

APPENDIX A

Natural Resources

ENVIRONMENTAL COMPLIANCE AND PERMITTING

Before implementation of fuels reduction treatments, certain local, state, and federal statutes and regulations require environmental review and permitting; the specific environmental documents and permits needed for the project are dependent on factors such as the proposed treatment actions and location of the actions. Environmental compliance typically includes California Environmental Quality Act (CEQA) and related documents. Permitting involves coordinating with federal, state, and/or local regulatory agencies to ensure project approval and clearance.

Table A.1 below lists anticipated permits needed for fuels reduction treatments in the Temecula Creek site. Appendix C details the process for potential pathways for compliance with CEQA regulations.

Multiple Species Habitat Conservation Plan Consistency Analysis Report

Because part of the project is located within the Multiple Species Habitat Conservation Plan (MSHCP) Criteria Area, an MSHCP Consistency Analysis report was completed in accordance with meeting the goals and objectives of the Reserve System and to demonstrate consistency with the MSHCP Implementation Structure. The full report is included as Attachment A.1.

Multiple Species Habitat Conservation Plan Technical Memorandum

Because focused surveys were not conducted and project activity specifics (treatment type and location) are undetermined, steps remain for project compliance with the MSHCP Implementation Structure. A technical memorandum was completed to outline additional steps necessary before implementation of proposed project activities. The full MSHCP technical memorandum is included as Attachment A.2.

Aquatic Resources Assessment

A preliminary assessment of aquatic resources was conducted for the project site. A field survey was conducted where the review area was walked and mapped to identify the general extent of the stream along its approximate ordinary high-water mark and to test for potential wetlands. The work conducted also helps inform overall project planning. A full jurisdictional delineation was not completed. The full aquatic resources technical memorandum is included as Attachment A.3.

Table A.1. Permitting Matrix

Permit	Responsible Agency	Permit Trigger	Notes	Timeline	Cost
Clean Water Act (CWA) Section 404 Nationwide Permit (NWP) NWP 18 (minor discharges)/NWP 33 (temporary access) Preconstruction Notification (PCN) Regional General Permit (RGP) and/or Programmatic-level permit (may be required if the City anticipates expanded and regularly conducted fuels reduction activities across a specified geographic area)	U.S. Army Corps of Engineers (USACE)	Required if there will be impacts to waters of the United States, including impacts to wetlands with connectivity to waters of the United States, or impacts to waters below the ordinary high-water mark.	Additional studies that may be required include wetland delineation, biological, and cultural resources studies (see Endangered Species Act [ESA] Section 7 and National Historic Preservation Act [NHPA] Section 106 Consultation below), and compensatory mitigation may be required (if certain temporary and permanent impacts from actions are more than 0.10 acre in size).	Approximately 6 to 9 months: Field surveys and permit preparation (2 months) Permit issuance (4 months) USACE aims to issue NWP decisions within 60 days Complex projects can require 9 to 12 months to be issued (see ESA Section 7 below) <i>Different timelines and documentation are required depending on whether informal or formal consultation is required..</i>	TBD
CWA Section 401 Individual Permit	State Water Resources Control Board (State Water Board) or Regional Water Quality Control Board	Required if there will be impacts to waters of the United States. Associated with CWA Section 404 permitting.	Additional studies that may be required: wetland delineation, alternatives analysis (depending on extent of impacts to wetlands), and compensatory mitigation	Approximately 5 months: (which includes a 30-day advance pre-filing meeting with the agency before submitting the application) Both the Water Quality Control application and USACE notification/application are submitted concurrently to the Water Board (state and regional) and USACE to coordinate timing of issuance Field surveys and permit preparation (2 months) Permit issuance (3 months) Statutory timeline is 6 weeks from submittal (45 days for authorization).	TBD

Permit	Responsible Agency	Permit Trigger	Notes	Timeline	Cost
Regular 5-year standard Lake and Streambed Alteration Agreement (LSAA)	CDFW	<p>Required if there may be impacts to stream bed/bank or riparian area (definition for jurisdictional waters for CDFW is different and broader than that for USACE Section 404 permitting).</p> <p>Required if there will be potential substantial effects to regulated streambeds including riparian vegetation through use of heavy equipment and/or vegetation trimming or removal.</p>	<p>Additional studies that may be required: wetland delineation, biological resources technical report, CEQA compliance, and compensatory mitigation.</p> <p>Additional items that may be needed: California Endangered Species Act (CESA) permit (if take of listed species may occur), consultation by lead federal agency with USFWS (for federal listed species).</p> <p><i>If the project's primary purpose is improving fish and wildlife habitat, the project would qualify for CDFW's Small Habitat Restoration Project LSAA option or 401 General Order</i></p>	<p>Approximately 5 to 8 months:</p> <p>CDFW will review the request and aim to determine whether the request is complete within 30 calendar days. CDFW may request more information from applicant if needed. Once all information is provided, CDFW will proceed in preparing either a draft agreement or letter indicating no agreement is needed.</p> <p><i>Due to current low staff numbers at CDFW across California, review times for LSA and CESA permits may be extended.</i></p>	TBD
Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis Determination of Biologically Equivalent or Superior Preservation (DBESP) report	Regional Conservation Authority	DBESP is needed if there will be impacts to MSHCP sensitive resources.	<p>Consistency Analysis: focused surveys are needed. See the MSHCP technical memorandum for specific species for this project.</p> <p>Given the recurring nature of maintenance fuels treatment, the proposed project will likely impact MSHCP sensitive resources and require a DBESP.</p> <p>A Joint Process Review (JPR) is required.</p>	<p>Approximately 4 to 6 months:</p> <p>Dependent on initiation and completion of sensitive species surveys and species survey windows.</p>	TBD


Permit	Responsible Agency	Permit Trigger	Notes	Timeline	Cost
ESA Section 7 Consultation	USFWS and/or National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries)	Required if impacts may potentially affect federally listed species. Associated with CWA Section 404 permitting.	If impacts to federally listed species are unlikely, informal consultation occurs. If impacts to federally listed species are likely, formal consultation occurs and preparation of a biological assessment(s) is required.	Approximately 9 to 15 months (formal consultation) Field surveys and biological assessment preparation (3 months) Receiving a formal biological opinion (6 months to 1 year from when consultation has been initiated, depending on data availability and level of impact to listed species) The typical timeline for issuance of a biological opinion is no less than 135 days after acceptance of the biological assessment as complete. <i>Different timeline and documentation are required depending on whether there will be "No Effect" or "May Affect but not likely to Adversely Affect" determination.</i>	TBD
California Incidental Take Permit Section 2080 of the California Fish and Game Code	CDFW	Recommended if there is potential for take of state-listed species protected under the CESA that cannot be avoided through project design and avoidance measures.	Biological report preparation and permit application required to apply for take permit.	Up to 21 months Field surveys and reporting/application preparation (3 months) Issuance of an Incidental Take Permit (up to 18 months following permit submittal when compensatory mitigation is required due to the additional documentation required to demonstrate compliance with the CDFW fully mitigated standard) Because the CDFW is also required to review CEQA documents for consistency, permits cannot be issued until a CEQA Notice of Determination (NOD) is filed.	TBD
CEQA	Lead agency would likely be the City of Temecula if formal CEQA review is needed	Requires public agencies to review activities that may affect the quality of the environment so that consideration is given to preventing damage to the environment.		Approximately 1 month (notice of exemption) Approximately 5 to 6 months (Initial Study/Mitigated Negative Declaration [IS/MND], inclusive of 30 days to prepare the Administrative Draft IS/MND, 30-day public comment period, and public hearing)	TBD

Permit	Responsible Agency	Permit Trigger	Notes	Timeline	Cost
NHPA Section 106 Consultation <i>Additional information on cultural resources can be found in Appendix B.</i>	State Historic Preservation Officer (SHPO)	<p>Required if there may be potential effects on historic properties. Associated with CWA Section 404 permitting.</p> <p>Consultation results in memorandum of agreement (MOA) and historic properties treatment plan (HPTP), which outlines agreed-upon measures that the agency will take to avoid, minimize, or mitigate the adverse effects. The consulting parties may agree that no such measures are possible but that the adverse effects must be accepted in the public interest.</p>		<p>Approximately 6 to 8 months:</p> <p>Field surveys and permit preparation (2 months)</p> <p>Issuance of permit (4 to 6 months)</p> <p>Obtaining an MOA and agency concurrence on the HPTP is a roughly 120-day process that includes a minimum 30-day circulation of the HPTP to stakeholders and a 30-day review period by the SHPO.</p>	TBD

Note: Permits and processes listed may be more streamlined if the proposed fuels reduction treatment activities are limited to only nonnative/invasive vegetation removal for the purpose of habitat restoration.
TBD = to be determined

ATTACHMENT A.1

Multiple Species Habitat Conservation Plan Consistency Analysis Report

The logo for the Southern Western Conservation Agency (SWCA) is positioned vertically on the left side of the page. It consists of the letters 'S', 'W', 'C', and 'A' in a large, stylized, light blue font, stacked from bottom to top.

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the City of Temecula – Temecula Creek Community Wildfire Protection Plan

JANUARY 2024

PREPARED FOR
City of Temecula

PREPARED BY
SWCA Environmental Consultants

**WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES
HABITAT CONSERVATION PLAN CONSISTENCY ANALYSIS
FOR THE CITY OF TEMECULA – TEMECULA CREEK
COMMUNITY WILDFIRE PROTECTION PLAN**

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ABSTRACT/EXECUTIVE SUMMARY

The approximately 177-acre City of Temecula – Temecula Creek Community Wildfire Protection Plan project area (project area) occurs within the following Criteria Cells: 7356, 7357, 7358, 7359, 7444, 7445, and 7446. Approximately 1.18 acres of the project area occurs outside of any Criteria Cell but is included in this report because it comprises less than 1% of the project area. The project area supports 103.60 acres of wetland and riparian habitat, 11.33 acres of riverine habitat, 46.24 acres of upland habitat, and 15.49 acres of developed and disturbed land. Chaparral sand-verbena (*Abronia villosa* var. *aurita*), white rabbit-tobacco (*Pseudognaphalium leucocephalum*), and least Bell's vireo (*Vireo bellii pusillus*) were incidentally observed on-site during habitat assessment and vegetation mapping surveys.

Focused surveys are required for burrowing owl (*Athene cunicularia*), riparian birds including least Bell's vireo, fairy shrimp, and plant species listed in Western Riverside County Multiple Species Habitat Conservation Plan Section 6.1.2. These plant species that have potential to occur on-site include: smooth tarplant (*Centromadia pungens* ssp. *laevis*), slender-horned spine flower (*Dodecahema leptoceras*), Southern California black walnut (*Juglans californica*), ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*), mud nama (*Nama stenocarpa*), Fish's milkwort (*Polygala cornuta* var. *fishiae*), and Coulter's matilija poppy (*Romneya coulteri*).

Impacts to sensitive biological resources have not been determined because focused surveys for the above species were not authorized to proceed at this time. Once these surveys have been conducted, impacts can be quantified, and appropriate mitigation can be determined, as necessary.

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1 INTRODUCTION

The purpose of this Consistency Analysis is to summarize the biological data for the proposed City of Temecula – Temecula Creek Community Wildfire Protection Plan (CWPP) and to demonstrate the project’s compliance with the Western Riverside County Multiple Species Habitat Conservation Program (MSHCP).

1.1 Project Description and Area

The purpose of the 2024 City of Temecula – Temecula Creek CWPP is to develop a specialized and comprehensive strategy to address wildfire risks within and around the 177-acre CWPP area (project area). Included within this CWPP are strategies and a step-by-step environmental compliance process for implementing fuels-reduction measures in a biologically and culturally sensitive riparian area near urban development. The CWPP also aims to create increased public awareness, enhancing residents’ understanding of the natural and human-caused risks of wildland fires that threaten lives, safety, and the local economy, and identify other wildfire prevention and mitigation measures that enhance fuels reduction. By addressing critical fire prevention needs while considering environmental, cultural, and wildlife factors, the 2024 City of Temecula – Temecula Creek CWPP will serve as a model for similar high fire-risk areas in the city of Temecula. Fuels reduction would focus on removing non-native species with some removal of native vegetation where there is especially high risk of wildfire. No development or earth-moving is proposed and the CWPP is being designed to maximize avoidance of sensitive resources to the greatest extent practicable. Potential management techniques include the following fuels treatment methods: manual removal, mechanical removal, prescribed burning, targeted grazing, and replanting with native species as needed.

The approximately 177-acre project area is located on Assessor’s Parcel Numbers (APNs) 922-210-060, 922-220-030, 961-440-005, 961-440-007, 961-440-008, 961-440-009, 961-440-012, 961-450-001, 961-450-011, 961-450-015, 961-450-063, and 961-450-064 in the city of Temecula, Riverside County, California (Figures 1 and 2).

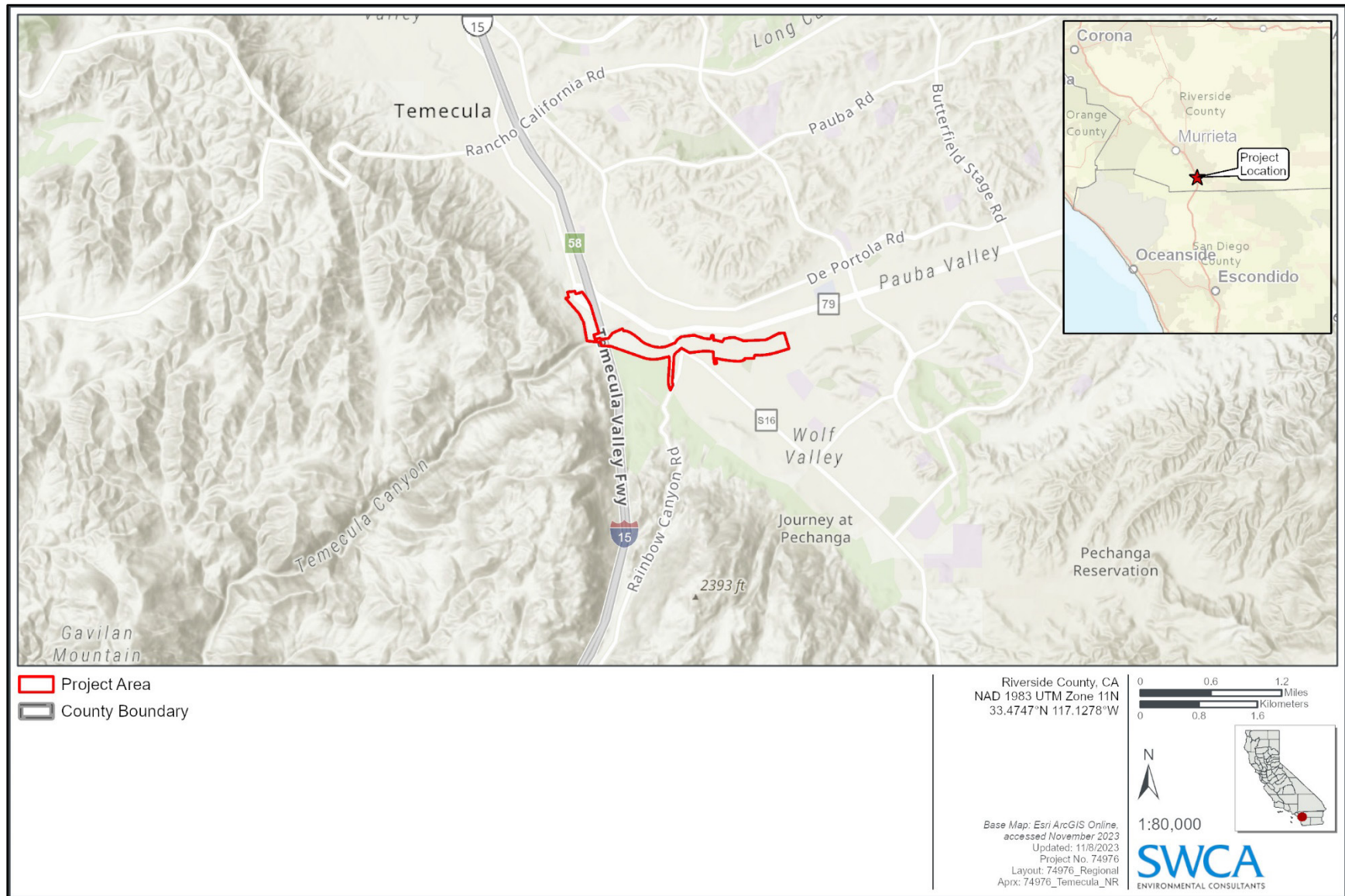


Figure 1. Project region.

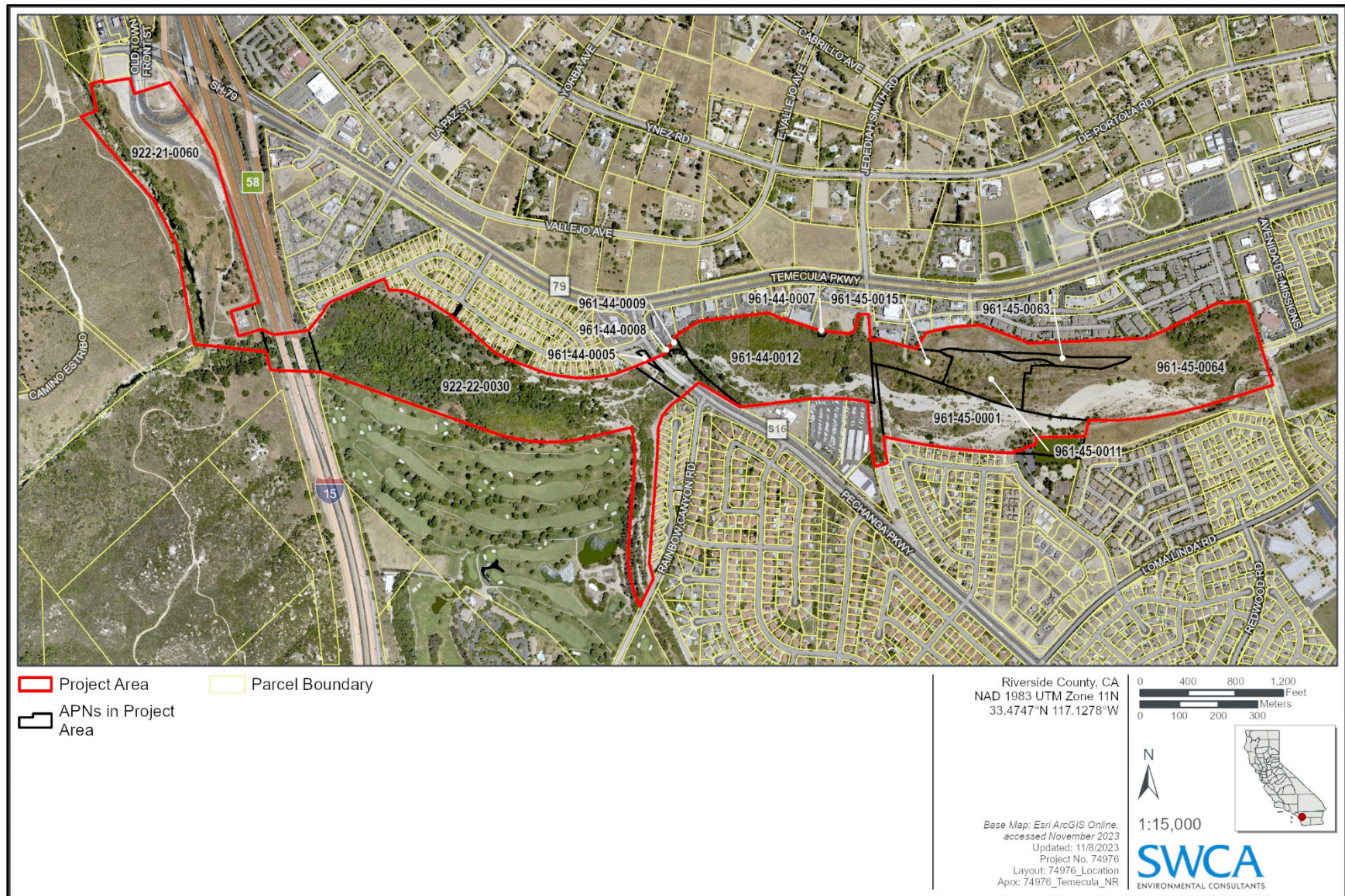


Figure 2. Project site.

1.2 Covered Roads

Pechanga Parkway bisects the central portion of the project area and Interstate 15 bisects the western portion of the project area. Two “collector” covered roads are shown in the eastern portion of the site connecting Via Rio Temecula Road to Temecula Parkway and Temecula Parkway to Pechanga Parkway (Figure 3). The CWPP does not propose to construct or modify any proposed or existing covered roads.

1.3 Covered Public Access Activities

While there is an adopted planned regional trail mapped on-site, the CWPP does not include the construction of, or improvements to, covered public access activities such as trails, facilities, or passive recreational activities.

1.4 General Setting

The project area for the CWPP encompasses approximately 177 acres in the city of Temecula in southwestern Riverside County, California (see Figure 1). Directly abutting the project area is residential and commercial development to the north, south, and east, a golf course to the south, and undeveloped land to the west and southwest (see Figure 2). The Project Area is situated along sections of Temecula Creek, Murrieta Creek, and Pechanga Creek from approximately the terminus of Temecula Parkway at the northwestern end of the project area to the Saint Thomas of Canterbury Episcopal Church at the east end of the project area. Additionally, the project area contains several conservation easements and is in proximity to other protected areas (Figure 4).

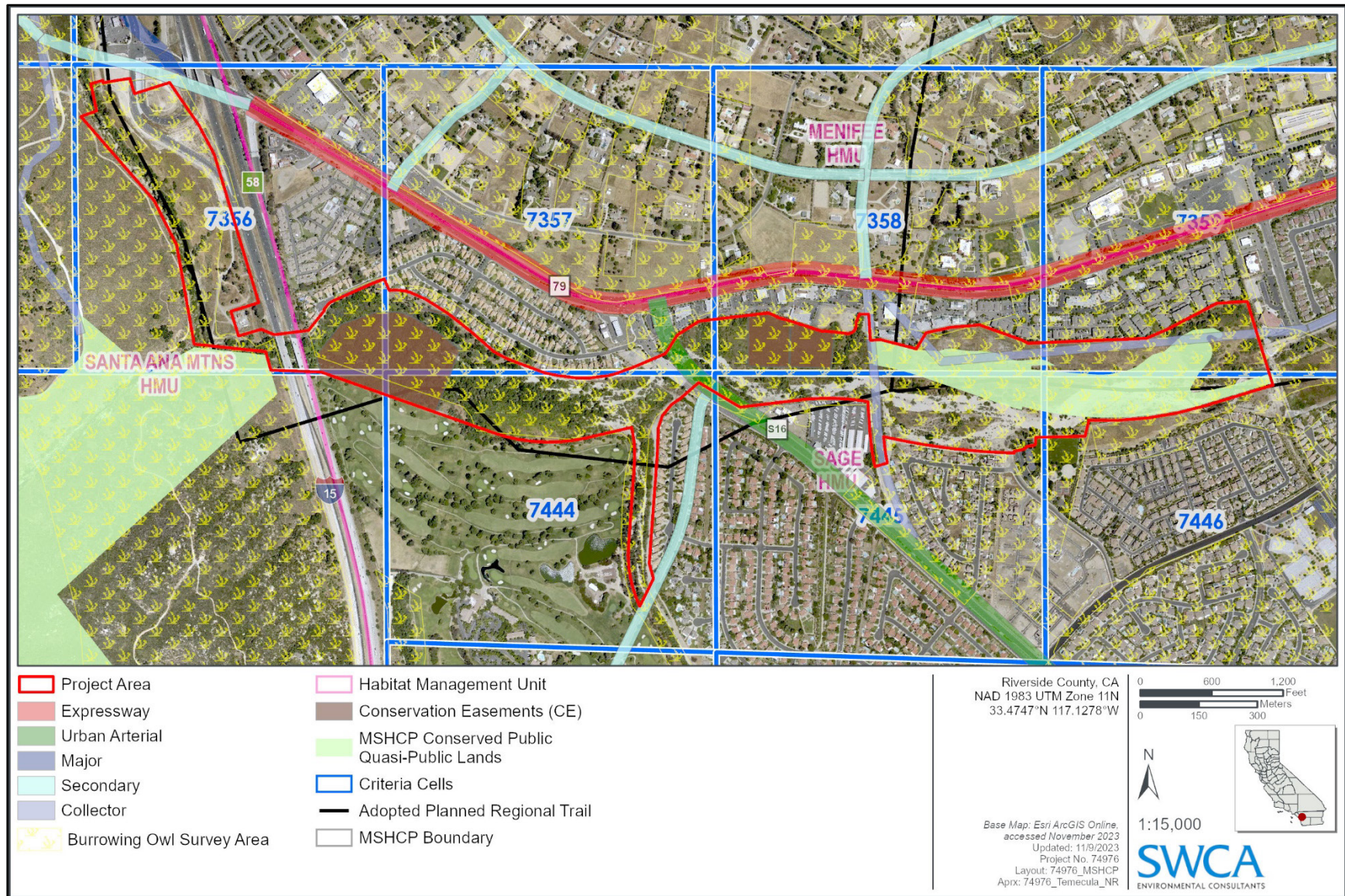


Figure 3. Western Riverside County Regional Conservation Authority MSHCP Information Map layers.

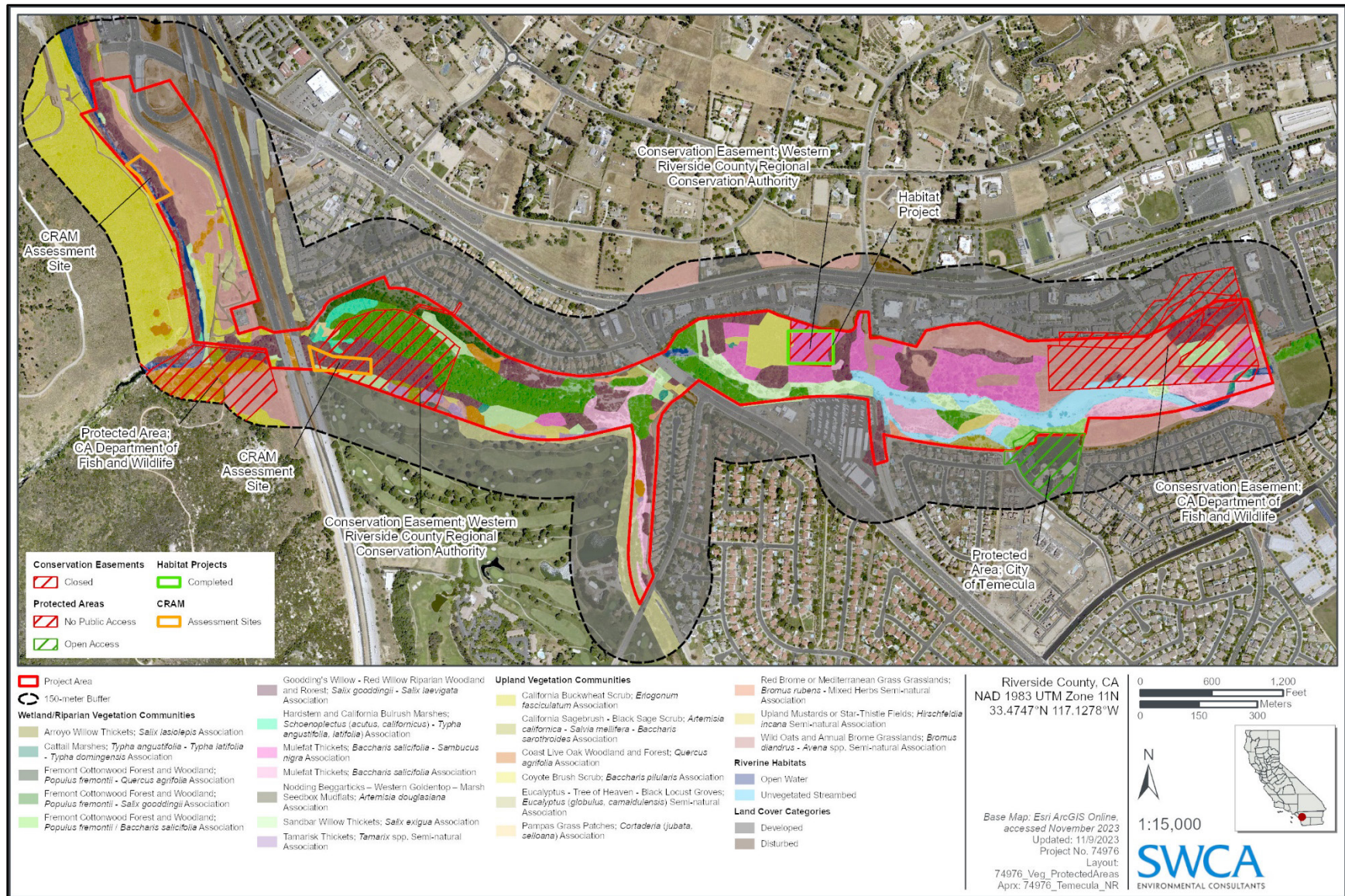


Figure 4. Easements, protected areas, and habitat projects.

2 RESERVE ASSEMBLY ANALYSIS

A Reserve Assembly analysis is not required for Joint Project Review covering Public Projects. The City of Temecula (City) is the project proponent of the CWPP and a permittee of the MSHCP, making this a Public Project (Permittee-sponsored). Therefore, a Reserve Assembly analysis is not required.

3 VEGETATION MAPPING AND SPECIES COMPENDIA

SWCA Environmental Consultants (SWCA) biologists reviewed published literature and online databases to identify previously recorded special-status biological resources that occur or could occur on or in the immediate vicinity of the project area. Species occurrences from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) Rare Find 5 (CDFW 2023a) and the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants (CNPS 2023a) were queried for project-relevant data within a 3-mile radius around the project area (Figure 5). Records of birds from the immediate vicinity of the project area were identified from eBird, an online birdwatching checklist (eBird 2023). The U.S. Fish and Wildlife Service's (USFWS's) online mapper for critical habitat was reviewed to determine whether any critical habitat for Endangered Species Act (ESA)-listed threatened or endangered species is present within or immediately adjacent to the project area (USFWS 2023). The project area is not located within critical habitat for any species. Records from iNaturalist (2023) were also evaluated for species not adequately covered by other databases. Potential jurisdictional water features were identified via a desktop analysis that used Google Earth (2023) and Esri ArcGIS satellite imagery.

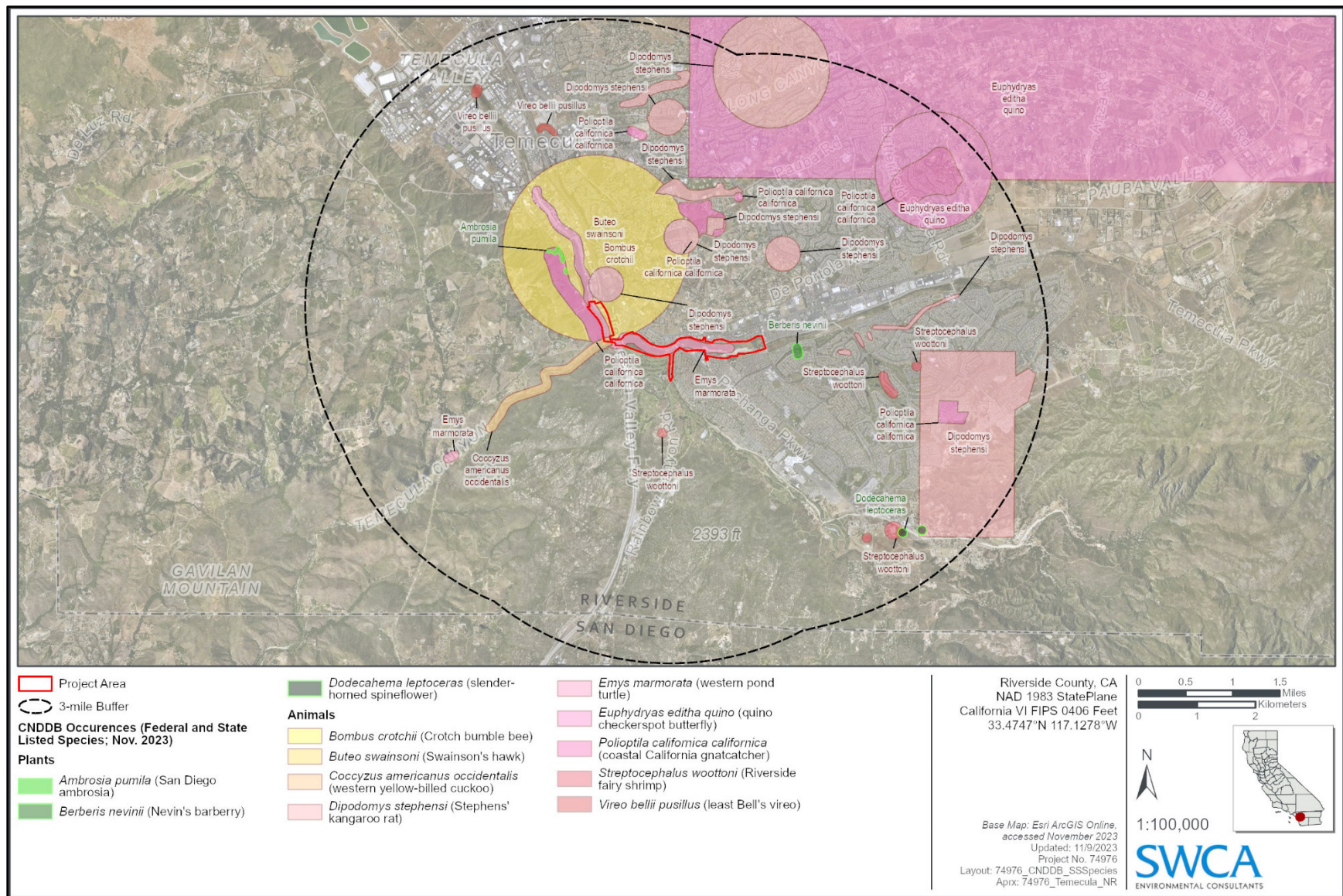


Figure 5. Special-status species within 3 miles.

Relevant resources reviewed included, but were not limited to, the following:

- CDFW CNDDDB RAREFIND 5 (CDFW 2023a)
- CDFW Special Vascular Plants, Bryophytes, and Lichens List (CDFW 2023b) and Special Animals List (CDFW 2023c)
- CDFW California's Wildlife (CDFW 2023d)
- CNPS Inventory of Rare and Endangered Plants (CNPS 2023a)
- The Consortium of California Herbaria (2023)
- Jepson eFlora (Jepson Flora Project 2023)
- Calflora (2023)
- Online database of bird distribution and abundance (eBird 2023)
- Critical Habitat Mapper and File Data (USFWS 2023)
- Aerial imagery (Google Earth 2023)
- iNaturalist (2023)
- A Guide to the Reptiles and Amphibians of California (Nafis 2023)
- NatureServe Explorer (NatureServe 2023)

Additionally, existing data from previous investigations conducted within the project area were reviewed and included the following:

- *Final Report Temecula Creek Wildlife Corridor Baseline Wildlife Tracking Study* (Martin 2022a)
- *Pechanga Creek and Applegate Baseline Tracking Surveys* (Martin 2022b)
- *Temecula-Pechanga Creek Camera Monitoring Report: March 1, 2021-April 4, 2022* (Vickers 2022)
- *Special-Status Plant Survey for the Temecula Creek Wildlife Corridor Project* (Johnston 2022a)
- *Vegetation and Invasive Plant Species Survey for the Temecula Creek Wildlife Crossing Project* (Johnston 2022b)

Temecula Creek Wildlife Corridor Project- Baseline Conditions, Opportunities, and Constraints Report (ICF 2023)

- *Interstate 15 Wildlife Crossings: Design Considerations for Focal Wildlife Species* (Smith et al. 2023)

Spatial information from these previous studies was used as preliminary mapping data and relevant information from previous reports was reviewed and incorporated into this study, where appropriate.

Habitat designations and vegetation communities in this report follow A Manual of California Vegetation Online (CNPS 2023b). Plant taxonomy and nomenclature follow Jepson eFlora (Jepson Flora Project 2023) for scientific names and most common names, CNDDDB (CDFW 2023a) for special-status plant common names and the scientific names for taxa that Jepson eFlora does not recognize, and Calflora (2023) for common names not included in Jepson eFlora. Wildlife taxonomy and nomenclature in this report follow Crother (2008) for reptiles and amphibians, American Ornithological Society (2023) for birds, and Wilson and Reeder (2005) for mammals.

Field surveys were conducted within the project area to document current conditions and biological resources. Field notes were maintained throughout each survey. On-site habitats were mapped to the association level (CNPS 2023b). Habitat mapping included the entirety of the project area plus an approximately 500-foot (150-meter) buffer extending outward from the project area boundaries. Buffer areas overlapping adjoining properties were observed from the project area or public roadways. In addition to habitat mapping, plant and animal species observed were documented.

Plant species that could not be identified in the field were collected for later identification. Wildlife species were identified visually, by their vocalizations, or by burrows, nests, scat, tracks, or other sign. Any observed special-status species were noted and their locations were mapped. The potential for special-status species was evaluated based on factors such as presence/absence of suitable prey and vegetation, microhabitats such as rock outcrops, soil, topography, water availability, elevation, proximity to development and other anthropogenic effects, and the overall size of available habitat, as applicable. Habitat mapping and the locations of special-status species were documented via ArcGIS application on tablets connected to GPS units with submeter accuracy.

Survey limitations for habitat mapping include underrepresentation of late blooming annual species due to time of year and nocturnal species due to time of day. No protocol or focused surveys were conducted. A summary of surveys conducted is provided in Table 1.

Table 1. Summary of Site Surveys

Date	Time	Temperature (°F)	Sky	Wind (mph)	Survey Type	Surveyors
03/28/23	0800–1630	55–65	Dry, 50–100% cloud cover	0–5	Habitat Assessment and Vegetation Mapping	Lee BenVau and Christina Torres
04/25/23	0800–1500	59–63	Dry, 25–75% cloud cover	0–5	Habitat Assessment and Vegetation Mapping	Lee BenVau and Christina Torres

Note: °F = degrees Fahrenheit; mph = miles per hour

Photographs of the project area are provided in Exhibit A.

Eleven wetland/riparian vegetation communities, two riverine habitats, nine upland vegetation communities, and two land cover categories were mapped within the project area (Figure 6).

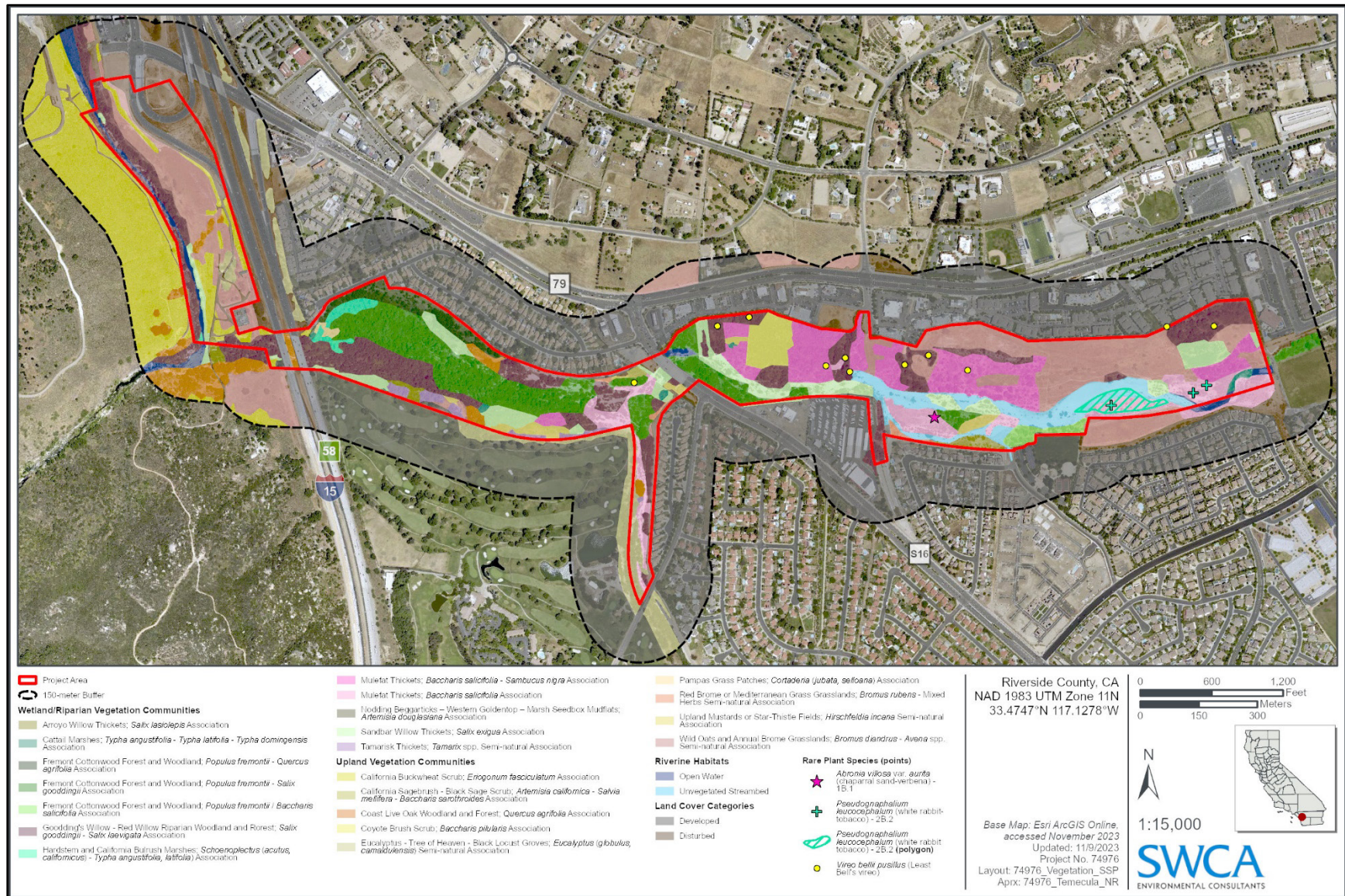


Figure 6. Vegetation communities and land cover.

Table 2 includes the acreage of each vegetation community and land cover category within the project area.

Table 2. On-Site Vegetation Communities and Land Covers

Vegetation Community / Land Cover	Acres
Wetland/Riparian Vegetation Communities	
Arroyo Willow Thickets (<i>Salix lasiolepis</i> Shrubland Alliance); <i>Salix lasiolepis</i> Association	1.42
Cattail Marshes (<i>Typha [angustifolia, domingensis, latifolia]</i> Herbaceous Alliance); <i>Typha angustifolia</i> – <i>Typha latifolia</i> – <i>Typha domingensis</i> Association	0.67
Fremont Cottonwood Forest and Woodland (<i>Populus fremontii</i> – <i>Fraxinus velutina</i> – <i>Salix gooddingii</i> Forest & Woodland Alliance); <i>Populus fremontii</i> – <i>Quercus agrifolia</i> Association	4.16
Fremont Cottonwood Forest and Woodland; <i>Populus fremontii</i> – <i>Salix gooddingii</i> Association	21.25
Fremont Cottonwood Forest and Woodland; <i>Populus fremontii</i> / <i>Baccharis salicifolia</i> Association	1.46
Goodding's Willow – Red Willow Riparian Woodland and Forest (<i>Salix gooddingii</i> – <i>Salix laevigata</i> Forest & Woodland Alliance); <i>Salix gooddingii</i> – <i>Salix laevigata</i> Association	30.45
Hardstem and California Bulrush Marshes (<i>Schoenoplectus [acutus, californicus]</i> Herbaceous Alliance); <i>Schoenoplectus (acutus, californicus)</i> – <i>Typha (angustifolia, latifolia)</i> Association	1.48
Mulefat Thickets (<i>Baccharis salicifolia</i> Shrubland Alliance); <i>Baccharis salicifolia</i> Association	11.21
Mulefat Thickets; <i>Baccharis salicifolia</i> – <i>Sambucus nigra</i> Association	17.40
Sandbar Willow Thickets (<i>Salix exigua</i> Shrubland Alliance); <i>Salix exigua</i> Association	12.47
Tamarisk Thickets (<i>Tamarix</i> spp. Shrubland Semi-Natural Alliance); <i>Tamarix</i> spp. Semi-natural Association	1.63
Wetland/Riparian Vegetation Communities Subtotal	103.60
Riverine Habitats	
Open Water	1.77
Unvegetated Streambed	9.56
Riparian Habitats Subtotal	11.33
Wetland/Riparian Vegetation Communities and Riverine Habitats Subtotal	114.93
Upland Vegetation Communities	
California Buckwheat Scrub (<i>Eriogonum fasciculatum</i> Shrubland Alliance); <i>Eriogonum fasciculatum</i> Association	4.40
California Sagebrush – Black Sage Scrub (<i>Artemisia californica</i> – <i>Salvia mellifera</i> Shrubland Alliance); <i>Artemisia californica</i> – <i>Salvia mellifera</i> – <i>Baccharis sarothroides</i> Association	0.24
Coast Live Oak Woodland and Forest (<i>Quercus agrifolia</i> Forest & Woodland Alliance); <i>Quercus agrifolia</i> Association	2.22
Coyote Brush Scrub (<i>Baccharis pilularis</i> Shrubland Alliance); <i>Baccharis pilularis</i> Association	3.35
Eucalyptus – Tree of Heaven – Black Locust Groves (<i>Eucalyptus</i> spp. – <i>Ailanthus altissima</i> – <i>Robinia pseudoacacia</i> Woodland Semi-Natural Alliance); Eucalyptus (globulus, camaldulensis) Semi-natural Association	2.46
Pampas Grass Patches (<i>Cortaderia [jubata, selloana]</i> Herbaceous Semi-Natural Alliance); <i>Cortaderia (jubata, selloana)</i> Association	0.31
Red Brome or Mediterranean Grass Grasslands (<i>Bromus rubens</i> – <i>Schismus [arabicus, barbatus]</i> Herbaceous Semi-Natural Alliance); <i>Bromus rubens</i> – mixed herbs Semi-natural Association	0.58
Upland Mustards or Star-thistle Fields (<i>Brassica nigra</i> – <i>Centaurea [solstitialis, melitensis]</i> Herbaceous Semi-Natural Alliance); <i>Hirschfeldia incana</i> Semi-natural Association	2.36
Wild Oats and Annual Brome Grasslands (<i>Avena</i> spp. – <i>Bromus</i> spp. Herbaceous Semi-Natural Alliance); <i>Bromus diandrus</i> – <i>Avena</i> spp. Semi-natural Association	30.32
Upland Vegetation Communities Subtotal	46.24

Vegetation Community / Land Cover	Acres
Land Cover Categories	
Developed	7.29
Disturbed	8.20
Land Cover Categories Subtotal	15.49
TOTAL	176.67*

* Includes 1.18 acres that are outside any Criteria Cell, consisting of 0.01 acre of Cattail Marshes, 0.77 acre of Sandbar Willow Thickets, 0.38 acre of Goodding's Willow – Red Willow Riparian Woodland and Forest, and 0.02 acre of developed land.

3.1 Wetland/Riparian Vegetation Communities and Riverine Habitats

Wetland/Riparian Vegetation Communities

Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance); *Salix lasiolepis* Association

Arroyo Willow Thickets are typically dominated or co-dominated by arroyo willow (*Salix lasiolepis*) alongside other species such as coyote brush (*Baccharis pilularis*), mule fat (*B. salicifolia*), western sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), and other willows (*Salix* spp.). This habitat typically occurs in riparian areas that experience seasonal or intermittent flooding (CNPS 2023b).

On-site Arroyo Willow Thickets are dominated by arroyo willow and include other native species such as mule fat, common scouring rush (*Equisetum hyemale* ssp. *affine*) and branching phacelia (*Phacelia ramosissima*) as well as non-native species such as giant reed (*Arundo donax*) and fennel (*Foeniculum vulgare*).

Cattail Marshes (*Typha [angustifolia, domingensis, latifolia]* Herbaceous Alliance); *Typha angustifolia* – *Typha latifolia* – *Typha domingensis* Association

Cattail Marshes are typically dominated or co-dominated by *Typha angustifolia*, *T. domingensis*, and/or *T. latifolia* along with sedges (*Cyperus* spp.), salt grass (*Distichlis spicata*), spike-sedges (*Eleocharis* spp.), rushes (*Juncus* spp.), and bulrushes (*Schoenoplectus* spp.). These marshes typically occur in areas with clayey or silty soils that are semi-permanently flooded with fresh or brackish water (CNPS 2023b).

On-site Cattail Marshes are dominated by broad-leaved cattail (*Typha latifolia*) and include other native species tolerant of saturated soils or standing water such as mosquito fern (*Azolla filiculoides*) and willow herb (*Epilobium ciliatum* ssp. *ciliatum*).

Fremont Cottonwood Forest and Woodland (*Populus fremontii* – *Fraxinus velutina* – *Salix gooddingii* Forest & Woodland Alliance); *Populus fremontii* – *Quercus agrifolia* Association

Fremont Cottonwood Forest and Woodland is dominated or co-dominated by Fremont cottonwood along with ash (*Fraxinus* spp.), walnuts (*Juglans* spp.), western sycamore, coast live oak (*Quercus agrifolia*), and willows. The canopy can range from continuous to open, the shrub layer is intermittent to open, while the herbaceous layer is variable. This habitat is typically found in floodplains, along low-gradient rivers, perennial or intermittent streams, alluvial fans, and valleys with subsurface water supply throughout the year (CNPS 2023b).

On-site Fremont Cottonwood Forest and Woodland; *Populus fremontii* – *Quercus agrifolia* Association, is a disturbed habitat that includes Fremont cottonwood (*Populus fremontii* subsp. *fremontii*) and coast live oak in the canopy, a minimal shrub layer, and a well-developed herbaceous layer consisting largely of non-native species such as ripgut grass (*Bromus diandrus*), bristly ox-tongue (*Helminthotheca echioides*), and English plantain (*Plantago lanceolata*).

Fremont Cottonwood Forest and Woodland; *Populus fremontii* – *Salix gooddingii* Association

On-site Fremont Cottonwood Forest and Woodland; *Populus fremontii* – *Salix gooddingii* Association, provides much of the cover in the central region of the site along Temecula Creek and is dominated by dense stands of Fremont cottonwood and Goodding's black willow (*Salix gooddingii*) in the canopy with a shrub layer consisting of mule fat, Hinds' willow (*Salix exigua* var. *hindsiana*), and California blackberry (*Rubus ursinus*). Other species observed include western ragweed (*Ambrosia psilostachya*), California burclover (*Medicago polymorpha*), and hoary nettle (*Urtica dioica* ssp. *holosericea*).

Fremont Cottonwood Forest and Woodland; *Populus fremontii* / *Baccharis salicifolia* Association

On-site Fremont Cottonwood Forest and Woodland; *Populus fremontii* / *Baccharis salicifolia* Association is similar to Fremont Cottonwood Forest and Woodland; *Populus fremontii* – *Salix gooddingii* Association but is more open, allowing for a denser shrub layer dominated by mule fat to develop under the canopy of Fremont cottonwood and willows.

Goodding's Willow – Red Willow Riparian Woodland and Forest (*Salix gooddingii* – *Salix laevigata* Forest & Woodland Alliance); *Salix gooddingii* – *Salix laevigata* Association

Goodding's Willow – Red Willow Riparian Woodland and Forest is dominated or co-dominated by Goodding's black willow and/or red willow (*Salix laevigata*) along with boxelder (*Acer negundo*), white alder (*Alnus rhombifolia*), western sycamore, Fremont cottonwood, oaks (*Quercus* spp.), and willows. The canopy can range from open to continuous, the shrub layer ranges from sparse to continuous, and the herbaceous layer is variable. This habitat typically occurs along large rivers, canyons, stream floodplains, lake edges, and seeps (CNPS 2023b).

Goodding's Willow – Red Willow Riparian Woodland and Forest is dominated by Goodding's black willow and red willow in the canopy, mule fat, California blackberry, and Hinds' willow in the shrub layer, and a diverse assemblage of species in the herb layer including mugwort (*Artemisia* sp.), ripgut grass, shepherd's purse (*Capsella bursa-pastoris*), San Diego sedge (*Carex spissa*), and tall cyperus (*Cyperus eragrostis*).

Hardstem and California Bulrush Marshes (*Schoenoplectus [acutus, californicus]* Herbaceous Alliance); *Schoenoplectus (acutus, californicus)* – *Typha (angustifolia, latifolia)* Association

Hardstem and California Bulrush Marshes are typically dominated or co-dominated by hardstem bulrush (*Schoenoplectus acutus*) and/or California bulrush (*S. californicus*) along with mosquito fern (*Azolla filiculoides*), alkali bulrush (*Bolboschoenus maritimus*), western goldenrod (*Euthamia occidentalis*), and cattails. This habitat may be brackish or freshwater and typically occurs along streams, rivers, and estuaries as well as around ponds, lakes, and roadside ditches. The soils where this habitat occurs are often high in organic content and poorly aerated (CNPS 2023b).

On-site Hardstem and California Bulrush Marshes are similar to Cattail Marshes but are instead dominated by California bulrush and include broad-leaved cattail to a lesser extent.

Mulefat Thickets (*Baccharis salicifolia* Shrubland Alliance); *Baccharis salicifolia* Association

Mulefat Thickets are typically dominated by mule fat and can occur with other shrubs such as California sagebrush (*Artemisia californica*), coyote brush, laurel sumac (*Malosma laurina*), arrow weed (*Pluchea sericea*), willows, and elderberries (*Sambucus* spp.). Scattered trees may also be present and the herbaceous layer is typically sparse. This habitat is often found in canyon bottoms, floodplains, irrigation ditches, lake margins, and stream channels. The soils in these areas often consist of mixed alluvium (CNPS 2023b).

On-site Mulefat Thickets; *Baccharis salicifolia* Association are nearly monotypic stands of mule fat in the shrub layer with few trees. The herb layer varies from bare sand where this habitat occurs within the streambed of Temecula Creek to including a variety of herbs where this habitat occurs in higher elevation areas such as streamside terraces. Species observed in this habitat include annual bur-sage (*Ambrosia acanthicarpa*), tarragon (*Artemisia drancunculus*), Pomona milk vetch (*Astragalus pomonensis*), Davidson's wild buckwheat (*Eriogonum davidsonii*), and alkali heliotrope (*Heliotropium curassavicum* var. *oculatum*). Two chaparral sand-verbena (*Abronia villosa* var. *aurita*) individuals were incidentally observed in this habitat.

Mulefat Thickets; *Baccharis salicifolia* – *Sambucus nigra* Association

On-site Mulefat Thickets; *Baccharis salicifolia* – *Sambucus nigra* Association include some mule-fat individuals but are strongly dominated by widely-spaced blue elderberry (*Sambucus Mexicana*, formerly *S. nigra* ssp. *caerulea*). The canopy layer is sparse to nonexistent, but the herb layer is nearly continuous where it is not shaded by blue elderberry. The herb layer consists primarily of non-native grasses such as red brome (*Bromus rubens*), rattail sixweeks grass (*Festuca myuros*), and wall barley (*Hordeum murinum*), as well as other non-native herbs such as poison hemlock (*Conium maculatum*), short-pod mustard (*Hirschfeldia incana*), and sourclover (*Melilotus indicus*).

Sandbar Willow Thickets (*Salix exigua* Shrubland Alliance); *Salix exigua* Association

Sandbar Willow Thickets are dominated by sandbar willow and include other species such as *Baccharis* species, California brickellia (*Brickellia californica*), California wild rose (*Rosa californica*), blackberries (*Rubus* spp.), and willows. This habitat typically occurs in temporarily flooded floodplains, bars and banks along rivers and streams, and near seeps (CNPS 2023b).

On-site Sandbar Willow Thickets are nearly monotypic stands of Hinds' willow with a few scattered arroyo willow individuals in the canopy. Other species observed in this habitat mugwort, mule fat, Mexican rush, and blue elderberry.

Tamarisk Thickets (*Tamarix* spp. Shrubland Semi-Natural Alliance); *Tamarix* spp. Semi-natural Association

Tamarisk Thickets are dominated by tamarisk (*Tamarix ramosissima*) or other *Tamarix* species and may include scattered emergent trees such as Fremont cottonwood or willows. This habitat typically occurs along watercourses including rivers, washes, lake margins, and ditches (CNPS 2023b).

On-site Tamarisk Thickets are dominated by tamarisk (*Tamarix* sp.) and occur along the interface of the golf course and riparian habitats. Other species observed in this habitat include mugwort, mule fat, Italian stone pine (*Pinus pinea*), and Hinds' willow.

Riverine Habitats

Open Water

Open Water within the project area includes portions of Temecula Creek where vegetation was minimal and standing or flowing water was present.

Unvegetated Streambed

Unvegetated Streambed within the project area includes portions of Temecula Creek that were characterized by bare sandy substrate in the bottom of the channel with minimal vegetation.

3.2 Upland Vegetation Communities and Land Cover Categories

Upland Vegetation Communities

California Buckwheat Scrub (*Eriogonum fasciculatum* Shrubland Alliance); *Eriogonum fasciculatum* Association

California Buckwheat Scrub is dominated or co-dominated by California buckwheat (*Eriogonum fasciculatum*) and/or chaparral yucca (*Hesperoyucca whipplei*) along with California sagebrush, coyote brush, sticky monkeyflower (*Diplacus aurantiacus*), *Encelia* species, Menzie's goldenbush (*Isocoma menziesii*), deerweed (*Acmispon glaber*), and sages (*Salvia* spp.). This habitat is often found on upland slopes, along channels and washes, and on alluvial fans. Soils in these areas are typically coarse, well-drained, and moderately acidic to slightly saline (CNPS 2023b).

California Buckwheat Scrub within the project area is dominated by California buckwheat (*Eriogonum fasciculatum*) and occurs in relatively disturbed and isolated patches in the western part of the project area. Despite the disturbed condition, there are small areas that support a diverse range of native annual species that were only documented in this habitat such as common goldfields (*Lasthenia gracilis*), California plantain (*Plantago erecta*), and baby blue eyes (*Nemophila menziesii* var. *menziesii*).

California Sagebrush – Black Sage Scrub (*Artemisia californica* – *Salvia mellifera* Shrubland Alliance); *Artemisia californica* – *Salvia mellifera* – *Baccharis sarothroides* Association

California Sagebrush – Black Sage Scrub is dominated or co-dominated by California sagebrush and black sage (*Salvia mellifera*) along with chamise (*Adenostoma fasciculatum*), sticky monkeyflower, California sunflower (*Encelia californica*), California buckwheat, chaparral yucca, deerweed, laurel sumac, *Rhus* species, and white sage (*Salvia apiana*). This habitat typically occurs on steep east to southwest-facing slopes with loose, unconsolidated sediments (CNPS 2023b).

On-site California Sagebrush – Black Sage Scrub is limited to a heavily disturbed portion of the project area adjacent to development and is dominated solely by broom baccharis (*Baccharis sarothroides*). Other species observed include Italian thistle (*Carduus pycnocephalus* ssp. *pycnocephalus*), tocalote (*Centaurea melitensis*), and short-pod mustard.

Coast Live Oak Woodland and Forest (*Quercus agrifolia* Forest & Woodland Alliance); *Quercus agrifolia* Association

Coast Live Oak Woodland and Forest is dominated by coast live oak and typically occurs with species such as California black walnut (*Juglans californica*) and other oaks (*Quercus* sp.) on canyon bottoms, slopes, and flats with deep sandy or loamy soils with high organic matter (CNPS 2023b).

On-site Coast Live Oak Woodland and Forest is dominated by coast live oak (*Quercus agrifolia*) and largely occurs on slopes along the interface of riparian and upland habitat. Other observed species include bur-chervil (*Anthriscus caucaulis*), mugwort, mule fat, ripgut grass, rooreh (*Claytonia perfoliata*), calabazilla (*Cucurbita foetidissima*), common eucrypta (*Eucrypta chrysanthemifolia* var. *chrysanthemifolia*), goose grass (*Galium aparine*), wild-cucumber (*Marah macrocarpa*), milk thistle (*Silybum marianum*), common chickweed (*Stellaria media*), and greater periwinkle (*Vinca major*).

Coyote Brush Scrub (*Baccharis pilularis* Shrubland Alliance); *Baccharis pilularis* Association

Coyote Brush Scrub is dominated by coyote brush, California coffee berry (*Frangula californica*), and/or coast silk tassel (*Garrya elliptica*). Associated species include coastal sagebrush, orange bush monkeyflower (*Diplacus aurantiacus*), California buckwheat, and deerweed. This habitat typically occurs along coastal bluffs, in proximity to rivers and streams, and gaps in forests. Soils may range from sandy to clayey (CNPS 2023b).

On-site Coyote Brush Scrub is dominated by dense coyote brush and includes scattered tarragon (*Artemisia dracunculus*), mule fat, and telegraph weed (*Heterotheca grandiflora*).

Eucalyptus – Tree of Heaven – Black Locust Groves (*Eucalyptus* spp. – *Ailanthus altissima* – *Robinia pseudoacacia* Woodland Semi-Natural Alliance); *Eucalyptus (globulus, camaldulensis)* Semi-natural Association

Eucalyptus – Tree of Heaven – Black Locust Groves are dominated by *Acacia* species, tree of heaven (*Ailanthus altissima*), *Eucalyptus* spp., or black locust (*Robinia pseudoacacia*). This habitat is often the result of trees being planted as groves or for windbreaks and may become naturalized near streams and lakes (CNPS 2023b).

On-site Eucalyptus – Tree of Heaven – Black Locust Groves are dominated by red gum (*Eucalyptus camaldulensis*) and blue gum (*Eucalyptus globulus*) with a sparse understory that ranges from non-native grasses and upland herbs such as slender wild oat (*Avena barbata*) and Crete weed (*Hedypnois rhagadioloides*) where it occurs in upland areas and riparian species such as mugwort and mule fat where it occurs along riparian areas.

Pampas Grass Patches (*Cortaderia [jubata, selloana]* Herbaceous Semi-Natural Alliance); *Cortaderia (jubata, selloana)* Association

Pampas Grass Patches are dominated by purple pampas grass (*Cortaderia jubata*) or pampas grass (*C. selloana*) and often occur in disturbed areas, grasslands, and wetlands (CNPS 2023b).

On-site Pampas Grass Patches consist of a stand of pampas grass in an area that is otherwise vegetated by Hardstem and California Bulrush Marshes and Fremont Cottonwood Forest and Woodland. Species other than pampas grass were sparse in this habitat and include Hinds', Goodding's black, and red willows.

Red Brome or Mediterranean Grass Grasslands (*Bromus rubens* – *Schismus [arabicus, barbatus]* Herbaceous Semi-Natural Alliance); *Bromus rubens* – mixed herbs Semi-natural Association

Red Brome or Mediterranean Grass Grasslands are typically dominated by red brome, Mediterranean grass (*Schismus arabicus*), and/or old han schismus (*Schismus barbatus*). Shrubs may be present at low cover (CNPS 2023b).

On-site Red Brome or Mediterranean Grass Grasslands occur on disturbed terraces along Temecula Creek and are dominated by red brome and old han schismus. Other species observed include annual bur-sage (*Ambrosia acanthicarpa*), western ragweed (*Ambrosia psilostachya*), California suncup (*Camissoniopsis bistorta*), and common sand aster (*Corethrogyne filaginifolia*).

Upland Mustards or Star-thistle Fields (*Brassica nigra* – *Centaurea [solstitialis, melitensis]* Herbaceous Semi-Natural Alliance); *Hirschfeldia incana* Semi-natural Association

Upland Mustards or Star-thistle Fields are dominated by ruderal forbs such as mustards (*Brassica* spp. and *Hirschfeldia incana*), star-thistle (*Centaurea* spp.), and/or wild radish (*Raphanus sativus*). Trees and shrubs may be present at low cover (CNPS 2023b).

On-site Upland Mustards or Star-thistle Fields are dominated by short-pod mustard and include an array of other non-native species such as black mustard, Italian thistle, redstem filaree (*Erodium cicutarium*), bristly ox-tongue, and prickly lettuce (*Lactuca serriola*).

Wild Oats and Annual Brome Grasslands (*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance); *Bromus diandrus* – *Avena* spp. Semi-natural Association

Wild Oats and Annual Brome Grasslands are typically dominated by oats (*Avena* spp.), bromes (*Bromus* spp.), and/or foxtail barley (*Hordeum murinum*) with other non-native herbs such as Australian saltbush (*Atriplex semibaccata*) also providing cover. Trees and shrubs may be present at low cover (CNPS 2023b).

On-site Wild Oats and Annual Brome Grasslands are dominated by ripgut grass. Other non-native species observed include slender wild oat, black mustard, soft chess (*Bromus hordeaceus*), red brome, artichoke thistle (*Cynara cardunculus*), rattail sixweeks grass, and wall barley. Native species observed include common fiddleneck (*Amsinckia intermedia*), California croton (*Croton californicus*), blue dicks (*Dipterostemon capitatus* ssp. *capitatus*), coastal gilia (*Gilia digenesis*), and Menzies' goldenbush (*Isocoma menziesii*).

Land Cover Categories

Developed

On-site Developed land consists of paved roads, a portion of the golf course, and part of a parking lot.

Disturbed

On-site Disturbed land consists of dirt access roads supporting minimal vegetation.

4 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/ RIVERINE AREAS AND VERNAL POOLS (SECTION 6.1.2)

The project area was assessed for riparian, riverine, and vernal pool habitat as well as the potential for species listed in MSHCP Section 6.1.2 to occur on-site.

4.1 Riparian/Riverine Areas

According to Section 6.1.2 of the MSHCP, “Riparian/Riverine Areas are lands which contain Habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year” (Dudek 2003:6-21).

4.1.1 Methods

Riparian and riverine resources were defined in accordance with the above description and were evaluated in the field during habitat assessment and vegetation mapping surveys (Figure 7). Section 6.1.2 of the MSHCP (Dudek 2003) was used to guide the assessment of the functions and values of the riparian and riverine areas on-site. Hydrology, biological resources, and other environmental factors were evaluated as part of this assessment.

A preliminary assessment of aquatic resources was conducted and is provided under separate cover (SWCA 2023).

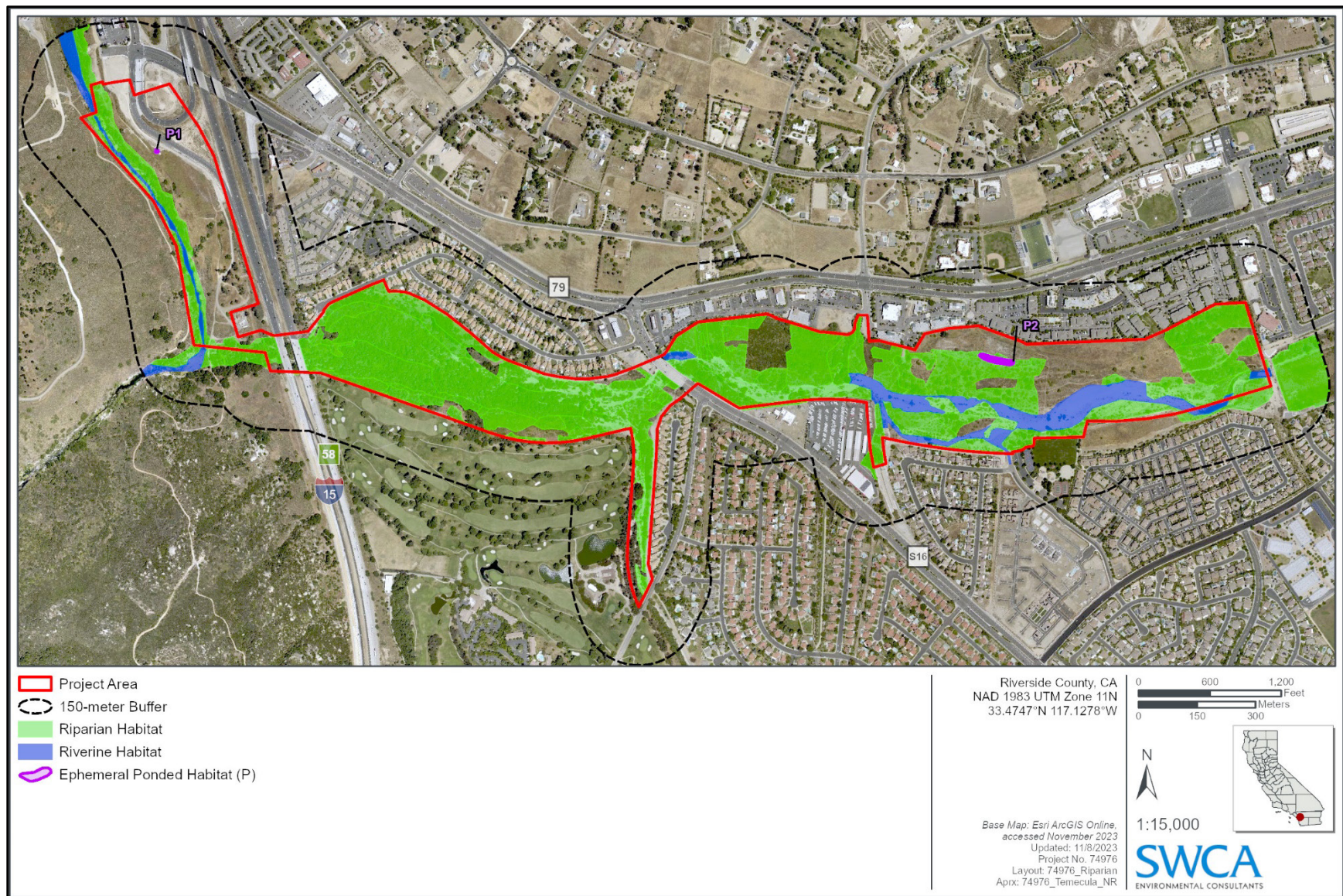


Figure 7. Riparian, riverine, and ephemeral ponded habitat.

4.1.2 Existing Conditions and Results

Riparian resources on-site (see Section 3.1) consist of vegetation communities dependent upon a nearby fresh water source, i.e., Temecula Creek, Murrieta Creek, or Pechanga Creek, whereas riverine resources consist of unvegetated areas, i.e., sections of unvegetated streambed and open water. Given that the surveys were conducted in a high rainfall year, riparian and riverine resources were readily observable in the field and areas of standing or flowing water were not uncommon.

Hydrology

Pechanga Creek drains into Temecula Creek and Temecula and Murrieta Creeks drain into the Santa Margarita River, which flows directly to the Pacific Ocean. Flows are obstructed only by the footings of bridges crossing over the creeks and the riparian vegetation that has grown along the banks. The creeks are largely characterized by broad sandy beds with limited rocky areas. Given the permeability of the substrate within the channel, open water is limited to the main stream channel where flows occur, plus limited areas beyond the channel where soils have a higher clay component and water ponds in small depressions. In a review of historical aerial photographs, Murrieta Creek had water visible in Google Earth imagery dated August 2021, while Temecula Creek and Pechanga Creek did not have visible water during the dry season.

Excess nutrients in the form of fertilizers and other pollutants from the surrounding developed areas likely enter the system during storm events. However, the mature stands of riparian vegetation and limited development within the project area typifies a relatively healthy system that is expected to perform typical riparian and wetland ecosystem services such as nutrient retention and transformation, and toxicant trapping, as well as physical services such as flood attenuation, and sediment trapping and transport.

Biology

Aquatic Resources

Riparian resources include the vegetation communities described in Section 3.1. Riverine resources include unvegetated areas of streambed as well as open water.

Soils

The Natural Resources Conservation Service (NRCS) was queried to view on-site soil mapping and summaries of the Official Soil Series Descriptions (OSSD) are provided below (NRCS 2023).

Over 50% of the CWPP area is mapped as Riverwash (RsC). This soil series does not have an OSSD. Generally, Riverwash consists of recent deposits of silt, sand, and gravel along major streams and tributaries.

The remaining 50% of the project area consists of the following soils.

Arlington and Greenfield series

Arlington soils have brown, neutral, very fine sandy loam A horizons, reddish brown, mildly alkaline, loam B2t horizons, underlain by weakly cemented duripans. The Arlington soils occur in coastal and intermediate valleys of Southern California on alluvial fans and terraces at elevations of about 400 to 2,000 feet. These soils are well-drained with slow to medium runoff and slow permeability.

The Greenfield series consists of deep, well-drained soils that formed in moderately coarse and coarse textured alluvium derived from granitic and mixed rock sources. Greenfield soils occur in interior and coastal valleys of Central and Southern California and are on alluvial fans and terraces and have slopes of 0 to 30 percent. These soils are well-drained with slow to medium runoff and moderately rapid permeability.

On-site soils of this series consist of:

- Arlington and Greenfield fine sandy loams, 8 to 15 percent slopes, eroded (AtD2)
- Greenfield sandy loam, 0 to 2 percent slopes (GyA)
- Greenfield sandy loam, 2 to 8 percent slopes, eroded (GyC2)

Escondido series

Escondido soils have dark brown slightly acid very fine sandy loam A horizons and neutral very fine sandy loam B2 horizons over hard metamorphic bedrock at depths of about 29 inches. Escondido soils occur mainly in Southern California, in San Diego and western Riverside Counties, and occur on gently rolling to hilly topography in foothills at elevations of 400 to 2,800 feet. These soils are well-drained with medium runoff and moderate permeability.

On-site soils of this series consist of Escondido fine sandy loam, 15 to 25 percent slopes, eroded (EcE2).

Fallbrook series

The Fallbrook series consists of deep, well drained soils that formed in material weathered from granitic rocks. Fallbrook soils are on rolling hills and have slopes of 5 to 75 percent. Fallbrook soils occur on foothills on the east side of the San Joaquin Valley and foothills in the west part of Southern California at elevations of 200 to 3,000 feet or as high as 3,500 feet on south facing slopes. They formed in material weathered from granite and closely related granitic rocks and rock outcrops are common in some areas. These soils are well-drained with medium to very rapid runoff and moderately slow permeability.

On-site soils of this series consist of Fallbrook rocky sandy loam, shallow, 15 to 50 percent slopes, eroded (FcF2).

Garretson series

Garretson soils have brown and yellowish brown, slightly acid, gravelly very fine sandy loam and gravelly loam A horizons and yellowish brown, brown and grayish brown, slightly acid and neutral, gravelly loam C horizons. Garretson soils occur in valleys in the western part of Central and Southern California and are on nearly level to strongly sloping fans and floodplains at elevations of 50 to 3,000 feet. They formed in medium textured alluvium, dominantly from sedimentary formations. These soils are well-drained with slow to medium runoff and moderate permeability.

On-site soils of this series consist of Garretson very fine sandy loam, 2 to 8 percent slopes (GaC).

Gorgonio series

Gorgonio soils have dark grayish brown and brown, gravelly loamy fine sand, slightly and medium acid A horizons and brown, somewhat stratified; medium acid, gravelly loamy sand C horizons. Gorgonio soils occur near the mountains in southern and central coast areas of California and are nearly level to moderately sloping on alluvial fans at elevations of 20 to 3,000 feet. They formed in coarse textured

alluvium derived from granite, granodiorite, schist, and related rocks. These soils are somewhat excessively drained with slow or medium runoff and rapid permeability.

On-site soils of this series consist of Gorgonio loamy sand, deep, 2 to 8 percent slopes (GIC).

Grangeville series

The Grangeville series consists of very deep, somewhat poorly drained soils that formed in moderate coarse textured alluvium dominantly from granitic rock sources. Grangeville soils are on alluvial fans and floodplains and have slopes ranging from 0 to 2 percent. Grangeville soils occur on the east side of the San Joaquin Valley and intermountain valleys in the western part of Southern California on alluvial fans and floodplains at elevations of 0 to 1,800 feet. The soils formed in moderately coarse textured alluvium dominantly derived from granitic rock sources. Some areas are saline or saline-sodic. These soils are somewhat poorly drained, but have altered drainage from dams, water table pumping, artificial drains, and filling and leveling of nearby sloughs. Runoff is negligible to very low with moderate to moderately rapid permeability. Most areas of Grangeville soils were occasionally flooded prior to implementation of flood control structures. The water table is at a depth of 24 to 48 inches unless drained. If drained, the water table is typically at depths of 48 to over 60 inches.

On-site soils of this series consist of:

- Grangeville sandy loam, drained, saline-alkali, 0 to 5 percent slopes (GpB)
- Grangeville sandy loam, sandy substratum, drained, 0 to 5 percent slopes (GrB)
- Grangeville fine sandy loam, drained, 0 to 2 percent slopes (GtA)
- Grangeville very fine sandy loam, saline-alkali, 0 to 5 percent slopes (GuB)
- Grangeville fine sandy loam, saline-alkali, 0 to 5 percent slopes (GvB)

Hanford series

The Hanford series consists of very deep, well-drained soils that formed in moderately coarse textured alluvium dominantly from granite. Hanford soils are on stream bottoms, floodplains, and alluvial fans and have slopes of 0 to 15 percent. These soils are widely distributed in the San Joaquin Valley and in the valleys of Central and Southern California on stream bottoms, floodplains, and alluvial fans at elevations of 150 to 3,500 feet. Runoff is negligible to low and permeability is moderately rapid.

On-site soils of this series consist of:

- Hanford coarse sandy loam, 0 to 2 percent slopes (HcA)
- Hanford coarse sandy loam, 2 to 8 percent slopes (HcC)

Ramona and Buren series

Ramona soils have brown, slightly and medium acid, sandy loam and fine sandy loam A horizons, reddish brown and yellowish red, slightly acid, sandy clay loam B2t horizons, and strong brown, neutral, fine sandy loam C horizons. Ramona soils occur in the interior valleys of central and the western part of southern California on nearly level to moderately steep terraces and fans at elevations of 250 to 3,500 feet. These soils are well-drained with slow to rapid runoff and moderately slow permeability.

The Buren series consists of well drained slow to moderately slowly permeable soils. These soils are limited to the intermediate valleys of southern California on gently to strongly sloping alluvial fans and terraces at elevations of about 700 to 3,000 feet. They formed in alluvium derived mostly from basic igneous rocks and partly from other crystalline rocks.

Onsite soils of these series consist of:

- Ramona and Buren sandy loams, 15 to 25 percent slopes, severely eroded (RmE3)
- Ramona and Buren loams, 5 to 15 percent slopes, eroded (RnD2)

Rockland

Rockland (RtF) does not have an OSSD (the Rockland series occurs in Minnesota and Wisconsin), but generally occurs at an elevation of 650 to 4,000 feet and is composed of residuum derived from mixed sources.

Rough broken land

Rough broken land (RuF) does not have an OSSD, but the soil survey for San Diego (United States Department of Agriculture 1973) describes this designation as well-drained to excessively drained, steep and very steep land dissected by many narrow V-shaped valleys and sharp divides. Areas of exposed raw sediments are common, and there are a few areas of very shallow soils. Runoff is rapid to very rapid and erosion is very high.

Tujunga series

The Tujunga series consists of very deep, somewhat excessively drained soils that formed in alluvium from granitic sources. Tujunga soils occur in Central California coastal valleys and Southern California coastal plain on alluvial fans and floodplains, including urban areas from 0 to 1,968 feet.

On-site soils of this series consist of Tujunga loamy sand, channeled, 0 to 8 percent slopes (TvC).

Plant Habitat

Riparian habitat on-site has the potential to support two narrow endemic plant species: San Diego ambrosia (*Ambrosia pumila*) and slender-horned spine flower (*Dodecahema leptoceras*). On-site riparian habitat and adjacent upland habitats are suitable for both species and contain suitable sandy and sandy loam soils. Additionally, a 2019 CNDDDB occurrence documents San Diego ambrosia approximately 0.35-mile northwest of the site and a 2005 CNDDDB occurrence documents slender-horned spine flower approximately 3 miles southeast of the site.

A list of flora observed on-site is included in Exhibit B and provides the habitats they were observed in. Hydrophytic plant species are those species that have an indicator status of facultative, facultative wetland, or obligate (U.S. Army Corps of Engineers 2020). Herbaceous species include both annual and perennial herbs while woody riparian species include shrubs and trees. In total, 20 herbaceous hydrophytic plant species and 10 woody riparian plant species were observed on-site during habitat assessment and vegetation mapping surveys.

Herbaceous wetland plant communities observed on-site consist of Cattail Marshes and Hardstem and California Bulrush Marshes. Woody riparian plant communities present on-site consist of Arroyo Willow Thickets, Fremont Cottonwood Forest and Woodland, Goodding's Willow – Red Willow Riparian Woodland and Forest, Mulefat Thickets, Sandbar Willow Thickets, and Tamarisk Thickets.

Given the extent of riparian and riverine resources on-site, all upland vegetation communities documented on-site serve as a buffer to these resources. Murrieta Creek is bordered predominantly by California Buckwheat Scrub and Wild Oats and Annual Brome Grasslands. The section of Pechanga Creek that occurs on-site has a minimal upland buffer consisting of Eucalyptus – Tree of Heaven – Black Locust Groves or is directly adjacent to development. Temecula Creek has little to no upland buffer in its western extent on-site but has Wild Oats and Annual Brome Grasslands bordering it to the north in the eastern portion of the site.

Non-native and invasive species observed within and adjacent to riparian/riverine resources include annual herbs such as Italian thistle, tocalote, and short-pod mustard; non-native grasses such as rigpgut grass, red brome, and smilo grass (*Stipa miliacea* var. *miliacea*); perennial herbs such as bur-chervil (*Anthriscus caucalis*), poison hemlock, fennel, and curly dock (*Rumex crispus*); and large perennial and non-native tree species such as giant reed, pampas grass, blue and red gum, tamarisk, and Mexican fan palm (*Washingtonia robusta*).

Wildlife Habitat

Exhibit C contains a list of wildlife species detected on-site. Sensitive riparian bird species have potential to occur on-site and are discussed further in Section 4.4.

Multiple least Bell's vireo (*Vireo bellii pusillus*) individuals were incidentally detected during habitat assessment and vegetation surveys. There is suitable habitat for western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) on-site, but there is only one CNDDDB record from 1950 along the Santa Margarita River and no other records in southwestern Riverside County, so the species is not expected to occur. Habitat is also suitable for southwestern willow flycatcher (*Empidonax traillii extimus*), but there are no records of this species in southwestern Riverside County.

Bird species included in MSHCP Section 6.1.2 were evaluated for potential to occur and the following species were incidentally observed: Cooper's hawk (*Accipiter cooperi*) and double-crested cormorant (*Nannopterum auritum*). Other bird species associated with riparian resources included red-shouldered hawk (*Buteo lineatus*), mallard (*Anas platyrhynchos*), Canada goose (*Branta canadensis*), great blue heron (*Ardea herodias*), red-winged blackbird (*Agelaius phoeniceus*), common yellowthroat (*Geothlypis trichas*), and yellow-rumped warbler (*Setophaga coronata*). There were woodland or forest bird species observed within the site that may not be riparian-obligate species and are rare or atypical for semi-arid Riverside County landscapes, which consisted of Nuttall's woodpecker (*Dryobates nuttallii*), northern flicker (*Colaptes auratus*), and acorn woodpecker (*Melanerpes formicivorus*).

Amphibians detected on-site consisted of California toad (*Anaxyrus boreas halophilus*) and Baja California treefrog (*Pseudacris hypochondriaca hypochondriaca*). Sensitive amphibians with potential to occur on-site consist only of western spadefoot (*Spea hammondi*). Western spadefoot could potentially use ephemeral depressional habitat on-site for breeding and there is a 2003 CNDDDB record documented approximately 0.75 mile south of the site. No turtles were detected on-site. However, western pond turtle (*Emys marmorata*) has high potential to occur on-site due to presence of suitable aquatic resources and the species was previously documented on-site in a 2015 CNDDDB record. Other riparian/riverine wildlife detected on-site consist of racoon (*Procyon lotor*), identified by tracks.

Other Environmental Factors

Public use of the project area largely consists of unhoused people using the property. Surrounding land use includes areas of development that may result in runoff containing toxics entering the riparian/riverine habitats during storm events. Vegetation management activities are visible in Google Earth images dated August 5, 2021. Non-native grassland was mowed in a narrow strip south of the development along Samantha Lane. No agricultural activity occurs on or adjacent to the CWPP area.

4.1.3 Impacts

Impacts to riparian/riverine areas will be determined once a project description of sufficient detail to quantify impacts is available. Fuels management treatments within sensitive riparian/riverine areas would require some form of ongoing maintenance treatments (e.g., vegetation removal) and would therefore be considered permanently impacted. Similarly, any area(s) called out as avoidance should not also encompass areas where fuels modification would be implemented.

4.1.4 Mitigation

In accordance with the MSHCP, a project must demonstrate 90% avoidance (permanent and temporary) of portions of the property that provide long-term conservation value for MSHCP resources (i.e., narrow endemic plants, small mammals, burrowing owl). Otherwise, a Determination of Biologically Equivalent or Superior Preservation (DBESP) report would be required to propose mitigation that demonstrates equivalent or superior function and value. Any impacts to riparian/riverine or vernal pool resources requires mitigation through a DBESP in consultation with the Regional Conservation Authority (RCA). Additionally, implementing Urban/Wildlands Interface guidelines (as outlined in Section 6.1.4 of the MSHCP) and construction minimization measures (as outlined in Section 7.5.3 of the MSHCP) during project construction may minimize indirect impacts on biological resources. Mitigation will be determined once impacts are quantified.

4.2 Vernal Pools

According to Section 6.1.2 of the MSHCP:

Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records. (Dudek 2003:6-22)

4.2.1 Methods

A search of depressional areas containing water or with evidence of having recently contained water was conducted during general vegetation mapping and habitat assessment surveys. Areas lower in elevation than surrounding areas as well as areas with clay soil evidenced by features such as soil cracks were investigated for signs of species associated with vernal pools.

4.2.2 Existing Conditions and Results

Two ephemeral depressional habitats were observed on-site that have potential to function as vernal pools. The western feature contained larvae of California toad and Baja California treefrog while the eastern feature contained scant remaining water but contained saturated soils and a visible area of rotted vegetation where water had been present. A review of historical aerial photographs showed that prior inundation was not documented for either feature and that the eastern feature may have been excavated in association with the development to the north visible in a 1967 aerial image (NETRONLINE 2023). No plant species typically associated with vernal pools were observed during the habitat assessment and vegetation mapping surveys. These features do not demonstrate characteristics of high-quality vernal pool habitat, but could nevertheless still function as marginal habitat.

4.2.3 Impacts

Impacts to riparian/riverine areas will be determined once a project description of sufficient detail to quantify impacts is available.

4.2.4 Mitigation

Any impact to riparian/riverine or vernal pool resources requires mitigation through a DBESP in consultation with the RCA. Additionally, implementing Urban/Wildlands Interface guidelines (as outlined in Section 6.1.4 of the MSHCP) and construction minimization measures (as outlined in Section 7.5.3 of the MSHCP) during project construction may minimize indirect impacts on biological resources. Mitigation will be determined once impacts are quantified.

4.3 Fairy Shrimp

Fairy shrimp are crustaceans that inhabit ephemeral aquatic features such as vernal pools and several species are state and/or federally listed. In accordance with Section 6.1.2 of the MSHCP, “For Riverside, vernal pool and Santa Rosa fairy shrimp, mapping of stock ponds, ephemeral pools and other features shall also be undertaken as determined appropriate by a qualified biologist” (Dudek 2003:6-22).

4.3.1 Methods

The literature review returned one 2003 CNDDDB record approximately 0.75 mile south of the CWPP area for Riverside fairy shrimp (*Streptocephalus woottoni*), but no records of vernal pool fairy shrimp (*Branchinecta lynchi*) occur within 5 miles of the project. A focused survey for fairy shrimp was not conducted.

4.3.2 Existing Conditions and Results

Two depressions containing standing water were observed during habitat assessment and vegetation mapping surveys (see Figure 7). Literature review and the presence of depressional habitat that could

function as suitable habitat for fairy shrimp indicate vernal pool fairy shrimp and Riverside fairy shrimp have suitable habitat on-site. Given that suitable habitat occurs on-site and the project does not propose to avoid suitable habitat, focused surveys pursuant to *USFWS Survey Guidelines for the Listed Large Branchiopods* (USFWS 2017) are required for vernal pool fairy shrimp and Riverside fairy shrimp in accordance with MSHCP Section 6.1.2. The results of these surveys will be provided in this section when available.

4.3.3 Impacts

Impacts to fairy shrimp will be determined after focused surveys are completed and a project description of sufficient detail to quantify impacts is available.

4.3.4 Mitigation

Mitigation for impacts to fairy shrimp will be determined after focused surveys are completed and impacts are determined.

4.4 Riparian Birds

Riparian birds consist of the following species listed in MSHCP Section 6.1.2: western yellow-billed cuckoo, southwestern willow flycatcher, American peregrine falcon (*Falco peregrinus anatum*), bald eagle (*Haliaeetus leucocephalus*), and least Bell's vireo.

4.4.1 Methods

Literature review and the assessment of on-site riparian habitat in the field indicate the following riparian bird species have potential to occur on-site: western yellow-billed cuckoo, southwestern willow flycatcher, bald eagle, and least Bell's vireo. Focused surveys for riparian birds were not conducted. Given that suitable habitat occurs on-site and the project does not propose to avoid suitable habitat focused surveys are required for least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo in accordance with MSHCP Section 6.1.2. The results of these surveys will be provided in this section when available.

4.4.2 Existing Conditions and Results

Multiple least Bell's vireo individuals were detected incidentally during the habitat assessment and vegetation mapping surveys. The results of protocol surveys for least Bell's vireo and southwestern willow flycatcher will be provided in this section once complete and will include the number of individuals detected on-site and the extent of their territories.

4.4.3 Impacts

Impacts to least Bell's vireo will be determined after protocol surveys are completed and a project description of sufficient detail to quantify impacts is available.

4.4.4 Mitigation

Mitigation for impacts to least Bell's vireo will be determined after protocol surveys are completed and impacts are determined.

4.5 Other Section 6.1.2 Species

Exhibit D includes special-status plant species and Exhibit E includes special-status wildlife species that were evaluated for potential to occur on-site, which includes all 11 wildlife species and all 23 plant species listed in MSHCP Section 6.1.2.

4.5.1 Methods

As part of the literature review, all species listed in MSHCP Section 6.1.2 were evaluated for potential to occur on-site irrespective of the absence of documented records in the vicinity of the project. Habitat assessment surveys evaluated on-site habitats on the suitability for each species. No focused surveys were conducted.

4.5.2 Existing Conditions and Results

Of the MSHCP Section 6.1.2 plant species, the following have potential to occur on-site: smooth tarplant (*Centromadia pungens* ssp. *laevis*), slender-horned spine flower, Southern California black walnut, ocellated Humboldt lily, mud nama (*Nama stenocarpa*), Fish's milkwort (*Polygala cornuta* var. *fishiae*), and Coulter's matilija poppy (*Romneya coulteri*). Rare plant surveys would be required to determine presence/absence of these species on-site and the number and distribution of individuals on-site.

No wildlife species other than the riparian birds and fairy shrimp noted above are expected to occur on-site.

4.5.3 Impacts

Impacts to other Section 6.1.2 species, specifically those plant species noted above, cannot be determined without the results of focused rare plant surveys and a project description of sufficient detail to quantify impacts.

4.5.4 Mitigation

Mitigation for impacts to other Section 6.1.2 species will be determined after rare plant surveys are completed and impacts are determined.

5 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3)

No part of the project area occurs within a Narrow Endemic Plant Species Survey Area. Therefore, focused surveys for narrow endemic plant species are not required.

6 ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)

6.1 Criteria Area Plant Species

No part of the project area occurs within a mapped survey area for Criteria Area plant species. Therefore, focused surveys for Criteria Area plant species are not required.

6.2 Amphibians

No part of the project area occurs within a mapped survey area for amphibian species. Therefore, focused surveys for amphibians are not required.

6.3 Burrowing Owl

All portions of the project area fall within the mapped survey area for burrowing owl (*Athene cunicularia*) except for those portions of the survey area within Criteria Cells 7356 and 7357, and the 1.18-acre section of the CWPP area that does not occur within any Criteria Cell. Therefore, focused surveys for burrowing owls are required.

6.3.1 Methods

The habitat assessment and vegetation mapping surveys included a habitat assessment for burrowing owl in accordance with the survey instructions (WRC RCA 2006). Burrowing owls use habitats with low-growing vegetation such as grassland and sparse shrubland, as well as agricultural use areas and golf courses that contain fossorial mammal burrows. Anthropogenic structures such as earthen berms, culverts, and debris piles are also utilized. The desktop assessment identified the presence of suitable grassland habitat on-site and was confirmed to occur during the surveys, and an approximately 500-foot (150-meter) buffer zone around the project boundary was visually inspected with binoculars. Focused burrow or burrowing owl surveys have not been conducted.

6.3.2 Existing Conditions and Results

The project area supports suitable burrowing owl habitat consisting of non-native grassland, grassy areas between sparse shrub cover, and earthen berms along the interface with development. A focused burrow survey is required to determine if the project area supports burrows or burrow surrogates that could be used by burrowing owl and if they are present, a focused burrowing owl survey would be required to determine if any of those burrows or burrow surrogates are being used by burrowing owl.

6.3.3 Impacts

Impacts to burrowing owl will be determined after focused surveys are completed and a project description of sufficient detail to quantify impacts is available.

6.3.4 Mitigation

Mitigation for impacts to burrowing owls will be determined after focused surveys are completed and impacts are determined.

6.4 Mammals

No part of the project area occurs within a mapped survey area for mammal species. Therefore, focused surveys for mammals are not required.

7 INFORMATION ON OTHER SPECIES

7.1 Delhi Sands Flower-Loving Fly

No part of the project area occurs within an area mapped with Delhi soils. Therefore, focused surveys for Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) are not required.

7.2 Coastal California Gnatcatcher

Potentially suitable coastal California gnatcatcher (*Poliophtila californica californica*) habitat is limited to California Buckwheat Scrub (*Eriogonum fasciculatum* Shrubland Alliance) within the CWPP area. No coastal California gnatcatchers were detected during the habitat mapping and assessment survey. Protocol surveys are not required and were not conducted. However, as a precaution, all habitat clearing and grubbing should be timed to avoid the active breeding season for coastal California gnatcatcher (March 1 to August 15) to the extent feasible.

7.3 Quino Checkerspot Butterfly

Potentially suitable Quino checkerspot butterfly (*Euphydryas editha quino*) habitat consisting of California buckwheat scrub containing California plantain, a larval host plant, was documented during the habitat assessment and vegetation mapping surveys. The site occurs within the Recommended Quino Survey Area and portions of the site consist of Quino Survey Areas, i.e., any area within the Recommended Quino Survey Area that does not qualify as an Excluded Area (USFWS 2014). Excluded areas consist of orchards, developed areas or small in-fill parcels dominated by non-native vegetation, active agricultural fields without remnant inclusions of native vegetation or that are entirely without fallowed or unplowed areas, and closed-canopy woody vegetation such as forests, riparian areas, shrublands, and chaparral. Given that the CWPP area contains Quino Survey Areas, protocol surveys are required to determine presence/absence of Quino checkerspot butterfly.

7.4 Species Not Adequately Conserved

Exhibit D covers special-status plant species and Exhibit E covers special-status wildlife species that were evaluated for potential to occur on-site, which includes species not adequately conserved. Species not adequately conserved with potential to occur on-site consist of ocellated Humboldt lily and Lincoln's sparrow (*Melospiza lincolni*). Focused surveys for rare plants and riparian birds would be sufficient to determine if these species occur on-site.

8 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (SECTION 6.1.4)

MSHCP Section 6.1.4 states, “The guidelines presented in this section are intended to address indirect effects associated with locating Development in proximity to the MSHCP Conservation Area, where applicable” and clarifies that addressing potential edge effects along the Urban/Wildlands Interface are intended to “be implemented in conjunction with review of individual public and private Development projects in proximity to the MSHCP Conservation Area” (Dudek 2003:6-42). However, the goal of the CWPP is to reduce wildfire risk along the Urban/Wildlands Interface and does not propose development. Therefore, this section is not applicable.

8.1 Drainage

According to Section 6.1.4 of the MSHCP:

Proposed Developments in proximity to the MSHCP Conservation Area shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged to the MSHCP Conservation Area is not altered in an adverse way when compared with existing conditions. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into the MSHCP Conservation Area. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the MSHCP Conservation Area. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. Regular maintenance shall occur to ensure effective operations of runoff control systems. (Dudek 2003:6-42)

The CWPP does not propose any development, but will incorporate all relevant measures, including those required through the National Pollutant Discharge Elimination System (NPDES), to ensure runoff resulting from CWPP activities does not adversely alter the MSHCP Conservation Area.

8.2 Toxics

According to Section 6.1.4 of the MSHCP:

Land uses proposed in proximity to the MSHCP Conservation Area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife species, Habitat or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Conservation Area. Measures such as those employed to address drainage issues shall be implemented. (Dudek 2003:6-43)

Chemicals, such as herbicides and fuel for mechanized equipment, that are potentially toxic or may adversely affect wildlife, habitat, or water quality will not be discharged into the MSHCP Conservation Area. Standard best management practices (BMPs) to prevent accidental discharge of potentially toxic materials will be implemented such as refueling equipment only in approved staging areas, appropriate use of spill kits, and the requirement that only licensed applicators use herbicide within the survey area.

8.3 Lighting

According to Section 6.1.4 of the MSHCP, “Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. Shielding shall be incorporated in project designs to ensure ambient lighting in the MSHCP Conservation Area is not increased” (Dudek 2003:6-43).

CWPP activities will occur in daylight hours and no temporary or permanent lighting is proposed.

8.4 Noise

According to Section 6.1.4 of the MSHCP:

Proposed noise generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations and guidelines related to land use noise standards. For planning purposes, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards. (Dudek 2003:6-43)

CWPP activities would result in increased noise impacts if mechanized equipment is used to remove large invasive species (e.g., chainsaws to remove invasive trees). Instead, quieter methods of control such as “drill and kill” methods will be used to the extent practicable and noisy activities will occur outside of the avian breeding season (March 1 through August 31).

8.5 Invasives

According to Section 6.1.4 of the MSHCP:

When approving landscape plans for Development that is proposed adjacent to the MSHCP Conservation Area, Permittees shall consider the invasive, non-native plant species listed in Table 6-2 and shall require revisions to landscape plans (subject to the limitations of their jurisdiction) to avoid the use of invasive species for the portions of Development that are adjacent to the MSHCP Conservation Area. Considerations in reviewing the applicability of this list shall include proximity of planting areas to the MSHCP Conservation Areas, species considered in the planting plans, resources being protected within the MSHCP Conservation Area and their relative sensitivity to invasion, and barriers to plant and seed dispersal, such as walls, topography and other features. (Dudek 2003:6-43)

The CWPP does not propose any landscaping and will prioritize invasive species when vegetation removal is necessary. Barriers to invasive plant and seed dispersal are not necessary given the proposed invasive species removal activities.

8.6 Barriers

According to Section 6.1.4 of the MSHCP:

Proposed land uses adjacent to the MSHCP Conservation Area shall incorporate barriers, where appropriate in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass or dumping in the MSHCP Conservation Area. Such barriers

may include native landscaping, rocks/boulders, fencing, walls, signage and/or other appropriate mechanisms. (Dudek 2003:6-46)

There is existing fencing along much of the outer extent of the project area, but there are gaps that allow for unauthorized access. There is currently a proposed plan for new/additional fencing to deter unauthorized trespassing throughout the outer extent of the project area. Additional fencing would also encourage wildlife to stay within the creek channels where they are not at risk of being struck by vehicles.

8.7 Grading/Land Development

According to Section 6.1.4 of the MSHCP, “Manufactured slopes associated with proposed site development shall not extend into the MSHCP Conservation Area” (Dudek 2003:6-46).

The CWPP does not propose grading or land development; thus, no new manufactured slopes will extend into the MSHCP Conservation Area.

9 CONSTRUCTION GUIDELINES (SECTION 7.5.3)

These guidelines are applicable to covered facilities within Criteria Area and Public/Quasi-Public Lands. The CWPP is not a covered facility and does not propose any modifications to a covered facility; therefore, this section is not applicable to the CWPP.

10 BEST MANAGEMENT PRACTICES (MSHCP VOLUME I, APPENDIX C)

The following BMPs are applicable to all projects. Table 3 includes the text of each BMP from MSHCP Volume I, Appendix C, and describes how the CWPP will comply with each BMP.

Table 3. Project Compliance with BMPs (MSHCP Volume I, Appendix C)

Best Management Practice*	Project Compliance
1. A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) [ESA] and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.	Acknowledged, and project will comply.
2. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB [Regional Water Quality Control Board] requirements.	Acknowledged, and project will comply.
3. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.	Acknowledged, and project will comply.
4. The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.	Acknowledged, and project will comply.

Best Management Practice*	Project Compliance
5. Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.	Acknowledged, and project will comply.
6. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.	Acknowledged, and project will comply.
7. When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.	Acknowledged, and project will comply.
8. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS [USFWS], and CDFG [CDFW], RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.	Acknowledged, and project will comply.
9. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.	Acknowledged, and project will comply.
10. The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.	Acknowledged, and project will comply.
11. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.	Acknowledged, and project will comply.
12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.	Acknowledged, and project will comply.
13. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).	Acknowledged, and project will comply.
14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.	Acknowledged, and project will comply.
15. The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.	Acknowledged, and project will comply.

* Source: Dudek (2003:Appendix C).

11 LITERATURE CITED

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EXHIBIT A

Site Photographs

	
<p>Photograph 1. West-facing representative view of Open Water and Cattail Marshes. Photograph taken along the eastern edge of the project area.</p>	<p>Photograph 2. West-facing representative view of unvegetated streambed. Photograph taken in the eastern portion of the project area.</p>
	
<p>Photograph 3. North-facing representative view of ephemeral ponded habitat. Photograph taken in the eastern portion of the project area.</p>	<p>Photograph 4. North-facing representative view of Mulefat Thickets, <i>Baccharis salicifolia</i> – <i>Sambucus nigra</i> Association and Wild Oats and Annual Brome Grasslands mosaic. Photograph taken in the eastern-central portion of the project area.</p>
	
<p>Photograph 5. West-facing representative view of Sandbar Willow Thickets. Photograph taken in the eastern-central portion of the project area.</p>	<p>Photograph 6. West-facing representative view of Coyote Brush Scrub. Photograph taken within a previously restored area in the eastern-central portion of the project area.</p>





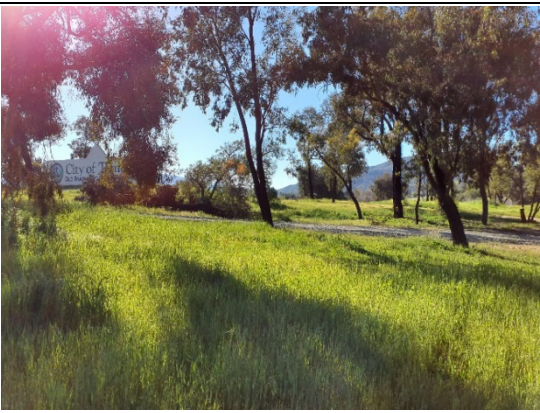

	
<p>Photograph 7. North-facing representative view of Upland Mustards or Star-thistle Fields. Photograph taken in the central region of the project area along the golf course.</p>	<p>Photograph 8. West-facing representative view of Fremont Cottonwood Forest and Woodland, <i>Populus fremontii</i> – <i>Quercus agrifolia</i> Association. Photograph in the central region of the project area.</p>
	
<p>Photograph 9. South-facing representative view of Goodding's Willow – Red Willow Riparian Woodland and Forest. Photograph taken in the central portion of the project area.</p>	<p>Photograph 10. South-facing representative view of California Buckwheat Scrub. Photograph taken in western portion of the project area.</p>
	
<p>Photograph 11. Southeast-facing representative view of Eucalyptus – Tree of Heaven – Black Locust Groves. Photograph taken in western portion of the project area.</p>	<p>Photograph 12. West-facing representative view of Wild Oats and Annual Brome Grasslands. Photograph taken in western portion of the project area.</p>

EXHIBIT B

Plants Observed

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the City of Temecula – Temecula Creek Community Wildfire Protection Plan

Scientific Name	Common Name	Family	Habit	Non-native?	Special-status?	Indicator*	Habitat
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	Nyctaginaceae	Annual herb	–	Yes	–	MT-BS
<i>Acacia redolens</i>	vanilla-scented wattle	Fabaceae	Shrub	Yes	–	–	CaBS
<i>Acmispon glaber</i>	deerweed	Fabaceae	Subshrub	–	–	–	CaBS
<i>Agave americana</i>	American century plant	Agavaceae	Perennial herb, Shrub	Yes	–	UPL	CaBS
<i>Ambrosia acanthicarpa</i>	annual bur-sage	Asteraceae	Annual herb	–	–	–	MT-BS, RBMGG
<i>Ambrosia psilostachya</i>	western ragweed	Asteraceae	Perennial herb	–	–	FACU	DEV, FCFW-SG, RBMGG
<i>Amsinckia intermedia</i>	common fiddleneck	Boraginaceae	Annual herb	–	–	–	MT-SN, SWT, UMSTF, WOABG
<i>Anemopsis californica</i>	yerba mansa	Saururaceae	Perennial herb	–	–	OBL	FCFW-SG
<i>Anthriscus caucalis</i>	bur-chervil	Apiaceae	Annual herb	Yes	–	–	CLOWF
<i>Artemisia californica</i>	California sagebrush	Asteraceae	Shrub	–	–	–	CaBS, GWRW
<i>Artemisia douglasiana</i>	mugwort	Asteraceae	Perennial herb	–	–	FAC	CLOWF, EUC, FCFW-QA, FCFW-SG, GWRW, SWT, TT, UMSTF
<i>Artemisia dracunculus</i>	tarragon	Asteraceae	Perennial herb	–	–	FACU	CoBS, MT-BS
<i>Arundo donax</i>	giant reed	Poaceae	Perennial herb	Yes	–	FACW	AWT
<i>Astragalus didymocarpus</i> var. <i>didymocarpus</i>	common dwarf milkvetch	Fabaceae	Annual herb	–	–	–	CaBS
<i>Astragalus pomonensis</i>	Pomona milk vetch	Fabaceae	Perennial herb	–	–	–	MT-BS
<i>Avena barbata</i>	slender wild oat	Poaceae	Annual herb	Yes	–	–	EUC, WOABG
<i>Azolla filiculoides</i>	mosquito fern	Azollaceae	Fern	–	–	OBL	CM, HCBM
<i>Baccharis pilularis</i>	coyote brush	Asteraceae	Shrub	–	–	–	CoBS, MT-BS
<i>Baccharis salicifolia</i> ssp. <i>salicifolia</i>	mule fat	Asteraceae	Shrub	–	–	FAC	AWT, CoBS, CLOWF, CM, EUC, FCFW-BS, FCFW-SG, GWRW, MT-BS, MT-SN, SWT, TT, WOABG
<i>Baccharis sarothroides</i>	broom baccharis	Asteraceae	Shrub	–	–	FACU	CSBSS
<i>Brassica nigra</i>	black mustard	Brassicaceae	Annual herb	Yes	–	–	UMSTF, WOABG
<i>Bromus diandrus</i>	ripgut grass	Poaceae	Annual herb	Yes	–	–	CLOWF, EUC, FCFW-QA, FCFW-SG, GWRW, RBMGG, SWT, WOABG
<i>Bromus hordeaceus</i>	soft chess	Poaceae	Annual herb	Yes	–	FACU	WOABG

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Scientific Name	Common Name	Family	Habit	Non-native?	Special-status?	Indicator*	Habitat
<i>Bromus rubens</i>	red brome	Poaceae	Annual herb	Yes	–	UPL	GWRW, MT-BS, MT-SN, RBMGG, SWT, WOABG
<i>Calandrinia menziesii</i>	red maids	Montiaceae	Annual herb	–	–	FACU	CaBS, UMSTF
<i>Camissoniopsis bistorta</i>	California sun cup	Onagraceae	Annual herb	–	–	–	CaBS, MT-BS, RBMGG
<i>Capsella bursa-pastoris</i>	shepherd's purse	Brassicaceae	Annual herb	Yes	–	FACU	GWRW
<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i>	Italian thistle	Asteraceae	Annual herb	Yes	–	–	CSBSS, MT-SN, SWT, UMSTF, WOABG
<i>Carex spissa</i>	San Diego sedge	Cyperaceae	Perennial herb	–	–	FAC	GWRW
<i>Centaurea melitensis</i>	toalote, Maltese star-thistle	Asteraceae	Annual herb	Yes	–	–	CSBSS, GWRW, MT-BS, WOABG
<i>Claytonia perfoliata</i>	rooreh	Montiaceae	Annual herb	–	–	FAC	CLOWF, FCFW-BS, GWRW, UMSTF
<i>Conium maculatum</i>	poison hemlock	Apiaceae	Perennial herb	Yes	–	FACW	MT-SN
<i>Corethrogyne filaginifolia</i>	common sand aster	Asteraceae	Perennial herb	–	–	–	CaBS, MT-BS, RBMGG
<i>Cortaderia selloana</i>	pampas grass	Poaceae	Perennial herb	Yes	–	FACU	GWRW, PGP
<i>Crassula connata</i>	pygmy-weed	Crassulaceae	Annual herb	–	–	FAC	CSBSS, MT-BS, UMSTF
<i>Croton californicus</i>	California croton	Euphorbiaceae	Perennial herb	–	–	–	MT-BS, RBMGG, WOABG
<i>Cryptantha intermedia</i>	common cryptantha	Boraginaceae	Annual herb	–	–	–	CaBS, WOABG
<i>Cucurbita foetidissima</i>	buffalo gourd, calabazilla	Cucurbitaceae	Perennial herb	–	–	–	CLOWF
<i>Cynara cardunculus</i>	artichoke thistle	Asteraceae	Perennial herb	Yes	–	–	WOABG
<i>Cyperus eragrostis</i>	tall cyperus	Cyperaceae	Perennial herb	–	–	FACW	GWRW, FCFW-QA
<i>Dipterostemon capitatus</i> ssp. <i>capitatus</i>	blue dicks	Themidaceae	Perennial herb	–	–	FACU	CaBS, WOABG
<i>Dudleya lanceolata</i>	lance-leaved dudleya	Crassulaceae	Perennial herb	–	–	–	CaBS
<i>Epilobium ciliatum</i> ssp. <i>ciliatum</i>	willow herb	Onagraceae	Perennial herb	–	–	FACW	CM, WOABG
<i>Equisetum hyemale</i> ssp. <i>affine</i>	common scouring rush	Equisetaceae	Perennial herb	–	–	FACW	AWT
<i>Erigeron canadensis</i>	horseweed	Asteraceae	Annual herb	–	–	FACU	MT-BS, RBMGG
<i>Eriogonum davidsonii</i>	Davidson's wild buckwheat	Polygonaceae	Annual herb	–	–	–	MT-BS

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the City of Temecula – Temecula Creek Community Wildfire Protection Plan

Scientific Name	Common Name	Family	Habit	Non-native?	Special-status?	Indicator*	Habitat
<i>Eriogonum fasciculatum</i> var. <i>foliolosum</i>	leafy California buckwheat	Polygonaceae	Shrub	–	–	–	MT-BS, SWT
<i>Erodium cicutarium</i>	redstem filaree	Geraniaceae	Annual herb	Yes	–	–	EUC, MT-SN, UMSTF, RBMGG, WOABG
<i>Eucalyptus camaldulensis</i>	red gum	Myrtaceae	Tree	Yes	–	FAC	EUC
<i>Eucalyptus globulus</i>	blue gum	Myrtaceae	Tree	Yes	–	–	EUC
<i>Eucrypta chrysanthemifolia</i> var. <i>chrysanthemifolia</i>	common eucrypta	Hydrophyllaceae	Annual herb	–	–	–	CLOWF
<i>Euphorbia maculata</i>	spotted spurge	Euphorbiaceae	Annual herb	Yes	–	UPL	CaBS, CoBS, DIS, RBMGG
<i>Festuca myuros</i>	rattail sixweeks grass	Poaceae	Annual herb	Yes	–	FACU	FCFW-SG, MT-SN, WOABG
<i>Foeniculum vulgare</i>	fennel	Apiaceae	Perennial herb	Yes	–	–	AWT, FCFW-BS
<i>Galium aparine</i>	goose grass	Rubiaceae	Annual herb	–	–	FACU	CLOWF, CM, UMSTF
<i>Gilia diegensis</i>	coastal gilia	Polemoniaceae	Annual herb	–	–	–	WOABG
<i>Hedypnois rhagadioloides</i>	Crete weed	Asteraceae	Annual herb	Yes	–	–	EUC
<i>Heliotropium curassavicum</i> var. <i>oculatum</i>	alkali heliotrope	Heliotropiaceae	Perennial herb	–	–	FACU	MT-BS
<i>Helminthotheca echinoides</i>	bristly ox-tongue	Asteraceae	Annual herb	Yes	–	FAC	FCFW-QA, UMSTF
<i>Hesperoyucca whipplei</i>	chaparral yucca	Agavaceae	Shrub	–	–	–	CaBS
<i>Heteromeles arbutifolia</i>	toyon	Rosaceae	Shrub	–	–	–	CaBS
<i>Heterotheca grandiflora</i>	telegraph weed	Asteraceae	Annual herb, Perennial herb	–	–	–	CaBS, CoBS, MT-BS, RBMGG, WOABG
<i>Hirschfeldia incana</i>	short-pod mustard	Brassicaceae	Annual herb, Perennial herb	Yes	–	–	CSBSS, GWRW, MT-BS, MT-SN, UMSTF, WOABG
<i>Hordeum murinum</i>	wall barley	Poaceae	Annual herb	Yes	–	FACU	MT-SN, WOABG
<i>Hypochaeris glabra</i>	smooth cat's-ear	Asteraceae	Annual herb	Yes	–	–	CLOWF, DEV, WOABG
<i>Isocoma menziesii</i>	Menzies' goldenbush	Asteraceae	Shrub	–	–	FAC	WOABG
<i>Juncus mexicanus</i>	Mexican rush	Juncaceae	Perennial herb	–	–	FACW	FCFW-BS, HCBM, SWT
<i>Lactuca serriola</i>	prickly lettuce	Asteraceae	Annual herb	Yes	–	FACU	DEV, UMSTF
<i>Lastarriaea coriacea</i>	leather-spineflower	Polygonaceae	Annual herb	–	–	–	WOABG

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Scientific Name	Common Name	Family	Habit	Non-native?	Special-status?	Indicator*	Habitat
<i>Lasthenia gracilis</i>	common goldfields	Asteraceae	Annual herb	–	–	–	CaBS
<i>Lepidium draba</i>	heart-podded hoary cress	Brassicaceae	Perennial herb	Yes	–	–	WOABG
<i>Logfia gallica</i>	daggerleaf cottonrose	Asteraceae	Annual herb	Yes	–	–	WOABG
<i>Lupinus bicolor</i>	miniature lupine	Fabaceae	Annual herb	–	–	–	CaBS, MT-BS, WOABG
<i>Lupinus succulentus</i>	arroyo lupine	Fabaceae	Annual herb	–	–	–	WOABG
<i>Lysimachia arvensis</i>	scarlet pimpernel	Myrsinaceae	Annual herb	Yes	–	FAC	UMSTF
<i>Marah macrocarpa</i>	wild-cucumber, chilicothe	Cucurbitaceae	Perennial herb	–	–	–	CLOWF
<i>Marrubium vulgare</i>	white horehound	Lamiaceae	Perennial herb	Yes	–	FACU	WOABG
<i>Matricaria discoidea</i>	pineapple weed	Asteraceae	Annual herb	–	–	FACU	DIS
<i>Medicago polymorpha</i>	California burclover	Fabaceae	Annual herb	Yes	–	FACU	FCFW-SG
<i>Melilotus indicus</i>	sourclover	Fabaceae	Annual herb	Yes	–	FACU	DEV, MT-SN, WOABG
<i>Nasturtium officinale</i>	water cress	Brassicaceae	Perennial herb	–	–	OBL	GWRW
<i>Nemophila menziesii</i> var. <i>menziesii</i>	baby blue eyes	Boraginaceae	Annual herb	–	–	–	CaBS
<i>Opuntia littoralis</i>	prickly pear	Cactaceae	Shrub (stem succulent)	–	–	–	CaBS, CLOWF
<i>Phacelia ramosissima</i>	branching phacelia	Hydrophyllaceae	Perennial herb	–	–	FACU	AWT, CLOWF, EUC, GWRW, UMSTF
<i>Pinus pinea</i>	Italian stone pine	Pinaceae	Tree	Yes	–	–	CLOWF, TT
<i>Pistacia chinensis</i>	Chinese pistachio	Anacardiaceae	Tree	Yes	–	–	FCFW-SG, GWRW
<i>Plantago erecta</i>	California plantain	Plantaginaceae	Annual herb	–	–	–	CaBS
<i>Plantago lanceolata</i>	English plantain	Plantaginaceae	Perennial herb	Yes	–	FAC	FCFW-QA, SWT
<i>Platanus racemosa</i>	western sycamore	Platanaceae	Tree	–	–	FAC	FCFW-SG
<i>Populus fremontii</i> subsp. <i>fremontii</i>	Fremont cottonwood	Salicaceae	Tree	–	–	–	CLOWF, FCFW-BS, FCFW-QA, FCFW-SG, GWRW, MT-SN
<i>Pseudognaphalium californicum</i>	ladies' tobacco	Asteraceae	Annual herb, Perennial herb	–	–	–	MT-BS
<i>Pseudognaphalium leucocephalum</i>	white rabbit-tobacco	Asteraceae	Perennial herb	–	Yes	–	MT-BS
<i>Quercus agrifolia</i>	coast live oak	Fagaceae	Tree	–	–	–	AWT, CaBS, CLOWF, FCFW-QA, GWRW

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Scientific Name	Common Name	Family	Habit	Non-native?	Special-status?	Indicator*	Habitat
<i>Raphanus sativus</i>	radish	Brassicaceae	Annual herb	Yes	–	–	DEV, UMSTF, WOABG
<i>Rubus ursinus</i>	California blackberry	Rosaceae	Shrub	–	–	FAC	FCFW-SG, GWRW
<i>Rumex crispus</i>	curly dock	Polygonaceae	Perennial herb	Yes	–	FAC	WOABG
<i>Salix exigua</i> var. <i>hindsiana</i>	Hinds' willow	Salicaceae	Shrub	–	–	FACW	CM, FCFW-BS, GWRW, MT-BS, PGP, SWT, TT
<i>Salix gooddingii</i>	Goodding's black willow	Salicaceae	Tree	–	–	FACW	FCFW-BS, FCFW-SG, GWRW, PGP, MT-SN
<i>Salix laevigata</i>	red willow	Salicaceae	Tree	–	–	FACW	FCFW-BS, FCFW-SG, GWRW, PGP
<i>Salix lasiolepis</i>	arroyo willow	Salicaceae	Shrub, Tree	–	–	FACW	AWT, EUC, FCFW-SG, GWRW, MT-BS, SWT
<i>Salsola tragus</i>	Russian thistle, tumbleweed	Chenopodiaceae	Annual herb	Yes	–	FACU	DEV, UMSTF
<i>Salvia mellifera</i>	black sage	Lamiaceae	Shrub	–	–	–	CaBS
<i>Sambucus mexicana</i>	blue elderberry	Acanthaceae	Shrub, Tree	–	–	FACU	AWT, CaBS, CLOWF, CSBSS, GWRW, SWT, UMSTF
<i>Schinus molle</i>	Peruvian pepper tree	Anacardiaceae	Tree	Yes	–	FACU	FCFW-QA
<i>Schismus barbatus</i>	old han schismus	Poaceae	Annual herb	Yes	–	–	CaBS, MT-BS, RBMGG, UMSTF
<i>Schoenoplectus californicus</i>	California bulrush	Cyperaceae	Perennial herb	–	–	OBL	CM, HCBM
<i>Senecio vulgaris</i>	common groundsel	Asteraceae	Annual herb	Yes	–	FACU	UMSTF, WOABG
<i>Sidalcea sparsifolia</i>	southern checkerbloom	Malvaceae	Perennial herb	–	–	–	WOABG
<i>Silybum marianum</i>	milk thistle	Asteraceae	Annual herb	Yes	–	–	CLOWF
<i>Sisymbrium altissimum</i>	tumble mustard	Brassicaceae	Annual herb, Perennial herb	Yes	–	FACU	MT-SN, WOABG
<i>Sisymbrium irio</i>	London rocket	Brassicaceae	Annual herb, Perennial herb	Yes	–	–	EUC
<i>Sonchus oleraceus</i>	common sow thistle	Asteraceae	Annual herb	Yes	–	UPL	GWRW
<i>Stellaria media</i>	common chickweed	Caryophyllaceae	Annual herb	Yes	–	FACU	CLOWF
<i>Stephanomeria virgata</i>	twiggy wreath plant	Asteraceae	Annual herb	–	–	–	WOABG
<i>Stipa miliacea</i> var. <i>miliacea</i>	smilo grass	Poaceae	Perennial herb	Yes	–	–	CLOWF, EUC, FCFW-BS

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Scientific Name	Common Name	Family	Habit	Non-native?	Special-status?	Indicator*	Habitat
<i>Stylocline gnaphaloides</i>	everlasting neststraw	Asteraceae	Annual herb	–	–	–	WOABG
<i>Tamarix</i> sp.	tamarisk	Tamaricaceae	Tree	Yes	–	–, FAC	CLOWF, DEV, MT-BS, TT, GWRW
<i>Toxicodendron diversilobum</i>	western poison oak	Anacardiaceae	Shrub	–	–	FACU	GWRW
<i>Trifolium hirtum</i>	rose clover	Fabaceae	Annual herb	Yes	–	–	DEV
<i>Typha latifolia</i>	broad-leaved cattail	Typhaceae	Perennial herb	–	–	OBL	CM, HCBM, SWT
<i>Urtica dioica</i> ssp. <i>holosericea</i>	hoary nettle	Urticaceae	Perennial herb	–	–	FAC	CoBS, FCFW-SG, SWT, UMSTF
<i>Urtica urens</i>	dwarf nettle	Urticaceae	Annual herb	Yes	–	–	DEV, UMSTF
<i>Vicia villosa</i>	hairy vetch	Fabaceae	Annual herb	–	–	–	CaBS, WOABG
<i>Vinca major</i>	greater periwinkle	Apocynaceae	Perennial herb	Yes	–	FACU	CLOWF
<i>Xanthium strumarium</i>	cocklebur	Asteraceae	Annual herb	–	–	FAC	FCFW-SG, GWRW, MT-BS

Indicators

UPL	Upland
FACU	Facultative Upland
FAC	Facultative
FACW	Facultative Wetland
OBL	Obligate

*Taxa without an indicator are assumed to be UPL

Habitats

CoBS	Baccharis pilularis Alliance (Coyote brush scrub); Baccharis pilularis Association
CaBS	Eriogonum fasciculatum Alliance (California buckwheat scrub); Eriogonum fasciculatum Association
CLOWF	Quercus agrifolia Alliance (Coast live oak woodland and forest); Quercus agrifolia Association
CSBS	Artemisia californica – Salvia mellifera Alliance (California sagebrush – black sage scrub); Artemisia californica – Salvia mellifera – Baccharis sarothroides Association
CM	Typha (angustifolia, domingensis, latifolia) Alliance (Cattail marshes); Typha angustifolia – Typha latifolia – Typha domingensis Association
DEV	Developed
DIS	Disturbed
EUC	Eucalyptus spp. – Ailanthus altissima – Robinia pseudoacacia Semi-Natural Alliance (Eucalyptus – tree of heaven – black locust groves); Eucalyptus (globulus, camaldulensis) Semi-natural Association
FCFW-BS	Populus fremontii – Fraxinus velutina – Salix gooddingii Alliance (Fremont cottonwood forest and woodland); Populus fremontii / Baccharis salicifolia Association*
FCFW-QA	Populus fremontii – Fraxinus velutina – Salix gooddingii Alliance (Fremont cottonwood forest and woodland); Populus fremontii – Quercus agrifolia Association*
FCFW-SG	Populus fremontii – Fraxinus velutina – Salix gooddingii Alliance (Fremont cottonwood forest and woodland); Populus fremontii – Salix (laevigata, lasiolepis, lucida ssp. lasiandra) Association*
HCBM	Hardstem and California bulrush marshes
GWRW	Salix gooddingii – Salix laevigata Alliance (Goodding's willow – red willow riparian woodland and forest); Salix gooddingii – Salix laevigata Association*
MFT-BS	Baccharis salicifolia Alliance (Mulefat thickets); Baccharis salicifolia Association
MFT-SN	Baccharis salicifolia Alliance (Mulefat thickets); Baccharis salicifolia – Sambucus nigra Association
PGP	Pampas Grass Patches
RBMGG	Red brome or Mediterranean grass grasslands
SWT	Salix exigua Alliance (Sandbar willow thickets); Salix exigua Association
TT	Tamarix spp. Semi-Natural Alliance (Tamarisk thickets); Tamarix spp. Semi-natural Association
UMSTF	Brassica nigra – Centaurea (solstitialis, melitensis) Semi-Natural Alliance (Upland mustards or star-thistle fields); Hirschfeldia incana Semi-natural Association
WOABG	Avena spp. – Bromus spp. Semi-Natural Alliance (Wild oats and annual brome grasslands); Bromus diandrus – Mixed herbs Semi-natural Association

EXHIBIT C

Wildlife Observed

Scientific Name	Common Name
INSECTS	
Nymphalidae	Brush-footed Butterflies
<i>Danaus plexippus plexippus</i> ¹	monarch
AMPHIBIANS	
Bufonidae	True Toads
<i>Anaxyrus boreas halophilus</i>	California toad
Hylidae	Treefrogs
<i>Pseudacris hypochondriaca hypochondriaca</i>	Baja California treefrog
REPTILES	
Colubridae	Colubrids
<i>Coluber</i> sp.	coachwhip
Iguanidae	Iguanids
<i>Sceloporus occidentalis</i>	western fence lizard
Viperidae	Vipers
<i>Crotalus oreganus helleri</i>	southern Pacific rattlesnake
BIRDS	
Accipitridae	Hawks
<i>Accipiter cooperii</i> ²	Cooper's hawk
<i>Buteo jamaicensis</i>	red-tailed hawk
<i>Buteo lineatus</i>	red-shouldered hawk
Aegithalidae	Bushtits
<i>Psaltiriparus minimus</i>	bushtit
Anatidae	Ducks, Geese, and Swans
<i>Anas platyrhynchos</i>	mallard
<i>Branta canadensis</i>	Canada goose
Ardeidae	Hérons, Egrets, Bitterns
<i>Ardea herodias</i> ³	great blue heron
Cathartidae	New World Vultures
<i>Cathartes aura</i> ⁴	turkey vulture
Charadriidae	Plovers, Dotterels, and Lapwings
<i>Charadrius vociferus</i>	killdeer
Columbidae	Pigeons and Doves
<i>Zenaida macroura</i>	mourning dove
Corvidae	Jays and Crows
<i>Aphelocoma californica</i>	California scrub-jay

¹ Candidate for federal listing

² Western Riverside County MSHCP–covered species

³ Western Riverside County MSHCP–covered species

⁴ Western Riverside County MSHCP–covered species

Scientific Name	Common Name
<i>Corvus brachyrhynchos</i>	American crow
<i>Corvus corax</i>	common raven
Fringillidae	Finches
<i>Haemorhous mexicanus</i>	house finch
<i>Spinus psaltria</i>	lesser goldfinch
Hirundinidae	Swallows
<i>Petrochelidon pyrrhonota</i>	cliff swallow
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow
Icteridae	Blackbirds and Allies
<i>Agelaius phoeniceus</i>	red-winged blackbird
<i>Molothrus ater</i> ⁵	brown-headed cowbird
Mimidae	Mockingbirds and Thrashers
<i>Mimus polyglottos</i>	northern mockingbird
<i>Toxostoma redivivum</i>	California thrasher
Parulidae	New World Warblers
<i>Geothlypis trichas</i>	common yellowthroat
<i>Setophaga coronata</i>	yellow-rumped warbler
Passerellidae	Sparrows and Towhees
<i>Melospiza melodia</i>	song sparrow
<i>Pipilo crissalis</i>	California towhee
<i>Pipilo maculatus</i>	spotted towhee
Phalacrocoracidae	Cormorants and Shags
<i>Nannopterum auritum</i> ⁶	double-crested cormorant
Picidae	Woodpeckers
<i>Dryobates nuttallii</i>	Nuttall's woodpecker
<i>Colaptes auratus</i>	northern flicker
<i>Melanerpes formicivorus</i>	acorn woodpecker
Trochilidae	Hummingbirds
<i>Calypte anna</i>	Anna's hummingbird
Troglodytidae	Wrens
<i>Thryomanes bewickii</i>	Bewick's wren
<i>Troglodytes aedon</i>	house wren
Tyrannidae	Tyrant Flycatchers
<i>Sayornis nigricans</i>	black phoebe
<i>Tyrannus vociferans</i>	Cassin's kingbird

⁵ Non-native species

⁶ CDFW Watch List, Western Riverside County MSHCP-covered species

Scientific Name	Common Name
Vireonidae	Vireos
<i>Vireo bellii pusillus</i> ⁷	least Bell's vireo
MAMMALS	
Leporidae	Hares and Rabbits
<i>Sylvilagus audubonii</i>	desert cottontail
Procyonidae	Raccoons and Ringtails
<i>Procyon lotor</i>	raccoon (tracks)
Sciuridae	Squirrels
<i>Otospermophilus beecheyi</i>	California ground squirrel

⁷ Federal endangered, state endangered, Western Riverside County MSHCP–covered species

EXHIBIT D

Special-status Plant Species with Potential to Occur

Table D-1. Potential Sensitive Species – Flora

Species Name Common Name	Status (Federal/State/Local)	Habitat Preferences/Requirements	Blooming Period	Potential for Occurrence
<i>Abronia villosa</i> var. <i>aurita</i> chaparral sand-verbena	–/1B.1/–	Sandy areas within chaparral, coastal scrub, and desert dunes. 60 to 1,570 meters (m).	(Jan)Mar– Sep	Present. Two individuals were observed incidentally on-site during the habitat assessment and vegetation mapping surveys and have been recorded on-site in prior surveys.
<i>Allium marvinii</i> Yucaipa onion	–/1B.2/C, NE	Chaparral. In openings on clay soils. 850–1,070 m.	Apr–May	Does not occur. Chaparral and clay soils do not occur on-site and site is below elevation range.
<i>Allium munzii</i> Munz's onion	FE/ST, 1B.1/C, NE	Chaparral, coastal scrub, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Heavy clay soils; grows in grasslands and openings within shrublands or woodlands. 375–1,040 m.	Mar–May	Does not occur. Clay soils do not occur on-site and site is below elevation range.
<i>Almutaster pauciflorus</i> alkali marsh aster	–/2B.2/–	Meadows and seeps. Alkaline. 60–765 m.	Jun–Oct	Does not occur. A single 1937 record mapped as a best guess by CNNDDB is the only nearby occurrence, which is southwest of the species' known geographic range.
<i>Ambrosia pumila</i> San Diego ambrosia	FE/1B.1/C, NE	Chaparral, coastal scrub, valley and foothill grassland. Sandy loam or clay soil; sometimes alkaline. In valleys; persists where disturbance has been superficial. Sometimes on margins or near vernal pools. 3–580 m.	Apr–Oct	High. Suitable coastal scrub and grassland habitats, and sandy loam soils occur on-site and a 2019 CNDDDB occurrence is recorded approximately 0.35 mi NW of the site.
<i>Arctostaphylos rainbowensis</i> Rainbow manzanita	–/1B.1/C	Chaparral. Usually found in gabbro chaparral. 100–870 m.	Dec–Mar	Does not occur. Chaparral and gabbroic soils do not occur on-site and the species would have been detectable during habitat assessment and vegetation mapping surveys.
<i>Astragalus pachypus</i> var. <i>jaegeri</i> Jaeger's milk-vetch	–/1B.1/C	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland. Dry ridges and valleys and open sandy slopes; often in grassland and oak-chaparral. 365–1,040 m.	Dec–Jun	Does not occur. Site is below elevation range and west of species' known geographic range.
<i>Atriplex coronata</i> var. <i>notatior</i> San Jacinto Valley crownscale	FE/1B.1/C, R/VP	Playas, valley and foothill grassland, vernal pools. Alkaline areas in the San Jacinto River Valley. 35–460 m.	Apr–Aug	Does not occur. Site is outside of known geographic range.
<i>Boechera johnstonii</i> Johnston's rockcress	–/1B.2/C, NE	Chaparral, lower montane coniferous forest. Often on eroded clay soils. With <i>Adenostoma</i> , <i>Quercus wislizenii</i> . 1,365–2,590 m.	Feb–Jun	Does not occur. Suitable habitat and clay soils do not occur on-site and site is below elevation range.

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Species Name Common Name	Status (Federal/State/Local)	Habitat Preferences/Requirements	Blooming Period	Potential for Occurrence
<i>Brodiaea filifolia</i> thread-leaved brodiaea	FT/SE, 1B.1/C, R/VP	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools. Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Occurs in openings on clay soils. 15–1,030 m.	Mar–Jun	Does not occur. Clay soils do not occur on-site.
<i>Brodiaea orcuttii</i> Orcutt's brodiaea	–1B.1/C, R/VP	Vernal pools, valley and foothill grassland, closed-cone coniferous forest, cismontane woodland, chaparral, meadows and seeps. Mesic, clay habitats; usually in vernal pools and small drainages. 30–1,615 m.	May–Jul	Does not occur. Clay soils do not occur on-site.
<i>Calochortus palmeri</i> var. <i>munzii</i> San Jacinto mariposa-lily	–1B.2/C, NE	Lower montane coniferous forest, chaparral, meadows and seeps. Seen in open Jeffrey pine forest as well as in chaparral. 940–1,815 m.	Apr–Jul	Does not occur. Site is below elevation range.
<i>Calochortus plummerae</i> Plummer's mariposa-lily	–4.2/C	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60–2,500 m.	May–Jul	Does not occur. Site is outside of known geographic range.
<i>Centromadia pungens</i> ssp. <i>laevis</i> smooth tarplant	–1B.1/C, R/VP	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland. Alkali meadow, alkali scrub; also in disturbed places. 5–1,170 m.	Apr–Sep	High. Suitable grassland, riparian woodland, and disturbed places occur on-site and a 2008 CNDDDB occurrence is approximately 0.35 mi north of the site along Murrieta Creek.
<i>Chorizanthe leptotheca</i> Peninsular spineflower	–4.2/C	Chaparral, coastal scrub, lower montane coniferous forest. On granitic soils, in alluvial fans. 300–1,900 m.	May–Aug	Does not occur. Site is outside of known geographic range.
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spine flower	–1B.1/C	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90–1,220 m.	Apr–Jun	Does not occur. Site is outside of known geographic range.
<i>Chorizanthe polygonoides</i> var. <i>longispina</i> long-spined spine flower	–1B.2/C	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools. Gabbroic clay. 30–1,630 m.	Apr–Jul	Does not occur. Clay soils do not occur on-site.
<i>Clinopodium chandleri</i> San Miguel savory	–1B.2/C, NE, R/VP	Chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Rocky, gabbroic or metavolcanic substrate. 120–975 m.	Mar–Jul	Does not occur. Gabbroic or metavolcanic substrates do not occur on-site.
<i>Deinandra mohavensis</i> Mojave tarplant	–/SE, 1B.3/NAC, R/VP	Riparian scrub, coastal scrub, chaparral. Low sand bars in riverbed; mostly in riparian areas or in ephemeral grassy areas. 640–1,645 m.	(Jan–May) Jun–Oct	Does not occur. Suitable habitat occurs on-site but the site is west of the species' known geographic range.

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Species Name Common Name	Status (Federal/State/Local)	Habitat Preferences/Requirements	Blooming Period	Potential for Occurrence
<i>Diplacus clevelandii</i> Cleveland's bush monkeyflower	–/4.2/NAC	Chaparral, cismontane woodland, lower montane coniferous forest. Disturbed gravelly roadsides and slopes. Gabbro soils. 450–2,000 m.	Apr–Jul	Does not occur. Site is below elevation range.
<i>Dodecahema leptoceras</i> slender-horned spine flower	FE/SE, 1B.1/C, NE, R/VP	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). Flood deposited terraces and washes; associates include <i>Encelia</i> , <i>Dalea</i> , <i>Lepidospartum</i> , etc. Sandy soils. 200–765 m.	Apr–Jun	High. Suitable riparian woodland and terraces along Temecula Creek occur on-site and there is a 2005 CNDDDB occurrence 3.3 mi southeast of the site.
<i>Dudleya multicaulis</i> many-stemmed dudleya	–/1B.2/C, NE	Chaparral, coastal scrub, valley and foothill grassland. In heavy, often clayey soils or grassy slopes. 1–910 m.	Apr–Jul	Does not occur. Suitable coastal scrub and grassland habitats, but clay soils do not occur on site.
<i>Dudleya viscida</i> sticky-leaved dudleya	–/1B.2/NAC	Coastal scrub, coastal bluff scrub, chaparral, cismontane woodland. On north and south-facing cliffs and banks. 20–870 m.	May–Jun	Does not occur. Suitable habitat occurs on-site but the site is east of the species' known geographic range.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River woollystar	FE/SE, 1B.1/C, R/VP	Coastal scrub, chaparral. In sandy soils on river floodplains or terraced fluvial deposits. 180–705 m.	Apr–Sep	Does not occur. Site is outside of known geographic range.
<i>Eryngium aristulatum</i> var. <i>parishii</i> San Diego button-celery	FE/SE, 1B.1/C, R/VP	Vernal pools, coastal scrub, valley and foothill grassland. San Diego mesa hardpan and claypan vernal pools and southern interior basalt flow vernal pools; usually surrounded by scrub. 15–880 m.	Apr–Jun	Does not occur. Site does not support suitable habitat and the nearest occurrences are on the Santa Rosa Plateau approximately 7 miles NW.
<i>Galium angustifolium</i> ssp. <i>jacinticum</i> San Jacinto Mountains bedstraw	–/1B.3/C, NE	Lower montane coniferous forest. Open mixed forest. 1,190–2,440 m.	Jun–Aug	Does not occur. Site is below elevation range.
<i>Galium californicum</i> ssp. <i>primum</i> Alvin Meadow bedstraw	–/1B.2/NAC	Chaparral, lower montane coniferous forest. Grows in shade of trees and shrubs at the lower edge of the pine belt, in pine forest–chaparral ecotone. Granitic, sandy soils. 1,460–1,830 m.	May–Jul	Does not occur. Site is below elevation range.
<i>Heuchera hirsutissima</i> shaggy-haired alumroot	–/1B.3/NAC	Subalpine coniferous forest, upper montane coniferous forest. Often near large rocks. Granitic substrate. 1,065–3,200 m.	(May)Jun– Jul	Does not occur. Site is below elevation range.
<i>Holocarpha virgata</i> ssp. <i>elongate</i> graceful tarplant	–/4.2/C, R/VP	Chaparral, coastal scrub, valley and foothill grassland, cismontane woodland. 60–1,100 m.	May–Nov	Low. Suitable habitat occurs on-site but site is slightly east of known geographic range.
<i>Hordeum intercedens</i> vernal barley	–/3.2/C, R/VP	Valley and foothill grassland, vernal pools, coastal dunes, coastal scrub. Vernal pools, dry, saline streambeds, alkaline flats. 5–1,000 m.	Mar–Jun	Does not occur. Suitable habitat occurs on-site but documented occurrences (Jepson eFlora) indicate the species does not occur in Temecula.

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Species Name Common Name	Status (Federal/State/Local)	Habitat Preferences/Requirements	Blooming Period	Potential for Occurrence
<i>Hulsea vestita</i> ssp. <i>callicarpa</i> beautiful hulsea	–/4.2/C	Chaparral, lower montane coniferous forest. Rocky or gravelly, granitic sites. 915–3,050 m.	May–Oct	Does not occur. Site is below elevation range.
<i>Juglans californica</i> Southern California black walnut	–/4.2/C, R/VP	Chaparral, coastal scrub, cismontane woodland, riparian woodland. Slopes, canyons, alluvial habitats. 50–900 m.	Mar–Aug	High. The dense riparian woodland on-site is suitable for this species and may not have been detectable during habitat assessment and vegetation mapping surveys, and there is a 2008 CCH occurrence just north of the site along Murrieta Creek.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	–/1B.1/C	Usually found on alkaline soils in playas, sinks, and grasslands. 1–1,375 m.	Feb–Jun	Low. Small portions of the site are mapped as containing alkaline soils and grasslands that could support this species, but those areas are also subject to the highest amounts of disturbance and invasion by non-native species.
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's pepper-grass	–/4.3/–	Chaparral, coastal scrub. Dry soils, shrubland. 4–1,435 m.	Jan–Jul	High. Suitable habitat occurs on-site, the taxa is relatively common, and the taxa is not recognized by The Jepson Herbarium.
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i> ocellated Humboldt lily	–/4.2/NAC, R/VP	Chaparral, coastal scrub, cismontane woodland, lower montane coniferous forest, riparian forest. Yellow–pine forest or openings, oak canyons. 30–1,800 m.	Mar–Jul (Aug)	Moderate. On-site scrub and riparian woodland may be suitable but there are no documented CCH occurrences within 4 miles of the site.
<i>Lilium parryi</i> lemon lily	–/1B.2/NAC, R/VP	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest. Wet, mountainous terrain; generally in forested areas; on shady edges of streams, in open boggy meadows and seeps. 625–2,930 m.	Jul–Aug	Does not occur. Site is below elevation range.
<i>Limnanthes alba</i> ssp. <i>parishii</i> Parish's meadowfoam	–/SE, 1B.2/C, R/VP	Lower montane coniferous forest, meadows and seeps, vernal pools. Vernal moist areas and temporary seeps of highland meadows and plateaus; often bordering lakes and streams. 605–1,805 m.	Apr–Jun	Does not occur. Site is below elevation range.
<i>Microseris douglasii</i> ssp. <i>platycarpa</i> small-flowered microseris	–/4.2/C	Cismontane woodland, valley and foothill grassland, coastal scrub, vernal pools. Alkaline clay in river bottoms. 15–1,070 m.	Mar–May	Does not occur. Clay soils do not occur onsite.

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Species Name Common Name	Status (Federal/State/Local)	Habitat Preferences/Requirements	Blooming Period	Potential for Occurrence
<i>Mielichhoferia shevockii</i> Shevock's copper moss	–/1B.2/–	Cismontane woodland. Moss on metamorphic rocks containing heavy metals; mesic sites. On rocks along roads, in same habitat as <i>Mielichhoferia elongata</i> . 365–1,110 m.	Not Applicable	Does not occur. Site is below elevation range.
<i>Muhlenbergia californica</i> California muhly	–/4.3/NAC	Coastal scrub, chaparral, lower montane coniferous forest, meadows and seeps. Usually found near streams or seeps. 100–2,000 m.	Jun–Sep	Does not occur. Site is outside of known geographic range.
<i>Nama stenocarpa</i> mud nama	–/2B.2/C, R/VP	Marshes and swamps. Lake shores, riverbanks, intermittently wet areas. 15–815 m.	Jan–Jul	Low. On-site creek banks may be suitable for this species but the nearest occurrence is a 2019 CCH occurrence from the shore of Depot Lake at Seal beach Naval Weapons Station (Fallbrook Annex).
<i>Navarretia fossalis</i> spreading navarretia	FT/1B.1/C, NE, R/VP	Vernal pools, chenopod scrub, marshes and swamps, playas. San Diego hardpan and San Diego claypan vernal pools; in swales and vernal pools, often surrounded by other habitat types. 15–850 m.	Apr–Jun	Does not occur. Marginally suitable habitat occurs on-site and records indicate this species does not occur in Temecula.
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	–/1B.2/C, R/VP	Coastal scrub, valley and foothill grassland, vernal pools, meadows and seeps. Alkaline soils in grassland, or in vernal pools. Mesic, alkaline sites. 3–1,235 m.	Apr–Jul	Does not occur. Marginally suitable habitat occurs on-site and records indicate this species does not occur in Temecula.
<i>Orcuttia californica</i> California Orcutt grass	FE/SE, 1B.1/C, NE, R/VP	Vernal pools. 10–660 m.	Apr–Aug	Does not occur. Marginally suitable habitat occurs on-site and records indicate this species does not occur in Temecula.
<i>Phacelia stellaris</i> Brand's star phacelia	–/1B.1/C, NE, R/VP	Coastal scrub, coastal dunes. Open areas. 3–370 m.	Mar–Jun	Does not occur. Site is outside of known geographic range.
<i>Polygala cornuta</i> var. <i>fishiae</i> Fish's milkwort	–/4.3/C, R/VP	Cismontane woodland, riparian woodland, chaparral. Scree slopes, brushy ridges, and along creeks; often with oaks. 100–1,000 m.	May–Aug	Low. Suitable riparian woodland occurs on-site but the site is slightly outside the eastern margin of the species' known geographic range.
<i>Potentilla rimicola</i> cliff cinquefoil	–/2B.3/NAC	Subalpine coniferous forest, upper montane coniferous forest. Granite crevices; rocky sites. 2,405–3,050 m.	Jul–Sep	Does not occur. Site is below elevation range.
<i>Pseudognaphalium leucocephalum</i> white rabbit-tobacco	–/2B.2/–	Riparian woodland, cismontane woodland, coastal scrub, chaparral. Sandy, gravelly sites. 35–515 m.	(Jul)Aug–Nov(Dec)	Present. Species previously documented on-site and approximately 1,500 individuals were incidentally observed during surveys.

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Species Name Common Name	Status (Federal/State/Local)	Habitat Preferences/Requirements	Blooming Period	Potential for Occurrence
<i>Quercus engelmannii</i> Engelmann oak	–/4.2/C, R/VP	Cismontane woodland, chaparral, riparian woodland, valley and foothill grassland. 50–1,300 m.	Mar–Jun	Does not occur. Would have been detectable during habitat assessment and vegetation mapping surveys and was not observed.
<i>Romneya coulteri</i> Coulter's matilija poppy	–/4.2/C, R/VP	Coastal scrub, chaparral. In washes and on slopes; also after burns. 20–1,200 m.	Mar– Jul(Aug)	Low. Suitable habitat occurs on-site but site is southeast of most documented occurrences.
<i>Sibaropsis hammittii</i> Hammitt's clay-cress	–/1B.2/C, NE	Valley and foothill grassland, chaparral. Mesic microsites in open areas on clay soils in <i>Stipa</i> grassland. Often surrounded by <i>Adenostoma</i> chaparral. 715–1,040 m.	Mar–Apr	Does not occur. Site is below elevation range.
<i>Sidothea caryophylloides</i> chickweed oxytheca	–/4.3/NAC	Lower montane coniferous forest. Sandy sites. 1,115–2,600 m.	Jul– Sep(Oct)	Does not occur. Site is below elevation range.
<i>Tetracoccus dioicus</i> Parry's tetracoccus	–/1B.2/–	Chaparral, coastal scrub. Stony, decomposed gabbro soil. 135–705 m.	Apr–May	Does not occur. Gabbroic soil does not occur on-site.
<i>Trichocoronis wrightii</i> var. <i>wrightii</i> Wright's trichocoronis	–/2B.1/C, NE	Marshes and swamps, riparian forest, meadows and seeps, vernal pools. Mud flats of vernal lakes, drying riverbeds, alkali meadows. 5–435 m.	May–Sep	Does not occur. Southernmost documented occurrence is near Lake Perris, approximately 24.5 miles north of the site.

CRPR: California Rare Plant Rank

- 1B: Rare, threatened, or endangered in California and elsewhere.
- 2B: Rare, threatened, or endangered in California, but more common elsewhere.
- 3: Plants about which more information is needed
- 4: Plants of limited distribution.

Threat Rank

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

Western Riverside County MSHCP Special Status

- C – Covered
- NE – Narrow Endemic
- NAC – Not Adequately Covered
- R/VP – Riparian/Riverine and Vernal Pools

EXHIBIT E

Special-status Wildlife Species with Potential to Occur

Table E-1. Potential Sensitive Species – Fauna

Species Name Common Name	Status (Federal/State/Local)	Habitat Preferences/Requirements	Potential for Occurrence
INVERTEBRATE			
<i>Bombus crotchii</i> Crotch bumble bee	–/SCE/–	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Low. On-site <i>Eriogonum fasciculatum</i> is a suitable nectar source but the only record within 5 miles is a CNDDDB occurrence from 1949 overlapping a portion of the site.
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	FT/–/C, R/VP	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Low. Two on-site depressions containing water were observed that could be potentially suitable for this species but there are no records within 5 miles of the site.
<i>Danaus plexippus plexippus</i> ; pop. 1 Monarch butterfly– California overwintering population	FC/–/–	In Southern California, monarch butterfly adults are present year-round and are reliant on milkweeds (<i>Asclepias</i> spp.) as host plants for caterpillars, and adults require a diverse range of flowers for nectar as fuel during breeding. Adults form overwintering aggregations in large mature trees groves, often non-native gum (<i>Eucalyptus</i> spp.) trees as well as native Monterey and Sargent cypress (<i>Hesperocyparis</i> [<i>Cupressus</i>] <i>macrocarpa</i> ; <i>H. sargentii</i>), Monterey pine (<i>Pinus radiata</i>) and, less commonly, other native trees including western sycamore (<i>Platanus racemosa</i>), coast live oak (<i>Quercus agrifolia</i>), and coast redwood (<i>Sequoia sempervirens</i>). The majority of overwintering sites are at low elevations (<200–300 feet), within about 1.5 miles of the ocean.	Present. Monarch butterfly adults were observed on site during the survey, although milkweed was not noted in the project area. Overwintering groves tree species are present in project area, including coast live oak and western sycamore. However, the project area does not overlap with any known mapped overwintering groves for monarch and is not in close proximity to the ocean (the site is approximately 30 miles east of the Pacific Ocean). As such, the Project site is unlikely to support overwintering aggregations of monarch butterflies.
<i>Euphydryas editha quino</i> Quino checkerspot butterfly	FE/–/C	Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego Counties. Hills and mesas near the coast. Need high densities of food plants <i>Plantago erecta</i> , <i>P. insularis</i> , and <i>Orthocarpus purpurescens</i> .	Moderate. Small patches of <i>Plantago erecta</i> were noted in on-site buckwheat scrub during the habitat assessment and vegetation mapping surveys. Protocol surveys are required to determine presence/absence.
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	FE/–/C, R/VP	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	Moderate. Two on-site depressions containing water were observed that could be potentially suitable for this species and there is a 2003 CNDDDB record approximately 0.75 mi S of the site.
FISH			
<i>Catostomus santaanae</i> Santa Ana sucker	FT/–/C, R/VP	Endemic to Los Angeles Basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	Does not occur. Site is outside of known geographic range.

Species Name Common Name	Status (Federal/State/Local)	Habitat Preferences/Requirements	Potential for Occurrence
<i>Gila orcuttii</i> arroyo chub	–/SSC/C	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Moderate. Documented on-site from a 1998 CNDDB occurrence.
AMPHIBIANS AND REPTILES			
<i>Anaxyrus californicus</i> arroyo toad	FE/SSC/C, R/VP	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	Does not occur. Suitable habitat occurs on-site but this species is not documented in Temecula or Murrieta Creeks.
<i>Arizona elegans occidentalis</i> California glossy snake	–/SSC/–	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	High. Suitable habitat and soils occur on-site.
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	–/–/C	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food: termites.	High. Suitable habitat occurs on-site and species is relatively common.
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	–/SSC/–	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	High. Suitable habitat occurs on-site.
<i>Charina umbratical</i> southern rubber boa	–/ST/NAC	Found in a variety of montane forest habitats. Previously considered morphologically intermediate, recent (2022) genomic analysis clarifies individuals from Mount Pinos, Tehachapi Mountains, and southern Sierra Nevada are southern rubber boa. Found in vicinity of streams or wet meadows; requires loose, moist soil for burrowing; seeks cover in rotting logs, rock outcrops, and under surface litter.	Does not occur. Site is outside of known geographic range.
<i>Crotalus ruber</i> red-diamond rattlesnake	–/SSC/–	Chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	High. Suitable habitat occurs on-site and multiple occurrences are documented near the site.

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the City of Temecula – Temecula Creek Community Wildfire Protection Plan

Species Name Common Name	Status (Federal/State/Local)	Habitat Preferences/Requirements	Potential for Occurrence
<i>Emys marmorata</i> western pond turtle	–/SSC/C	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	High. Documented on-site in a 2015 CNDDDB occurrence.
<i>Lampropeltis multifasciata</i> (<i>Lampropeltis zonata parvirubra</i> , <i>L. z. pulchra</i>) coast mountain kingsnake (San Bernardino mountain kingsnake, San Diego mountain kingsnake)	–/–/NAC	Coniferous forest, oak-pine woodlands, riparian woodland, chaparral, coastal sage scrub. Prefers wooded areas near water with rock outcrops or rotting logs with areas to bask. Often under surface objects or in rock crevices.	Does not occur. Suitable habitat occurs on-site but the nearest occurrence is a 2016 iNaturalist record near Skinner Reservoir, approximately 7.75 miles NE of the site.
<i>Phrynosoma blainvillii</i> coast horned lizard	–/SSC/–	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	High. Documented adjacent to the site in a 1992 CNDDDB occurrence.
<i>Rana draytonii</i> California red-legged frog	FT/SSC/C, R/V/P	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11–20 weeks of permanent water for larval development. Must have access to estivation habitat.	Does not occur. Temecula and Murrieta Creeks do not have sufficient year-round water to support this species.
<i>Rana mucosa</i> southern mountain yellow-legged frog	FE/SE/C, R/V/P	Disjunct populations known from southern Sierras (northern DPS) and San Gabriel, San Bernardino, and San Jacinto Mtns (southern DPS). Found at 1,000 to 12,000 feet in lakes and creeks that stem from springs and snowmelt. May overwinter under frozen lakes. Often encountered within a few feet of water. Tadpoles may require 2–4 years to complete their aquatic development.	Does not occur. Temecula and Murrieta Creeks do not have sufficient year-round water to support this species and site is at the low end of the elevation range.
<i>Sceloporus graciosus vandenburgianus</i> southern sagebrush lizard	–/–/NAC	Prefers open areas with scattered low bushes within chaparral and conifer forest habitats, primarily in mountainous regions.	Does not occur. Suitable habitat does not occur on-site.
<i>Sceloporus orcuttii</i> granite spiny lizard	–/–/C	Inhabits a variety of scrub and woodland habitats containing large boulders and granite cliffs.	High. Suitably rocky habitat occurs on-site and species is relatively common.
<i>Spea hammondi</i> western spadefoot	–/SSC/C	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Moderate. Two on-site depressions containing water were observed that could be potentially suitable for this species and there is a 2003 CNDDDB record approximately 0.75 mi S of the site.

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the City of Temecula – Temecula Creek Community Wildfire Protection Plan

Species Name Common Name	Status (Federal/State/Local)	Habitat Preferences/Requirements	Potential for Occurrence
<i>Thamnophis hammondi</i> two-striped gartersnake	–/SSC/–	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 feet elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Low. Suitable habitat occurs on-site but the nearest occurrence is a 1999 CNDDDB record in the Santa Margarita River approximately 2.1 miles southwest of the site.
<i>Xantusia henshawii</i> granite night lizard	–/–/C	Inhabits chaparral, coastal sage scrub, creosote scrub, woodland, and coniferous forest. Prefers massive granite boulders and outcrops in shaded canyons or near water and avoids south-facing slopes.	Moderate. Suitably rocky habitat and water occurs on-site but the nearest documented occurrences are over 3 miles northeast of the site.
BIRDS			
<i>Aimophila ruficeps canescens</i> Southern California rufous-crowned sparrow	–/–/C	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	High. Multiple eBird occurrences documented on-site.
<i>Ammodramus savannarum</i> grasshopper sparrow	–/SSC/NAC (Partial)	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	Does not occur. Native grasslands do not occur on-site and the only record in Temecula is a 1993 eBird occurrence.
<i>Amphispiza belli belli</i> Bell's sparrow	–/–/C	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Nest located on the ground beneath a shrub or in a shrub 6–18 inches above ground. Territories about 50 yards apart.	Low. On-site buckwheat scrub may be suitable but there are no occurrences documented within 5 miles of the site.
<i>Ardea Herodias</i> great blue heron	–/–/C	Colonial nester in tall trees, cliffsides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	High. Suitable habitat occurs on-site and multiple eBird occurrences are documented on-site.
<i>Athene cunicularia</i> burrowing owl	–/SSC/C	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Moderate. Suitable habitat occurs on-site and there is a 2001 CNDDDB occurrence within 2 miles of the site.
<i>Botaurus lentiginosus</i> American bittern	–/–/C	Freshwater and slightly brackish marshes. Also in coastal saltmarshes. Dense reed beds.	Does not occur. Marginally suitable habitat occurs on-site but there are no records in Temecula or adjacent communities.
<i>Buteo swainsoni</i> Swainson's hawk	–/ST/C	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Moderate. Suitable habitat occurs on-site and one 1933 CNDDDB occurrence and one 2015 eBird occurrence overlaps the site.

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the City of Temecula – Temecula Creek Community Wildfire Protection Plan

Species Name Common Name	Status (Federal/State/Local)	Habitat Preferences/Requirements	Potential for Occurrence
<i>Cardellina pusilla</i> Wilson's warbler	–/–/C	Most deciduous shrub habitats, but primarily riparian shrub understory. Also woodland, suburban.	High. Two eBird occurrences documented on-site.
<i>Cathartes aura</i> turkey vulture	–/–/C	Forage on carrion in open areas such as grassland, pasture, or non-intensive agriculture. Nest in caves or crevices in rocky cliffs and slopes.	High. Species is relatively common, site is suitable for foraging, but does not contain suitable nesting habitat.
<i>Circus cyaneus hudsonius</i> northern harrier	–/SSC/C	Coastal salt and freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	Moderate. Suitable foraging habitat occurs on-site and one 2017 eBird record is documented on-site.
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	–/SE/C, R/VP	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Low. Suitable habitat occurs on-site and one 1950 CNDDDB occurrence is documented in the Santa Margarita River on and adjacent to the site, but no other records have been documented in southwestern Riverside County.
<i>Dryobates pubescens</i> downy woodpecker	–/–/C	Open, deciduous woodland, especially riparian. Less abundant in coniferous forests. Has adapted to orchards and wooded areas in parks and residential areas.	High. Suitable habitat occurs on-site and multiple eBird records occur on-site.
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	FE/SE/C, R/VP	Riparian woodlands in Southern California.	Low. Suitable habitat occurs on-site but there are no records in southwestern Riverside County.
<i>Eremophila alpestris actia</i> California horned lark	–/–/C	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	High. Suitable habitat occurs on-site and multiple eBird occurrences are documented on-site.
<i>Falco peregrinus anatum</i> American peregrine falcon	–/–/FPC, R/VP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Does not occur. Only somewhat suitable habitat occurs on-site and the species is not documented in Temecula.
<i>Geothlypis tolmiei</i> Macgillivray's warbler	–/–/C	Largely present in Southern California during migration only, where they inhabit areas of dense shrubs and well-shaded areas along mountains and deserts of interior California, less common along coast. Breeds primarily in openings of coniferous forest, including shrubby areas with little to no canopy.	Low. Suitable habitat occurs on-site but there are few records in the project's vicinity.
<i>Haliaeetus leucocephalus</i> bald eagle	–/SE, FP/C, R/VP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	High. Species observed flying over the site (eBird 2017) and site supports suitable habitat.

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the City of Temecula – Temecula Creek Community Wildfire Protection Plan

Species Name Common Name	Status (Federal/State/Local)	Habitat Preferences/Requirements	Potential for Occurrence
<i>Leiothlypis ruficapilla</i> Nashville warbler	–/–/C	Dry, often mountainous habitat, including deciduous and coniferous forest. Does not breed in Southern California, largely present only in migration.	High. One eBird occurrence documented on-site.
<i>Melospiza lincolni</i> Lincoln's sparrow	–/–/NAC	Largely non-breeding in Southern California where they occupy a wide variety of habitats with low, dense cover, especially wetter areas. Riparian areas, weedy ditches, tamarisk thickets, and suburban yards are used. Breeding habitat consists of subalpine and montane boggy habitats dominated by willows.	High. Multiple eBird occurrences documented on-site.
<i>Nycticorax nycticorax</i> black-crowned night heron	–/–/C	Colonial nester, usually in trees, occasionally in tule patches. Rookery sites located adjacent to foraging areas: lake margins, mud-bordered bays, marshy spots.	High. Suitable habitat occurs on-site and multiple eBird occurrences are documented on-site.
<i>Oreortyx pictus</i> mountain quail	–/–/C	Primarily dense shrub-dominated communities such as chaparral, mixed desert scrub, early-successional-stage vegetation. Also forest and woodland habitat.	Low. Somewhat suitable habitat occurs on-site but there are few records in the project's vicinity.
<i>Poliophtila californica californica</i> coastal California gnatcatcher	FT/SSC/C	Obligate, permanent resident of coastal sage scrub below 2,500 feet in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Moderate. On-site buckwheat scrub is suitable habitat and a 2001 CNDDDB record occurs on-site.
<i>Sphyrapicus thyroideus</i> Williamson's sapsucker	–/–/NAC	Breeds in conifer and mixed conifer-deciduous forests. Overwinters in similar habitat at lower elevation and sometimes use deciduous riparian and oak forests.	Does not occur. Only somewhat suitable habitat occurs on-site and the species is not documented in Temecula.
<i>Strix occidentalis occidentalis</i> California spotted owl	–/SSC/NAC	Mixed conifer forest, often with an understory of black oaks and other deciduous hardwoods. Canopy closure >40%. Most often found in deep-shaded canyons, on north-facing slopes, and within 300 meters of water.	Does not occur. Site is outside of known geographic range.
<i>Tachycineta bicolor</i> tree swallow	–/–/C	Fields, marshes, shorelines, and riparian woodland with snags. Cavity nester.	High. One eBird occurrence documented on-site.
<i>Vireo bellii pusillus</i> least Bell's vireo	FE/SE/C, R/VP	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2,000 feet. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Present. Multiple individuals were heard singing throughout the riparian habitats on-site during the habitat assessment and vegetation mapping surveys.
MAMMALS			
<i>Canis latrans</i> coyote	–/–/C	Habitat generalist ranging from open grassland to shrubland to dense riparian forest. Den usually in a burrow but may also be above ground in debris or crevices.	High. Suitable habitat occurs on-site and species is relatively common and widespread.

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the City of Temecula – Temecula Creek Community Wildfire Protection Plan

Species Name Common Name	Status (Federal/State/Local)	Habitat Preferences/Requirements	Potential for Occurrence
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	–/SSC/–	Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	Low. Somewhat suitable habitat occurs on-site and two CNDDB occurrences from 1994 and 2001 are documented within 5 miles of the site.
<i>Dipodomys simulans</i> Dulzura kangaroo rat	–/–/C	Scrub, chaparral, and grassland in Los Angeles, Riverside, Orange, San Diego and San Bernardino counties. Generally occurs at sites less than 2,400 feet in elevation. Grassland, coastal scrub and chaparral. Within scrub and chaparral habitat it occurs in areas with sparse shrub cover or less mature habitats associated with early succession.	Low. Suitable habitat occurs on-site, but no records are documented in Temecula.
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	FT/ST/–	Primarily annual and perennial grasslands, but also occurs in coastal scrub and sagebrush with sparse canopy cover. Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil.	Low. Suitable habitat occurs on-site and multiple CNDDB occurrences are documented within 2 miles of the project but none more recent than 1994.
<i>Eumops perotis californicus</i> western mastiff bat	–/SSC/–	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	Moderate. Suitable foraging and roosting habitat occur on-site and one 1991 CNDDB occurrence overlaps the site.
<i>Glaucomys oregonensis californicus</i> San Bernardino flying squirrel	–/SSC/NAC	Known from black oak or white fir dominated woodlands between 5,200–8,500 feet in the San Bernardino and San Jacinto ranges. May be extirpated from San Jacinto range. Needs cavities in trees/snags for nests and cover. Needs nearby water.	Does not occur. Site is outside of known geographic range.
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	–/–/C	Occurs primarily in arid regions with short grass. Preferred habitats include open grasslands, agricultural fields, and sparse coastal scrub. Not typically found in high grass or dense brush. Nesting sites are generally under bushes or shrubs that have shallow depressions.	High. Multiple occurrences have been documented throughout Temecula Creek and Pechanga Creek during prior wildlife tracking studies. Additionally, suitable habitat for this species occurs within the project area.
<i>Lynx rufus</i> bobcat	–/–/C	Areas of thick undergrowth within coniferous-deciduous woodlands, forests, swamps, riparian, scrub, desert, and mountain habitats. Large blocks of habitat are favored.	High. Multiple iNaturalist records in less developed areas surrounding Temecula, and multiple occurrences have been documented throughout Temecula Creek and Pechanga Creek during prior wildlife tracking studies. On-site riparian habitat is suitable.
<i>Neogale frenata</i> long-tailed weasel	–/–/C	Brushland and open woodlands, field edges, riparian, grasslands, marshes. Often found near water, tolerant of proximity to humans.	High. Occurrences have been documented throughout Temecula Creek and Pechanga Creek during prior wildlife tracking studies. Additionally, suitable habitat occurs on-site.

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Species Name Common Name	Status (Federal/State/Local)	Habitat Preferences/Requirements	Potential for Occurrence
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	–/SSC/C	Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin. Open ground with fine, sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	Moderate. Suitable habitat and soils occur on-site and one 1993 CNDDB occurrence is documented on-site.
<i>Puma concolor</i> mountain lion	–/–/C	Remote or mountainous areas containing riparian woodlands, forests, or rugged areas with high brush cover. Large (>2,220 square km) areas of habitat necessary for long-term population persistence.	High. Occurrences have been documented throughout Temecula Creek and Pechanga Creek during prior wildlife tracking studies.
<i>Sylvilagus bachmani</i> brush rabbit	–/–/C	Dense scrub, brushy habitat edges, chaparral, cactus patches, and brushy areas on sand dunes.	High. Suitable habitat occurs on-site and there is a 2020 iNaturalist record approximately 2.15 mi NE of the site.

Federal Listings

FE: Federally endangered
FT: Federally threatened
FC: Federal Candidate Species
FP: Fully Protected

State Listings

SE: State endangered
ST: State threatened
SCE: State candidate for listing as Endangered
CDFW SSC: Special Species of Concern

Western Riverside County MSHCP Special Status

C – Covered
NAC – Not Adequately Covered
R/VP – Riparian/Riverine and Vernal Pool

ATTACHMENT A.2

Multiple Species Habitat Conservation Plan Technical Memorandum

TECHNICAL MEMORANDUM

To: City of Temecula
Department of Development
4100 Main Street
Temecula, California 92590
Attn: Mark Collins

From: Leonard Griffiths, Southern California Natural Resources Director

Date: January 30, 2023

Re: **Next Steps for the *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the City of Temecula – Temecula Creek Community Wildfire Protection Plan* / SWCA Project No. 74976**

SWCA's 2023 *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the City of Temecula – Temecula Creek Community Wildfire Protection Plan* (Consistency Analysis) was prepared after vegetation mapping and habitat assessment surveys were conducted within the Community Wildfire Protection Plan project area. However, sections of the report remain incomplete because approval to conduct focused surveys was not provided.

In order to complete the Consistency Analysis, focused surveys are required for the following:

- Fairy shrimp (Consistency Analysis Section 4.3)
- Multiple Species Habitat Conservation Plan (MSHCP) Section 6.1.2 birds (Consistency Analysis Section 4.4)
- MSHCP Section 6.1.2 plants (Consistency Analysis Section 4.5)
- Burrowing owl (Consistency Analysis Section 6.3)

Additionally, impacts cannot be quantified at this time given that the project description is conceptual, and the above focused surveys would need to be completed before the extent of impacts to sensitive resources could be determined. Similarly, mitigation cannot be determined without a complete inventory of impacts that would require mitigation. However, given the nature of the project and the overall biological sensitivity of the CWPP project area, it is expected that fuels management activities would result in impacts to sensitive biological resources and would require mitigation. Therefore, a Determination of Biological Equivalent or Superior Preservation (DBESP) is expected to be required.

In order to have a complete submittal package, a Joint Process Review (JPR) application is required. A JPR application has been drafted, but the following are required in order to complete the application:

- Detailed project description
- Public/Quasi-Public (PQP) lands replacement analysis (MSHCP Section 3.2.1)
- DBESP

SWCA was also provided with ICF's 2023 *Temecula Creek Wildlife Corridor Project – Baseline Conditions, Opportunities, and Constraints Report* prepared for The Nature Conservancy. This report covers the portion of the CWPP project area that occurs approximately between the Interstate 15 and Pechanga Parkway crossings and includes a discussion of baseline biological conditions, plans for enhancing wildlife movement through the area, and avoidance and mitigation measures that have been developed in consultation with multiple stakeholders including the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, California Department of Fish and Wildlife, Regional Water Quality Control Board, and Western Riverside County Regional Conservation Authority. Given the extensive coordination that has occurred for this project within the larger CWPP project area, it will be crucial to ensure consistency between the CWPP and the Temecula Creek Wildlife Corridor Project going forward.

Additionally, the DBESP template notes that “for impacts related to MSHCP Section 6.1.2, applicants are encouraged to coordinate early by attending one or more pre-application meetings with the Riverside Conservation Authority (RCA), Wildlife Agencies comprised of the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACE), and Regional Water Quality Control Board (RWQCB) to discuss riparian/riverine issues, regulated waters issues, and/or mitigation options. If mitigation is agreed to during this early coordination effort, the Applicant may be granted a 30-day DBESP review instead of the typical 60-day review. Contact Kristin Staudenmaier at RCA (kristins@wrcrca.org) in order to request a time slot at a pre-application meeting.” Given that fuels management zones within sensitive riparian/riverine areas would likely require ongoing vegetation removal, these areas would be considered permanently impacted. Therefore, attendance at a pre-application meeting is recommended.

SWCA would be pleased to carry out the above tasks and coordination when funding is available for the CWPP. Please do not hesitate to contact me with any questions at (602) 274-3831 ext. 16874 or leonard.griffiths@swca.com.

Thank you,



Leonard Griffiths
Southern California Natural Resources Director

ATTACHMENT A.3

Aquatic Resources Assessment



ENVIRONMENTAL CONSULTANTS

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Pasadena, California 91107
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TECHNICAL MEMORANDUM

To: Mark Collins, Assistant Planner
City of Temecula
Department of Development
4100 Main Street
Temecula, California 92590

From: Bonnie Rogers, PWS, Senior Wetland Scientist

Date: January 30, 2023

Re: **Preliminary Assessment of Aquatic Resources at the Temecula Creek Project /
SWCA Project No. 00074976-000-PAS**

INTRODUCTION

SWCA Environmental Consultants (SWCA) was retained by the City of Temecula to develop a strategic comprehensive Community Wildfire Protection Plan for Temecula Creek, focusing on the Temecula Creek project area, located at approximately 33.4747° N, 117.1278° W.

This technical memorandum describes the results of a preliminary assessment of aquatic resources completed by SWCA. The purpose of the survey was to walk the review area and map the general extent of the stream along its approximate ordinary high-water mark and test for potential wetlands, and to inform overall project planning. A full jurisdictional delineation was not completed.

METHODS

SWCA wetland scientists Bonnie Rogers and Luis Aguilar surveyed the review area on October 9, 2023. The review area consists of a 100-foot buffer surrounding the approximately 177-acre project area. The review area is generally located south of Temecula Parkway in the City of Temecula in southwestern Riverside County, California (Figure 1, Figure 2). Interstate-15 (I-15) bisects the western portion of the review area, and Pechanga Parkway bisects the central portion. The review area is within the 2021 U.S. Geological Survey's (USGS's) Temecula and Pechanga quadrangle.

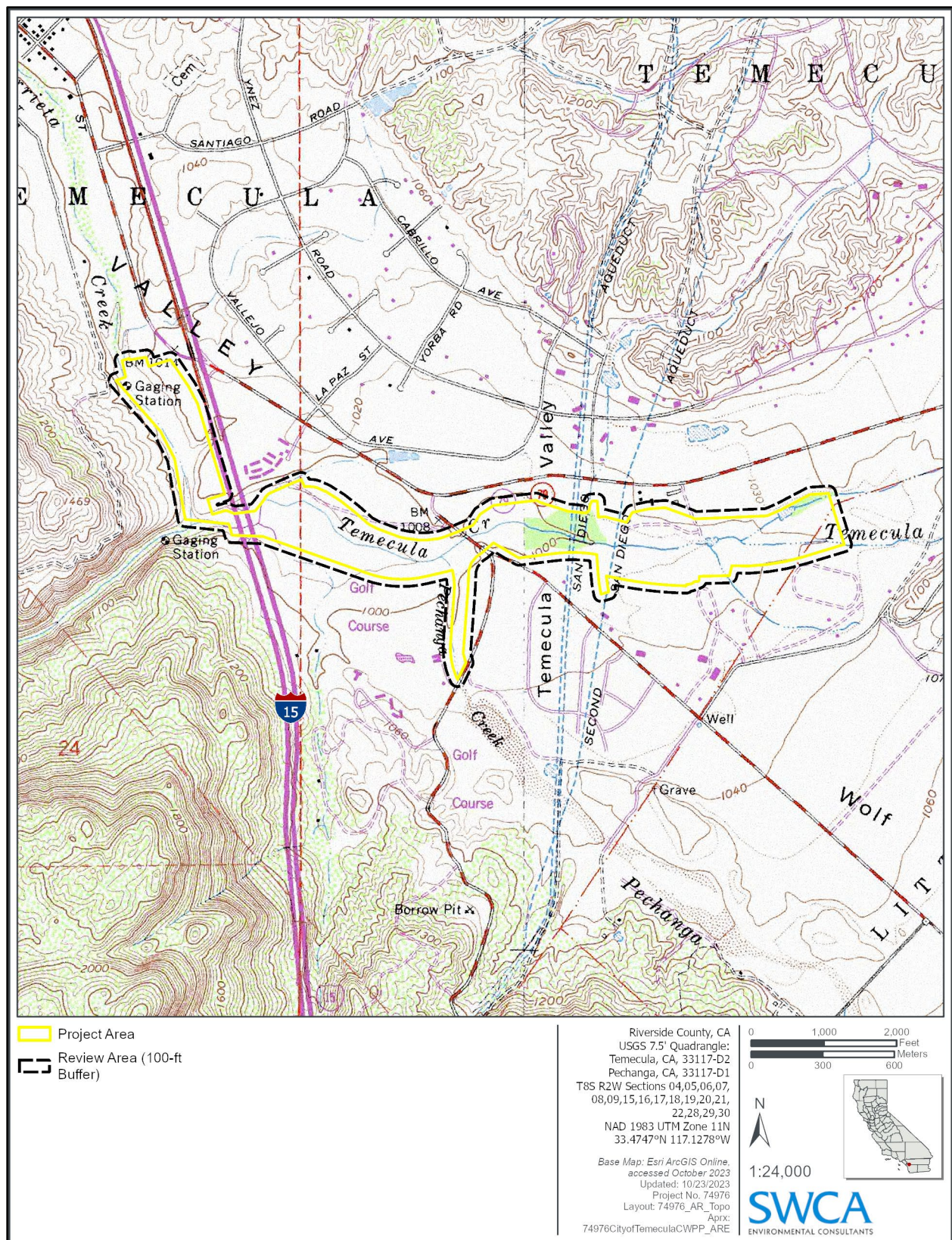


Figure 1. Review area on topographic basemap.

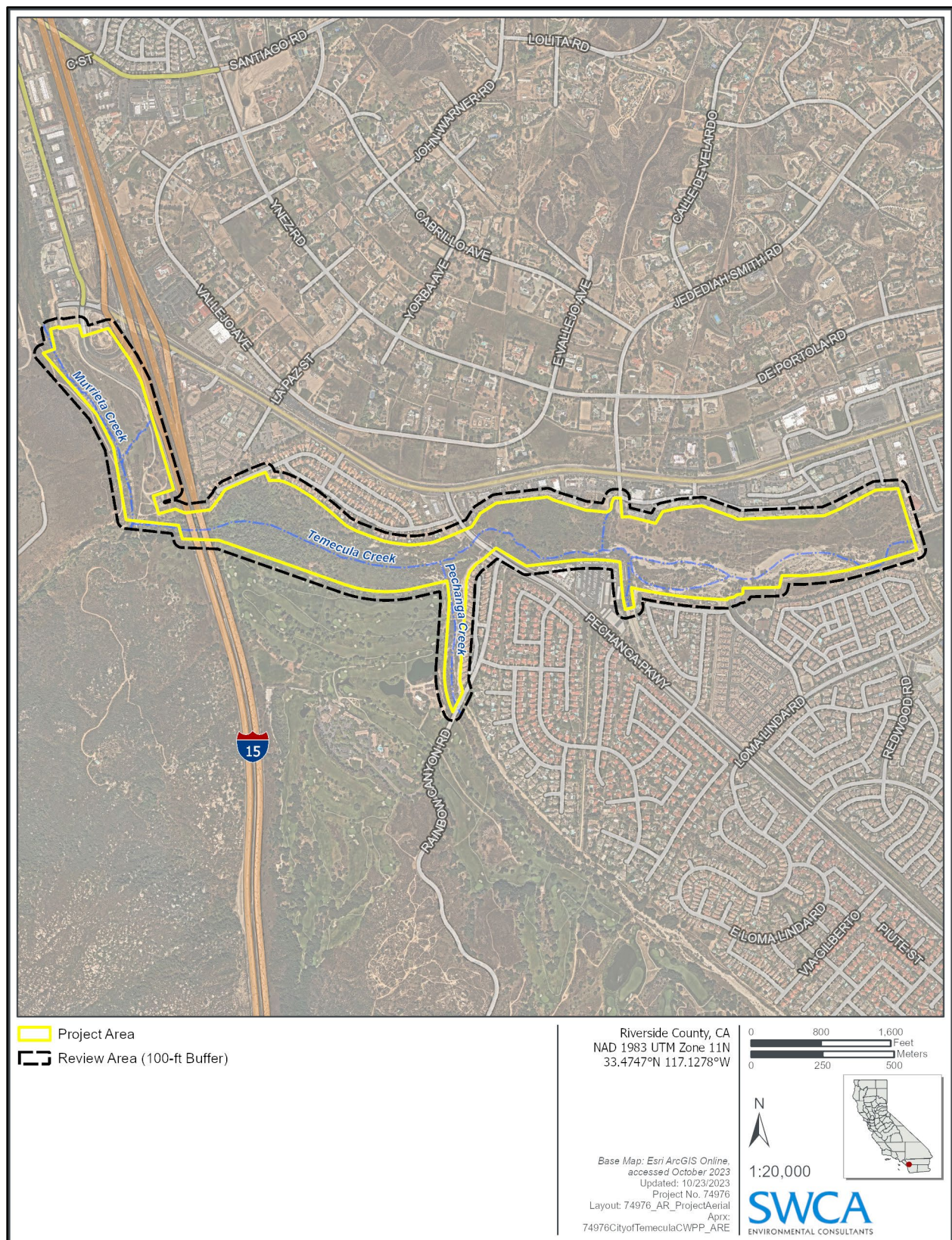


Figure 2. Review area on aerial imagery basemap.

The following publicly available databases were reviewed by desktop prior to the field survey:

- Google Earth aerial imagery (Google Earth 2023)
- National Wetlands Inventory (NWI) (U.S. Fish and Wildlife Service [USFWS] 2023a)
- Natural Resources Conservation Services (NRCS) Web Soil Survey (NRCS 2023)
- U.S. Fish and Wildlife Service (USFWS) Critical Habitat Mapper (USFWS 2023b)
- USGS National Hydrological Dataset (NHD) (USGS 2023a)

The preliminary assessment was conducted in accordance with the *Corps of Engineers Wetland Delineation Manual* (U.S. Army Corps of Engineers [USACE] 1987), the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0) (USACE 2008a), and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b). Potential extents of aquatic resources were assessed through application of the current Clean Water Act “Waters of the United States” rule amendment and Section 1600 et seq. of the California Fish and Game Code.

USACE waters of the United States (WOUS) was estimated by mapping the center line of the stream and comparing conditions with aerial imagery while in the field in order to draw the approximate boundaries of the OHWM for estimating WOUS. California State Water Quality Control Board (Water Board) waters of the State were assumed to be the same as WOUS. The extent of estimated California Department of Fish and Wildlife (CDFW) jurisdictional resources were mapped using previously collected vegetation community data to assess the maximum extent of the riparian habitat (to the outer dripline). Wetland sampling plots were evaluated to assess potential wetlands across the site.

The wetland scientists conducted a preliminary survey of the review area on foot, documenting aquatic resources extents, photographs (see Exhibit A), and wetland determination sampling plot points (Exhibit B). All resources were mapped utilizing a Geode® GPS unit set to submeter accuracy (1–3-foot resolution). Three wetland determination sampling plots (SP01, SP02, and SP03) were evaluated and recorded on the USACE Wetland Determination Data Form – Arid West Region (see Exhibit B).

EXISTING CONDITIONS

Hydrology

The review areas is situated along Temecula Creek, as well as portions of Murrieta Creek and Pechanga Creek. Directly abutting the review area are residential and commercial developments to the north, south, and east, a golf course to the south, and undeveloped land to the west and southwest.

Temecula Creek drains into Santa Margarita River, which flows directly to the Pacific Ocean (a Traditional Navigable Water). Temecula Creek generally conveys flow in a westerly direction, becoming Santa Margarita River at the confluence of Murrieta Creek and Temecula Creek in the western portion of the review area (Figure 3). Pechanga Creek conveys flow in a northerly direction and drains into Temecula Creek in the center portion of the review area.

The review area is within the Long Canyon-Murrieta Creek Hydrologic Unit Code (HUC) watershed (HUC12 180703020407) and the Pechanga Creek – Temecula Creek HUC watershed (HUC12 180703020302) (USGS 2023b). The NWI shows mapped Freshwater Emergent Wetlands, Freshwater Forested/Shrub Wetlands, and Riverine features in the review area (Figure 4).

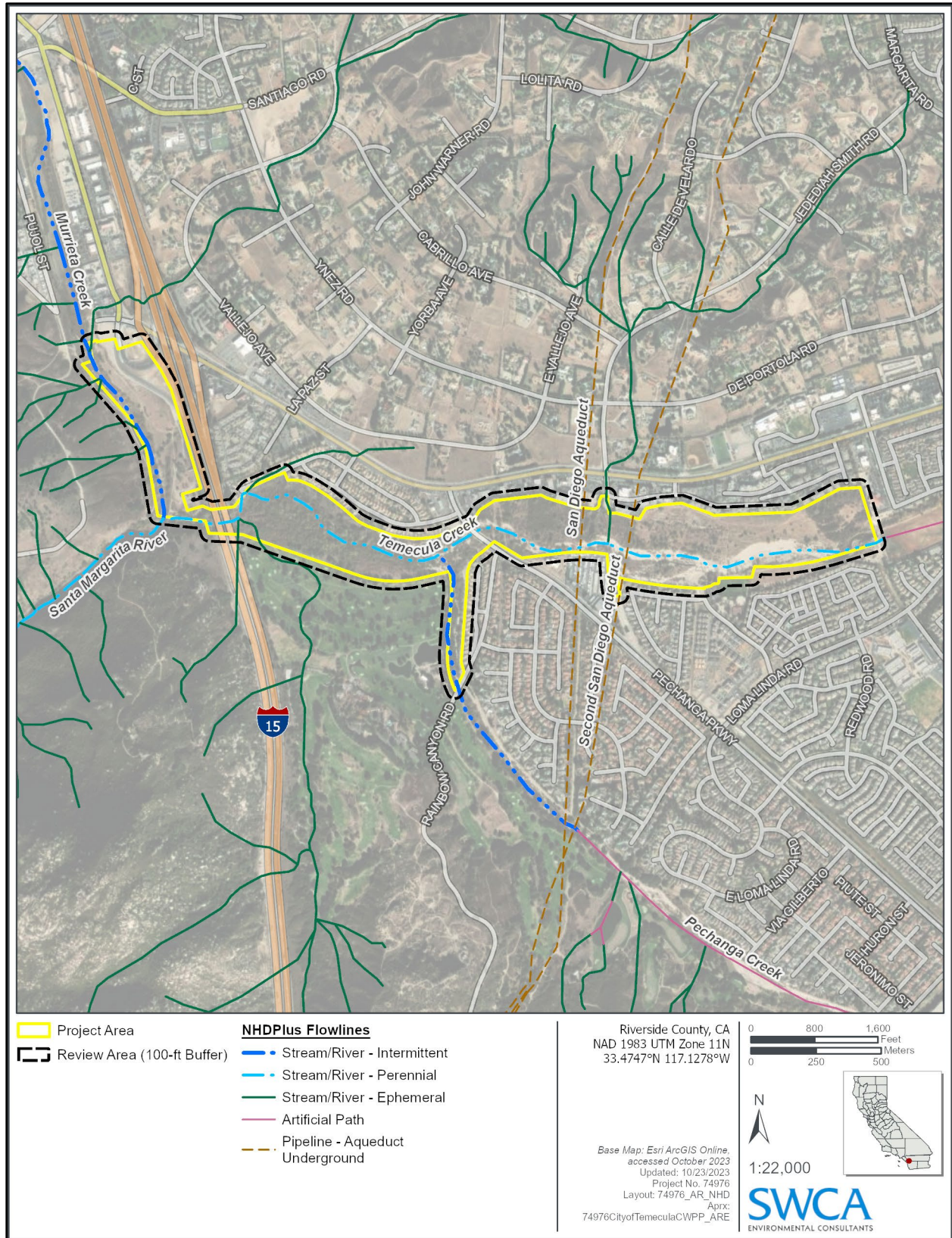


Figure 3. NHD desktop data.

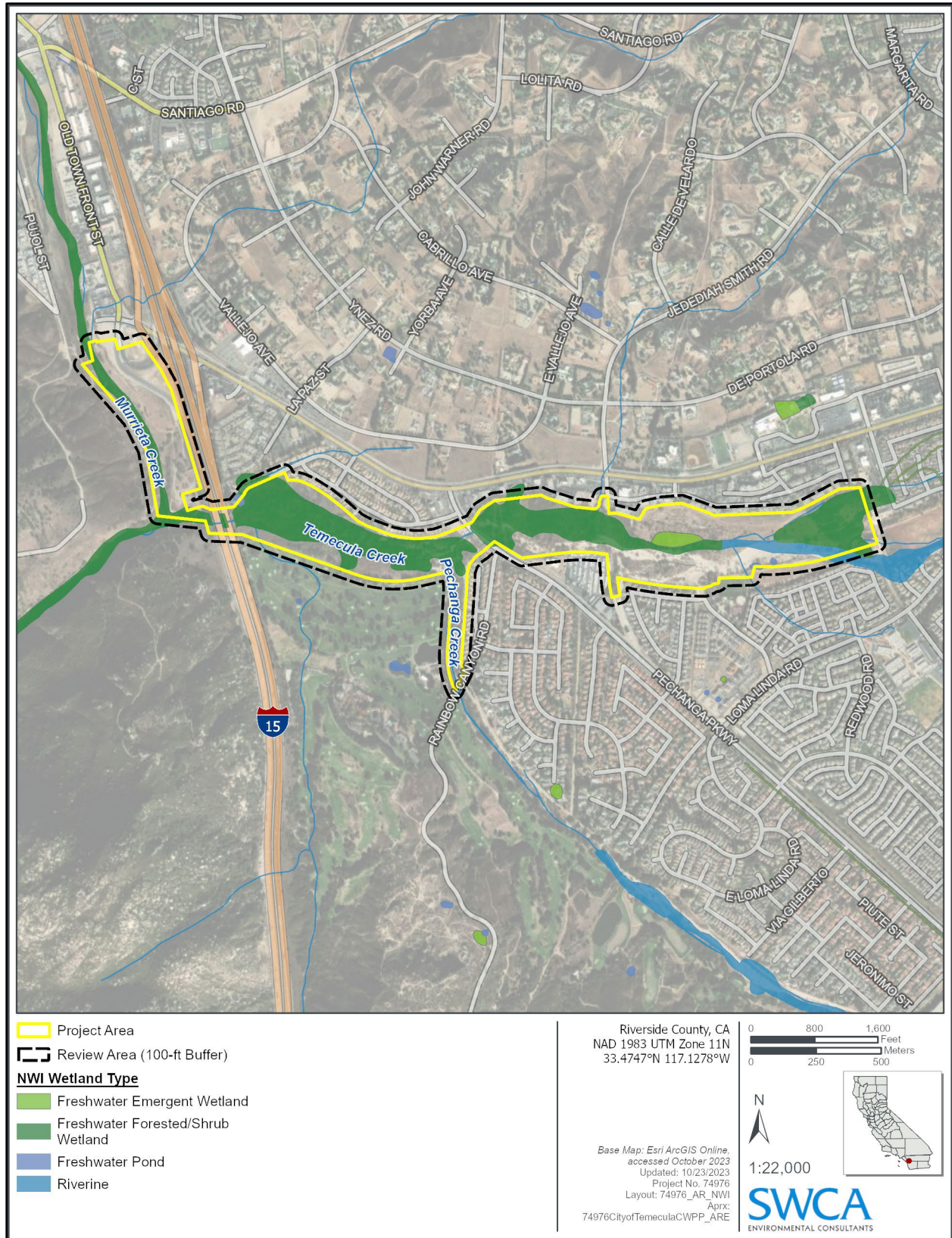


Figure 4. NWI desktop data.

Vegetation consists of a mixture of dense riparian woodland, riparian scrub, upland plant communities, and ruderal communities. A few freshwater marshes dominated by cattail (*Typha* spp.) and bulrush (*Schoenoplectus* spp.) also occur on-site.

Vegetation Communities

Approximately 26 Vegetation Communities/Associations and Land Cover Types were previously identified by SWCA in the review area, including nine vegetation communities associated with wetlands and riparian habitats. Vegetation alliances were mapped following methods and conventions from *A Manual of California Vegetation Online* (California Native Plant Society 2023). Of the 26 communities, the following wetland and riparian vegetation communities were mapped: Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance), Cattail Marshes (*Typha* (*angustifolia*, *domingensis*, *latifolia*) Herbaceous Alliance), Fremont Cottonwood Forest and Woodland (*Populus fremontii* - *Fraxinus velutina* – *Salix gooddingii* Forest & Woodland Alliance), Gooding's Willow – Red Willow Riparian Woodland and Forest (*Salix gooddingii* - *Salix laevigata* Forest & Woodland Alliance), Hardstem and California Bulrush Marshes (*Schoenoplectus* (*acutus*, *californicus*) Herbaceous Alliance), Mulefat Thickets (*Baccharis salicifolia* Shrubland Alliance), Nodding Beggartickes – Western Godlentop – Marsh Seedbox Mudflats (*Bidens cernua* - *Euthamia occidentalis* - *Ludwigia palustris* Herbaceous Alliance), Sandbar Willow Thickets (*Salix exigua* Shrubland Alliance), and Tamarisk Thickets (*Tamarix* spp. Shrubland Semi-Natural Alliance).

Landcover Types identified include Open Water, Unvegetated Streambed, Developed, and Disturbed.

For more information regarding vegetation communities identified on-site, including all vegetation community associations and upland vegetation communities, please refer to the draft *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the City of Temecula Community Wildlife Protection Program* being prepared by SWCA.

Critical Habitat

No USFWS-designated critical habitat for federally listed species overlaps or is immediately adjacent to the review area. The nearest designated critical habitat is for San Diego ambrosia (*Ambrosia pumila*) and coastal California gnatcatcher (*Poliophtila californica californica*), located approximately 0.5 mile northwest and 0.5 mile southwest, respectively, of the review area.

RESULTS

Weather

Weather during the October 9, 2023, survey was warm with generally clear skies. The temperature ranged between 90 and 100 degrees Fahrenheit, with calm winds between 0 and 5 miles per hour. Conditions were ideal for performing visual surveys of the review area.

Aquatic Resources

In total, six aquatic resource features (F01–F06) were estimated and mapped in the review area: three named drainages—Temecula Creek (F01), Pechanga Creek (F02), and Murrieta Creek (F03)—and three unnamed drainages (F04–F06) (Figure 5). F04 and F05 drain into F01 in the east-central portion of the review area. F06 drains into F03 near the northwestern limits of the review area. Site conditions support flowing and standing or ponded water in several locations. Soils were mostly sandy and loamy with some clayey and silty textures.

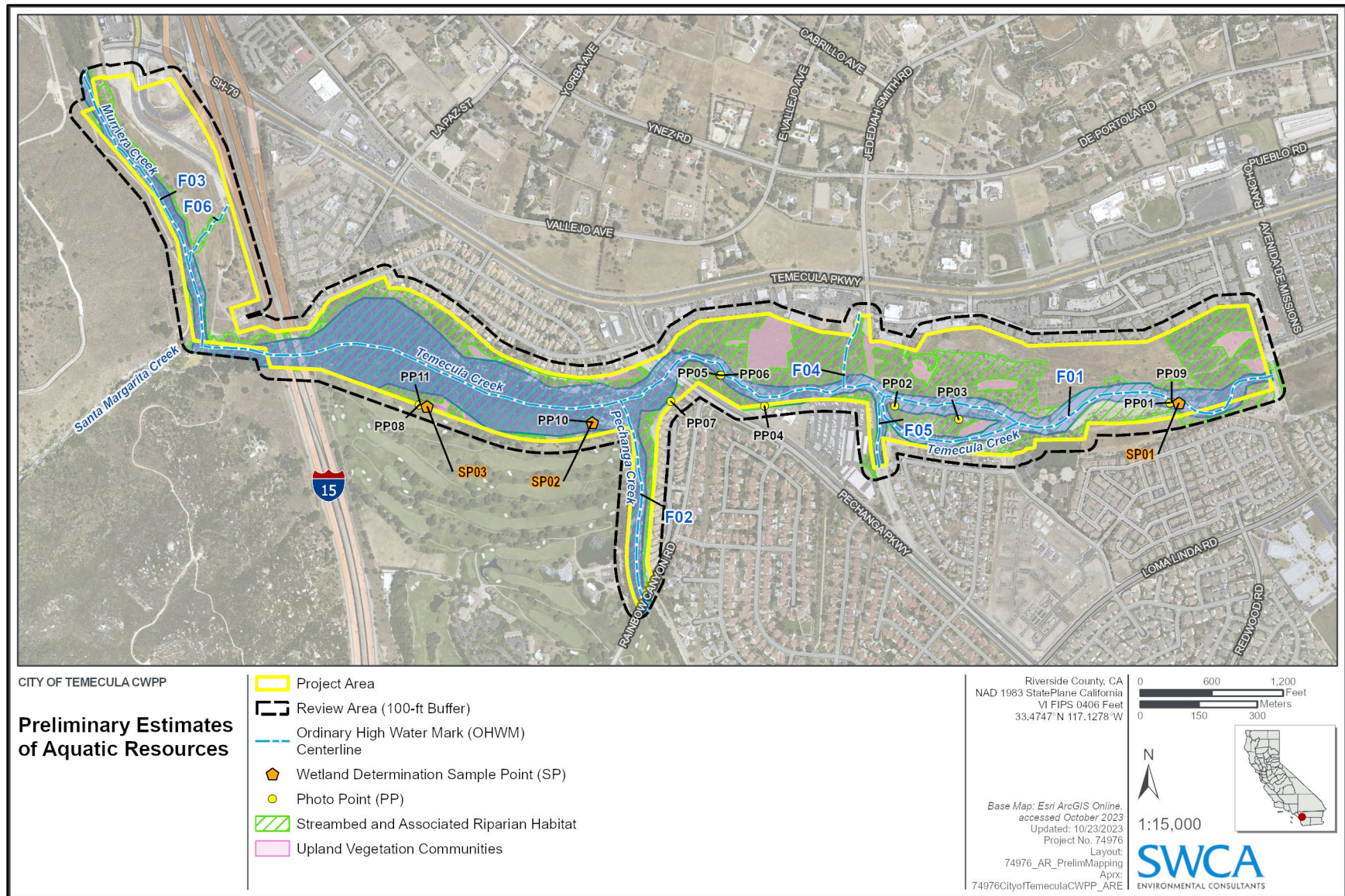


Figure 5. Preliminary estimates of aquatic resources.

Based on conditions and connectivity in the watershed, Features F01 through F06 are expected to be jurisdictional aquatic resources under programs administered by the USACE Los Angeles District, the Water Board's Regional Water Quality Control Board, and the CDFW.

Hydrological indicators, such as sediment deposits, surface soil cracking, drift deposits, and changes in vegetation composition were used to approximate an OHWM center line. Exact OHWM boundaries were not mapped during the field survey. Potential CDFW jurisdictional resources were mapped on figures using previously collected vegetation community data for the riparian habitat.

Three wetland determination sampling plots (SP01–SP03) were examined and recorded on datasheets (Table 1; see Exhibit B) where potential wetlands were expected. SP01 was examined in the low-flow channel of F01 near the eastern limits of the review area. SP01 exhibited a dominance of hydrophytic vegetation and wetland hydrology; however, soils did not meet any hydric soil indicator. Wetland hydrology observed at SP01 included surface water and a water table at a depth of 2 inches below the surface.

SP02 was also examined in the low-flow channel of F01 immediately west of the confluence of F01 and F02. SP02 did not exhibit any of the three wetland parameters.

SP03 was examined adjacent to a golf course located in a disturbed portion of the F01 streambed. SP03 exhibited wetland hydrology; however, soils did not meet any hydric soil indicator. Due to the prevalence of nonnative species and proximity to the golf course, vegetation was determined to be problematic at SP03.

Table 1. Wetland Determination Sampling Plots

Plot	Hydrologic Indicators	Hydric Soil Indicator	Hydrophytic Vegetation Indicator	Wetland/ Non-wetland Result	Relative Plot Location	Geographic Coordinate
SP01	Yes	No	Yes	Non-wetland	Streambed of Temecula Creek, in the eastern limits of the review area	33.4734 N, 117.114 W
SP02	No	No	No	Non-wetland	Streambed of Temecula Creek; west of the confluence of Pechanga Creek and Temecula Creek	33.4729 N, 117.13 W
SP03	Yes	No	Yes	Non-wetland	Streambed of Temecula Creek; adjacent to golf course	33.4732 N, 117.135 W

DISCUSSION

Six jurisdictional features (F01–F06) within the review area are presumed to be regulated by the USACE, Water Board, and CDFW. As a result, regulated impacts within the project area may require USACE permits under Section 404 of the Clean Water Act, Section 401 of the Clean Water Act and/or Porter Cologne Water Quality Control Act, and Section 1600 (Lake and Streambed Alteration) of the California Fish and Game Code.

Other considerations associated with permitting include evaluating potential direct and indirect effects on federally listed endangered and/or threatened species under the Endangered Species Act (Section 7), nesting birds protected under Migratory Bird Treaty Act, a consistency analysis in accordance with the Western Riverside Multiple Species Habitat Conservation Plan, and consideration of impacts to cultural and historic resources under the National Historic Preservation Act (Section 106).

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EXHIBIT A

Survey Photographs



Photograph A-1. Overview of eastern (upstream) portion of Temecula Creek, facing north.



Photograph A-2. OHWM limits of Temecula Creek adjacent to an island terrace with riparian vegetation; view facing south.



Photograph A-3. Island terrace with sandy soils and riparian vegetation; no OHWM indicators observed; view facing west.



Photograph A-4. Downstream view of OHWM southern boundary, facing northwest.



Photograph A-5. View of 4-foot-tall wracking, facing northwest (downstream).



Photograph A-6. Upstream example of perennial flow; view facing southeast.



Photograph A-7. Example of freshwater pond with cattail and duckweed (*Lemna* sp.); view facing north.



Photograph A-8. Interface of golf course and Temecula Creek; view facing west.



Photograph A-9. View of SP01.



Photograph A-10. View of SP02.



Photograph A-11. View of SP03.

EXHIBIT B

Datasheets

WETLAND DETERMINATION DATA FORM — Arid West Region

Project/Site: <u>Temecula</u>	City/County: <u>Temecula/Riverside County</u>	Sampling Date: <u>10/09/2023</u>
Applicant/Owner: <u>City</u>	State: <u>CA</u>	Sampling Point: <u>01</u>
Investigator(s): <u>Bonnie And Luis</u>	Section, Township, Range: <u>Sec. 00 T8S R2W</u>	
Landform (hillslope, terrace, etc.): <u>Channel</u>	Local relief (concave, convex, none): <u>Concave</u>	Slope (%): <u><5%</u>
Subregion (LRR): <u>LRR C</u>	Lat: <u>33.4734</u>	Long: <u>-117.114</u>
		Datum: <u>WGS1984</u>
Soil Map Unit Name: <u>GuB - Grangeville fine sandy loam, poorly drained, saline-alk ali, 0 to 5 percent slopes</u>	NWI classification: <u>R4SBA</u>	

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes: <u> X </u>	No: <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u> X </u>
Hydric Soil Present?	Yes: <u> </u>	No: <u> X </u>	
Wetland Hydrology Present?	Yes: <u> X </u>	No: <u> </u>	
Remarks: 			

VEGETATION — Use scientific names of plants.

Tree Stratum: (Plot size: 30)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:				
1.					Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)				
2.					Total Number of Dominant Species Across All Strata: <u>3</u> (B)				
3.					Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67</u> (A/B)				
4.									
		<u>0</u>	=Total Cover						
Sapling/Shrub Stratum: (Plot size: 5)					Prevalence Index worksheet:				
1. <i>Baccharis salicifolia</i>		<u>20</u>	<u>Y</u>	<u>FAC</u>	Total % Cover of:		Multiply by:		
2. <i>Salix laevigata</i>		<u>1</u>	<u>N</u>	<u>FACW</u>	OBL species	<u>25</u>	x 1 =	<u>25</u>	
3.					FACW species	<u>1</u>	x 2 =	<u>2</u>	
4.					FAC species	<u>20</u>	x 3 =	<u>60</u>	
5.					FACU species	<u>31</u>	x 4 =	<u>124</u>	
		<u>21</u>	=Total Cover			UPL species	<u>0</u>	x 5 =	<u>0</u>
Herb Stratum: (Plot size: 5)					Column Totals:	<u>77</u>	(A)	<u>211</u>	(B)
1. <i>Melilotus indicus</i>		<u>30</u>	<u>Y</u>	<u>FACU</u>	Prevalence Index = B/A = <u>2.74</u>				
2. <i>Persicaria arifolia</i>		<u>25</u>	<u>Y</u>	<u>OBL</u>					
3. <i>Heliotropium curassavicum</i>		<u>1</u>	<u>N</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators:				
4.					<u>X</u> Dominance Test is >50%				
5.					<u>X</u> Prevalence Index is ≤3.0 ¹				
6.					<u> </u> Morphological Adaptations ¹ (Profice supporting data in Remarks or on a separate sheet)				
7.					<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)				
8.					¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
		<u>56</u>	=Total Cover			Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>			
Woody Vine Stratum: (Plot size:)									
1.									
2.									
		<u>0</u>	=Total Cover						
% Bare Ground in Herb Stratum <u>40</u> % Cover of Biotic Crust <u>0</u>									
Remarks:									

Sampling Point: 01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR C)
☐ 2 cm Muck (A10) (LRR B)
☐ Reduced Vertic (F18)
☐ Red Parent Material (TF2)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present?	Yes	No	X
----------------------	-----	----	---

Remarks:

Wetland Hydrology Indicators:

Primary indicators (minimum of one required: check all that apply):

Secondary indicators (2 or more required):

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> FAC-Neutral Test (D5) |

Field Observations:

Surface Water Present?	Yes	<u>X</u>	No	<u> </u>	Depth (inches):	<u>0.25</u>
Water Table Present?	Yes	<u>X</u>	No	<u> </u>	Depth (inches):	<u>2</u>
Saturation Present? (includes capillary fringe)	Yes	<u>X</u>	No	<u> </u>	Depth (inches):	<u>0</u>

Wetland Hydrology Present? Yes X No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM — Arid West Region

Project/Site: Temecula City/County: Temecula/Riverside County Sampling Date: 10/09/2023
 Applicant/Owner: City State: CA Sampling Point: 02
 Investigator(s): Bonnie And Luis Section, Township, Range: Sec. 00 T8S R2W
 Landform (hillslope, terrace, etc.): Channel Local relief (concave, convex, none): Concave Slope (%): <5%
 Subregion (LRR): LRR C Lat: 33.4729 Long: -117.13 Datum: WGS1984
 Soil Map Unit Name: RSC - Riverwash NWI classification: PFOC
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes: <u> </u>	No: <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes: <u> </u>	No: <u>X</u>		
Wetland Hydrology Present?	Yes: <u> </u>	No: <u>X</u>		
Remarks:				

VEGETATION — Use scientific names of plants.

Tree Stratum: (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
1. <u>Tamarix ramosissima</u>	<u>10</u>	<u>Y</u>	<u>UPL</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u>10</u>	<u> </u>	<u> </u>	
<u>10</u> =Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>90</u> x 3 = <u>270</u> FACU species <u>14</u> x 4 = <u>56</u> UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>114</u> (A) <u>376</u> (B) Prevalence Index = B/A = <u>3.30</u>
Tree Stratum: (Plot size: 30)				
1. <u>Baccharis salicifolia</u>	<u>70</u>	<u>Y</u>	<u>FAC</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u>70</u>	<u> </u>	<u> </u>	
<u>70</u> =Total Cover				
Shrub/Stratum: (Plot size: 5)				Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Profice supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Artemisia douglasiana</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Ambrosia psilostachya</u>	<u>10</u>	<u>Y</u>	<u>FACU</u>	
3. <u>Erigeron canadensis</u>	<u>4</u>	<u>N</u>	<u>FACU</u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u>34</u>	<u> </u>	<u> </u>	
<u>34</u> =Total Cover				
Woody Vine Stratum: (Plot size:)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>0</u> =Total Cover				
% Bare Ground in Herb Stratum <u>0</u>	% Cover of Biotic Crust <u>0</u>			

Remarks:

SOIL

Sampling Point: 02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	2.5Y 4/2	100		0			Loamy Sand	
4-16	2.5Y 4/2	100		0			Sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5) (**LRR C**)
☐ 1 cm Muck (A9) (**LRR D**)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)

- ☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (**LRR C**)
☐ 2 cm Muck (A10) (**LRR B**)
☐ Reduced Vertic (F18)
☐ Red Parent Material (TF2)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if present):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one required; check all that apply):

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1) (**Nonriverine**)
☐ Sediment Deposits (B2) (**Nonriverine**)
☐ Drift Deposits (B3) (**Nonriverine**)
☐ Surface Soil Cracks (B6)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Water-Stained Leaves (B9)

- ☐ Salt Crust (B11)
☐ Biotic Crust (B12)
☐ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Other (Explain in Remarks)

Secondary indicators (2 or more required):

- ☐ Water Marks (B1) (**Riverine**)
☐ Sediment Deposits (B2) (**Riverine**)
☐ Drift Deposits (B3) (**Riverine**)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? Yes ___ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM — Arid West Region

Project/Site: Temecula City/County: Temecula/Riverside County Sampling Date: 10/09/2023
 Applicant/Owner: City State: CA Sampling Point: 03
 Investigator(s): Bonnie And Luis Section, Township, Range: Sec. 00 T8S R2W
 Landform (hillslope, terrace, etc.): Channel Local relief (concave, convex, none): None Slope (%): <5%
 Subregion (LRR): LRR C Lat: 33.4732 Long: -117.135 Datum: WGS1984
 Soil Map Unit Name: RSC - Riverwash NWI classification: No
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes: <u>X</u>	No: <u> </u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes: <u> </u>	No: <u>X</u>	
Wetland Hydrology Present?	Yes: <u>X</u>	No: <u> </u>	
Remarks:			

VEGETATION — Use scientific names of plants.

Tree Stratum: (Plot size: <u>30</u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> <div style="text-align: right;">0 =Total Cover</div> Sapling/Shrub Stratum: (Plot size: <u>5</u>) 1. <u> </u> 2. <u> </u> 3. <u> </u> 4. <u> </u> 5. <u> </u> <div style="text-align: right;">0 =Total Cover</div> Herb Stratum: (Plot size: <u>5</u>) 1. <u>Cynodon dactylon</u> 95 Y FACU 2. <u>Pluchea odorata</u> 2 N FACW 3. <u>Rumex aquaticus</u> 1 N UPL 4. <u> </u> 5. <u> </u> 6. <u> </u> 7. <u> </u> 8. <u> </u> <div style="text-align: right;">98 =Total Cover</div> Woody Vine Stratum: (Plot size: <u> </u>) 1. <u> </u> 2. <u> </u> <div style="text-align: right;">0 =Total Cover</div> % Bare Ground in Herb Stratum <u>0</u> % Cover of Biotic Crust <u>0</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Domant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B) Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>2</u></td> <td>x 2 = <u>4</u></td> </tr> <tr> <td>FAC species <u>0</u></td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species <u>95</u></td> <td>x 4 = <u>380</u></td> </tr> <tr> <td>UPL species <u>1</u></td> <td>x 5 = <u>5</u></td> </tr> <tr> <td>Column Totals: <u>98</u> (A)</td> <td><u>389</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.97</u></td> </tr> </table> Hydrophytic Vegetation Indicators: <u> </u> Dominance Test is >50% <u> </u> Prevalence Index is ≤3.0 ¹ <u> </u> Morphological Adaptations ¹ (Profice supporting data in Remarks or on a separate sheet) <u>X</u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>2</u>	x 2 = <u>4</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>95</u>	x 4 = <u>380</u>	UPL species <u>1</u>	x 5 = <u>5</u>	Column Totals: <u>98</u> (A)	<u>389</u> (B)	Prevalence Index = B/A = <u>3.97</u>	
Total % Cover of:	Multiply by:																
OBL species <u>0</u>	x 1 = <u>0</u>																
FACW species <u>2</u>	x 2 = <u>4</u>																
FAC species <u>0</u>	x 3 = <u>0</u>																
FACU species <u>95</u>	x 4 = <u>380</u>																
UPL species <u>1</u>	x 5 = <u>5</u>																
Column Totals: <u>98</u> (A)	<u>389</u> (B)																
Prevalence Index = B/A = <u>3.97</u>																	
Remarks: Golf course adjacent																	

Sampling Point: 03

[illegible]²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR C)
☐ 2 cm Muck (A10) (LRR B)
☐ Reduced Vertic (F18)
☐ Red Parent Material (TF2)
☐ Other (Explain in Remarks)

Restrictive Layer (if present):

Hydric Soil Present? Yes No X

Wetland Hydrology Indicators:

Secondary indicators (2 or more required):

- Field Observations:**

Wetland Hydrology Present? Yes X No

APPENDIX B


Cultural Resources

CRITICAL ISSUES ANALYSIS REPORT

A cultural resources critical issues analysis (CIA) was conducted to disclose information on known cultural resources within the project area and assess potential risks to those resources that may occur during implementation of the CWPP. This CIA is a preliminary cultural resources study aimed at the identification of potential critical issues and does not satisfy technical study requirements that may be required under the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), or Section 106 of the National Historic Preservation Act (NHPA). The full CIA report is included as Attachment B.1.

ATTACHMENT B.1

Cultural Resources Critical Issues Analysis

The logo for SWCA (Southwest Consulting & Associates) is positioned vertically on the left side of the page. It consists of the letters 'S', 'W', 'C', and 'A' in a large, stylized, light blue font. The 'S' and 'W' are connected, as are the 'C' and 'A'.

Cultural Resources Critical Issues Analysis for the City of Temecula – Temecula Creek Community Wildfire Protection Plan

JANUARY 2024

PREPARED FOR

City of Temecula
Department of Development

PREPARED BY

SWCA Environmental Consultants

CULTURAL RESOURCES CRITICAL ISSUES ANALYSIS FOR THE CITY OF TEMECULA – TEMECULA CREEK COMMUNITY WILDFIRE PROTECTION PLAN

Prepared for

City of Temecula
Department of Development
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Temecula, California 92590
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SWCA Project No. 74976

SWCA Cultural Resources Report No. 24-5

January 2024

Keywords: CEQA; cultural resources; critical issues analysis (CIA); Luiseño; City of Temecula; Riverside County; Township 8 South, Range 3 West, Sections 13 and 24 (USGS Temecula, California, quadrangle) and Township 8 South, Range 2 West, Sections 17–20 (Pechanga, California, quadrangle)

MANAGEMENT SUMMARY

Purpose and Scope: The City of Temecula is developing a Community Wildfire Protection Plan (CWPP) for 177 acres of land along sections of Temecula Creek, Murrieta Creek, and Pechanga Creek from approximately the terminus of Temecula Parkway at the northwest end to the Saint Thomas of Canterbury Episcopal Church at the east end (project area). The purpose of the CWPP is to reduce the risk of wildfire in the wildland-urban interface area containing sensitive resources that abuts residential and commercial development in the city of Temecula, California. This would occur through fuels reduction focused on the removal of nonnative species, and to a lesser degree, native vegetation where there is an especially high risk of wildfire. The CWPP may allow small handheld mechanical equipment (e.g., mowers and/or brush cutters) for fuels reduction; large machinery typically deployed during vegetation removal, surface grubbing, or grading will not be utilized. The CWPP proposes no earth moving, and the plan is being designed to prioritize avoidance of sensitive environmental resources to the greatest extent practicable.

SWCA Environmental Consultants (SWCA) prepared this critical issues analysis (CIA) at the request of the City of Temecula. The purpose of the CIA is to disclose information on known cultural resources within the project area and assess potential risks to those resources that may occur during implementation of the CWPP. This CIA is a preliminary cultural resources study aimed at the identification of potential critical issues and does not satisfy technical study requirements that may be required under the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), or Section 106 of the National Historic Preservation Act (NHPA).

SWCA completed a confidential records search of the local branch of the California Historical Resources Information System (CHRIS)¹ located on the campus of the University of California, Riverside; a search of the Sacred Lands File (SLF) through the California Native American Heritage Commission (NAHC); and archival research. The results of the records search and archival research were used to evaluate the likelihood of encountering unreported and/or buried archaeological and historical resources within or immediately adjacent to the project area.

Dates of Investigation: On April 13, 2023, SWCA requested a search of the CHRIS at the South Central Coastal Information System (SCCIC), located on the campus of California State University, Fullerton. SWCA received the results on August 24, 2023. The results of the SLF search were received from the NAHC on April 27, 2023, with a list of 18 tribes to contact. Subsequently, SWCA sent coordination letters to the interested tribes seeking additional information on cultural resources that may exist in the vicinity of the CWPP project area. Responses to the request for information have not yet been received.

In addition to the records and SLF searches, SWCA conducted a desktop review of available contemporary and historic maps, aerial images, quadrangles, and available Riverside County Assessor parcel data. This archival research focused on assessing the general sequence of historic-era development within the project area and identifying any natural, built, or other resources that may have previously existed within the project area. Aerial images and maps were used to assess the potential for previously unrecorded built environment or archaeological resources to be present on the surface of the project area.

Summary of Findings: Records on file at the Eastern Information Center at the University of California in Riverside, California, indicate that nine previously recorded cultural resources are within the project area: the Murrieta Canyon Archaeological District (P-33-011443), three pre-contact sites (RIV-50, RIV-270, and RIV-365) recorded as contributing elements of that district, two multicomponent

¹ The CHRIS assigns primary and trinomial site numbers to all archaeological sites, which will be referenced herein first by their trinomial number and, for ease of reference, will exclude the “CA-” prefix. Sites that are not assigned a trinomial are referenced by their primary number.

archaeological sites with both pre-contact and historic-era remains (RIV-3410H and RIV-4707H), an additional pre-contact site (P-33-011222), a pre-contact isolated find (P-33-025246), and a historic-era bridge (P-33-013135) that is no longer extant. The Murrieta Canyon Archaeological District and the three contributing pre-contact sites within the project area appear to be either listed in or eligible for listing in the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), and/or local historical registers. Twenty-one previously recorded cultural resources were identified outside of the project area within a 0.5-mile radius of the project: 18 pre-contact archaeological sites and three historic-era cultural resources.

The SLF search indicated that the project area is positive for sacred Native American cultural resources and recommended consultation with the Pechanga Band of Indians. SWCA archaeologists familiar with the project area identified the Luiseño Ancestral Origin Landscape, a tribal cultural resource (TCR) and NRHP-listed property, as the possible sacred Native American resource identified by the NAHC. The Luiseño Ancestral Origin Landscape encompasses the entire project area and is one of the most sacred landscapes to the Luiseño people and the location of culturally significant events associated with creation of all things at *‘éxva Teméeku*, linking surviving Luiseño populations to their ancestors, including the first people, the *Káamalam*. Tribal members have previously indicated that the project area is sensitive not only for TCRs, but also for its spiritual significance to current tribal members as continuum with their past. According to the Cultural and Paleontological Resources Assessment conducted by ICF International (ICF) (2023:2-43, 2-44), tribal representatives specifically pointed out the confluence of Murrieta and Temecula Creeks and the surrounding canyons, including Rainbow Canyon and Pechanga Creek. In response to SWCA’s request for information, Paul Macarro (Cultural Coordinator, Pechanga Band of Indians) wrote on January 27, 2024, that “for any project, there is not a more culturally sensitive-span in our entire Ancestral Territory.” Furthermore, the tribe reserves its “rights to participate in the formal environmental review process, including government-to-government consultation with the Lead Agency, and requests to be included in all correspondence regarding this Project” (Macarro 2024) (Exhibit B).

While residential, commercial, and infrastructure development nearly completely encircles the project, the project area itself has not been extensively developed. As such, it is possible that new surficial and buried archaeological resources associated with Native American land use is present in the project area. SWCA considers the entire project area to have a very high sensitivity for pre-contact, Native American affiliated archaeological resources.

Archival research noted at least nine roads that transected or intersected the project area dating to the early twentieth century (before 1940), and additional roads and a gauging station at the northwest corner of the project area dating to the late 1940s. However, no extant buildings or structures appear to be located within the project area. The likelihood of encountering new historic-era archaeological resources such as trash deposits, privies, structural remains, etc., in the identified areas of historical interest is considered moderate. Outside these areas of historic interest, the project area remained vacant and undeveloped, and as such, the likelihood of encountering historic-era archaeological resources in remaining portions of the project area is considered low.

Impacts to sensitive archaeological resources and TCRs (including the above-mentioned resources and any, as of yet, unidentified resources) have not been determined to date because focused surveys within the project area were not authorized at this time and responses/input from interested tribes have not yet been received.

California Department of Transportation (Caltrans) encroachment permit(s) may be required if work occurs within Caltrans' right-of-way along Interstate 15. This interstate, which crosses through the project area, was constructed in the 1970s but is likely exempt from evaluation (Property Type 6) under Attachment 4 of the First Amended Caltrans Section 106 Programmatic Agreement.

Recommendations: The CWPP is an action that must comply with CEQA. Should the project qualify for CEQA coverage by tiering from the California Vegetation Treatment Program (CalVTP) Programmatic Environmental Impact Report (PEIR), or if a new Environmental Impact Report (EIR) or Initial Study/Mitigated Negative Declaration (IS/MND) is required, it is recommended that cultural and tribal resources assessments/technical studies be prepared. Therefore, SWCA recommends a focused archaeological survey, performed by qualified archaeologists and Native American tribal representatives, to identify previously unknown cultural resources, assess the current condition of previously recorded cultural resources, and assess impacts to cultural resources and TCRs within the project area. An intensive archaeological survey will help provide the basis for the development of effective protection measures for cultural resources within the treatment area(s).

The project also requires an offer of tribal consultation from the City of Temecula under Assembly Bill (AB) 52 (Public Resources Code 21080.3.1), as well as formal government-to-government consultation. Tribal participation in any archaeological survey is anticipated, and tribal input and Traditional Ecological Knowledge (TEK) should be incorporated in the development of any protection measures and taken into consideration prior to the removal of native species. Participation of and consultation with the local Native American community is crucial to the effective identification and protection of cultural resources within the CWPP area (City of Temecula 2005). Native American participation is required for all levels of future investigations in the CWPP planning area, including those areas that have been previously developed, unless additional information can be provided to demonstrate that the property has been graded to a point where no cultural resources would be impacted. Areas that have not been previously developed should be surveyed to determine the potential for historical resources to be encountered and whether additional evaluation is required.

All invasive and nonnative plant-removal methods should be designed to minimize potential impacts to cultural resources, and excavation of root mass is not recommended. Low-impact fuels reduction approaches should be designed with assistance from Pechanga Band members and should minimize ground disturbance to the extent possible. TEK should be integrated into the revegetation components of the fuels reduction efforts. Culturally significant plant species, such as yerba mansa (*Anemopsis californica*; Luiseño word is *Chevnash*), rush (*Juncus* sp., Luiseño word is *Shoila*), deer grass (*Muhlenbergia rigens*; Luiseño word is *Yulalac*), and others, should be discussed with Pechanga Band members and be incorporated into project implementation plans. If an IS/MND or EIR is needed, tribal consultation pursuant to AB 52 would also be required.

A paleontological records search and desktop analysis should also be performed. Impacts to paleontological and cultural resources will be determined once a project description of sufficient detail to quantify impacts is available. Once a detailed project description is available, a paleontological assessment is performed, tribal input has been shared/received, and the surveys have been conducted, impacts can be adequately identified and quantified, and appropriate mitigation can be determined.

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INTRODUCTION

The City of Temecula is developing a Community Wildfire Protection Plan (CWPP) for 177 acres of land along sections of Temecula Creek, Murrieta Creek, and Pechanga Creek from approximately the terminus of Temecula Parkway at the northwest end to the Saint Thomas of Canterbury Episcopal Church at the east end (project area). The purpose of the CWPP is to reduce the risk of wildfire in the wildland-urban interface area, which contains sensitive resources and abuts residential and commercial development in the city of Temecula, California. This would occur through fuels reduction focused on the removal of nonnative species and, to a lesser degree, native vegetation where there is an especially high risk of wildfire. The CWPP may allow small handheld mechanical equipment (e.g., mowers and/or brush cutters) for fuel reduction; large machinery typically deployed during vegetation removal, surface grubbing, or grading will not be utilized. The CWPP proposes no earth moving, and the plan is being designed to prioritize avoidance of sensitive environmental resources to the greatest extent practicable.

SWCA Environmental Consultants (SWCA) prepared this critical issues analysis (CIA) at the request of the City of Temecula. The purpose of the CIA is to disclose information on known cultural resources within the project area and assess potential risks to those resources that may occur during implementation of the CWPP. This CIA is a preliminary cultural resources study aimed at the identification of potential critical issues and does not satisfy technical study requirements that may be required under the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), or Section 106 of the National Historic Preservation Act (NHPA).

Given the very high sensitivity for pre-contact archaeological resources and tribal cultural resources (TCRs), it is unlikely that the project would qualify for a CEQA Exemption (Statutory Exemption [pursuant to Article 18 of the State CEQA Guidelines – Section 21083] or Categorical Exemption [Article 19 – Section 21084] of the California Public Resources Code [PRC]). However, because portions of the Temecula Creek CWPP area are within the California Vegetation Treatment Program (CalVTP) Treatable Landscape and include covered treatment activities (i.e., wildland-urban interface fuel reduction) the project would likely qualify for CEQA coverage by tiering from the CalVTP Programmatic Environmental Impact Report (PEIR). It is anticipated that cultural and tribal resources technical studies will be required under CEQA, and possibly under NEPA and Section 106 of the NHPA in the event of a federal nexus. These technical studies would be prepared and included as a CalVTP PEIR addendum.

SWCA archaeologists Aaron Elzinga, M.A., Registered Professional Archaeologist (RPA), and David Sayre, B.A., as well as SWCA architectural historian Susan Zamudio-Gurrola, M.H.P., prepared the report, under the direction of Principal Investigator John J. Eddy, M.A., RPA. Copies of the report are on file with SWCA's Pasadena office and the Eastern Information Center (EIC) at the University of California in Riverside, California.

Project Location

The project is in the City of Temecula in southwestern Riverside County, California. It is immediately south of Temecula Parkway/State Route 79 and intersects a portion of Interstate 15 on the west (Figure 1–Figure 3). Specifically, the project site is depicted on the U.S. Geological Survey's (USGS's) 7.5-minute Temecula, California, quadrangle in Sections 13 and 14, Township 8 South, Range 3 West and on the Pechanga, California, quadrangle in Sections 17–20, Township 8 South, Range 2 West (see Figure 3).

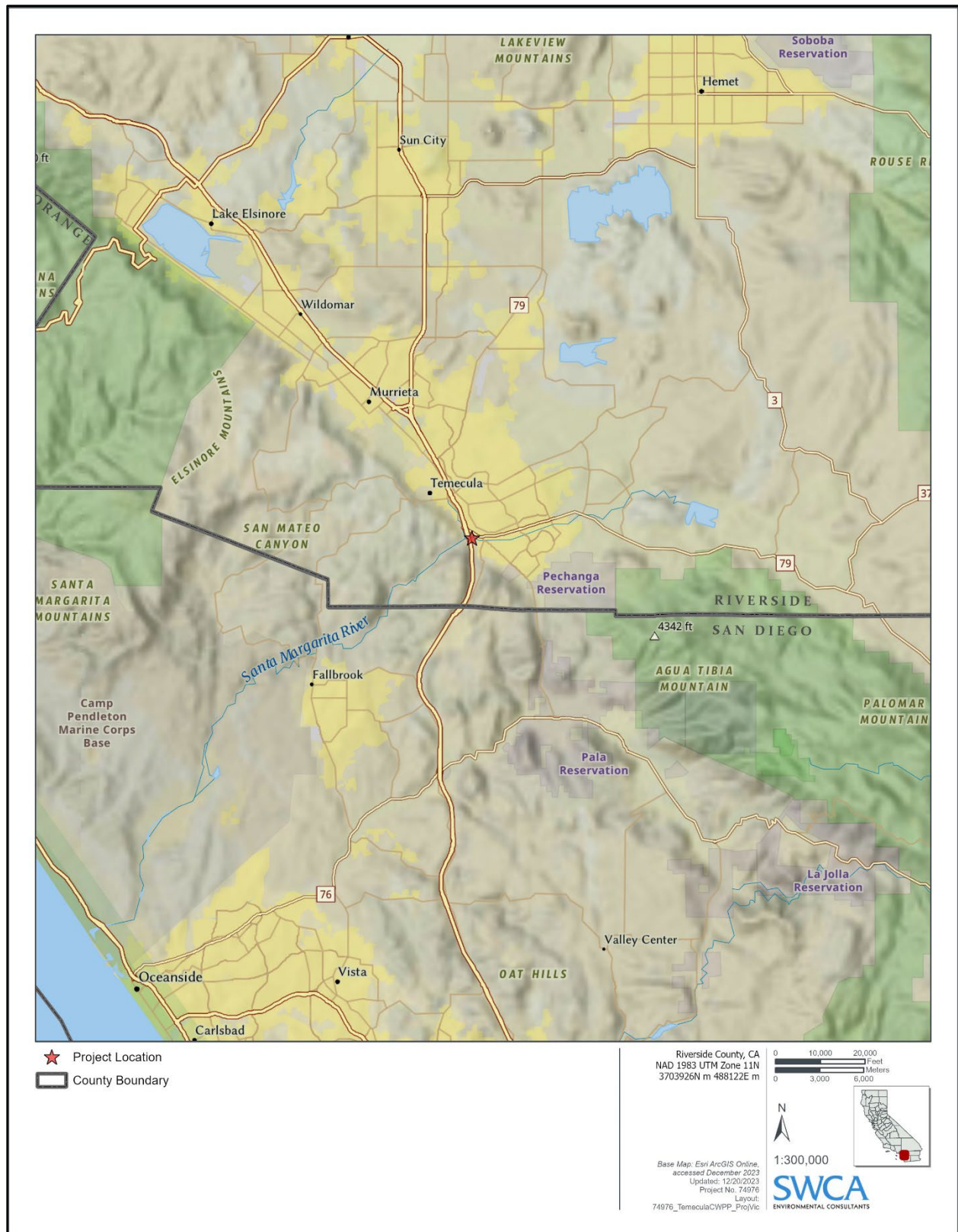


Figure 1. Project vicinity.



Figure 2. Project site plotted on a 2020 aerial photograph.

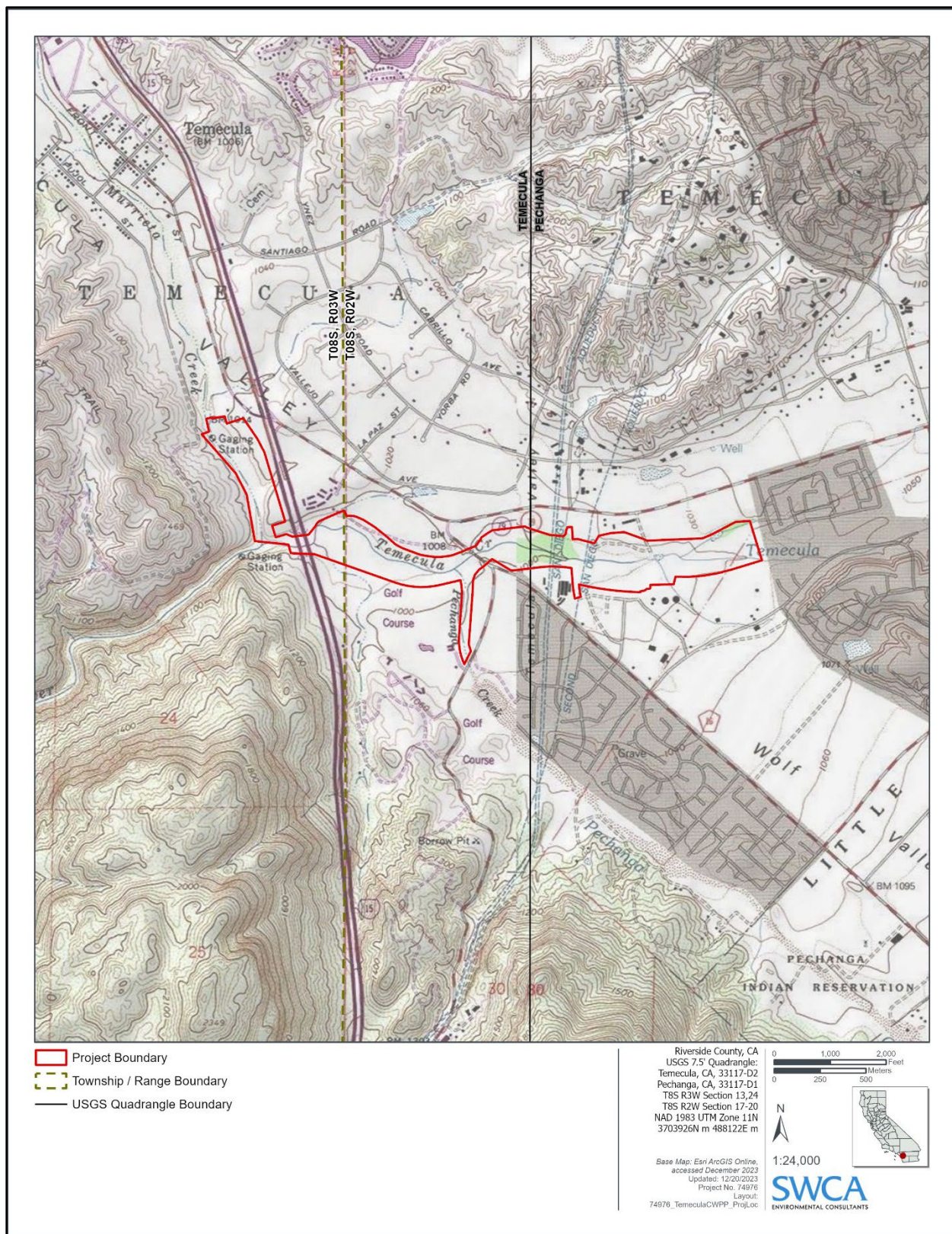


Figure 3. Project location plotted on the USGS Temecula and Pechanga, California, 7.5-minute quadrangles.

Directly abutting the project area is primarily residential and commercial development to the north, south, and east; a golf course to the south; and undeveloped land to the west and southwest. The project area is situated along sections of Temecula Murrieta and Pechanga Creeks from approximately the terminus of Temecula Parkway at the northwest end to the Saint Thomas of Canterbury Episcopal Church at the east end. Several conservation easements are included within the project area, and the area is in proximity to other protected areas. Surrounding land use is mostly residential with a mixture of commercial and institutional properties. The project area itself remains mostly undeveloped.

REGULATORY SETTING

This section identifies regulations, state legislation, and local statutes, ordinances, and guidelines that govern the identification and treatment of cultural resources and analysis of project-related effects to cultural resources. The lead agency must consider these requirements in making decisions on projects that may affect cultural resources.

State Regulations

The California Office of Historic Preservation (OHP), a division of the California Department of Parks and Recreation (DPR), performs certain duties described in the PRC and maintains the California Historic Resources Inventory and California Register of Historical Resources (CRHR). The state-level regulatory framework also includes CEQA, which requires the identification and mitigation, if necessary, of substantial adverse impacts that may affect the significance of eligible historical and archaeological resources.

California Environmental Quality Act

CEQA requires a lead agency to analyze whether historic and/or archaeological resources may be adversely affected by a proposed project. Under CEQA, a “project that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment” (PRC 21084.1). This analysis involves a two-part process: first, the determination must be made whether the proposed project involves cultural resources. Second, if cultural resources are present, the proposed project must be analyzed for a potential “substantial adverse change in the significance” of the resource.

HISTORICAL RESOURCES

According to CEQA Guidelines, Section 15064.5, for the purposes of CEQA, historical resources are defined as follows:

- A resource listed in, or formally determined eligible...for listing in the CRHR (PRC 5024.1, 14 California Code of Regulations [CCR] 4850 et seq.).
- A resource included in a local register of historical resources, as defined in PRC 5020.1(k) or identified as significance in a historic resources survey meeting the requirements of PRC 5024.1(g).
- Any object, building, structure, site, area, place, record, or manuscript that the lead agency determines to be eligible for national, state, or local landmark listing; generally, a resource shall be considered by the lead agency to be historically significant (and therefore a historic resource under CEQA) if the resource meets the criteria for listing in the CRHR (as defined in PRC 5024.1, 14 CCR 4852).

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity (as defined above) does not meet National Register of Historic Places (NRHP) criteria may still be eligible for listing in the CRHR.

According to CEQA, the fact that a resource is not listed in or determined eligible for the CRHR or is not included in a local register or survey shall not preclude the lead agency from determining that the resource may be a historical resource (PRC 5024.1). Pursuant to CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource may have a significant effect on the environment (CEQA Guidelines, Section 15064.5[b]).

Substantial Adverse Change and Indirect Impacts to Historical Resources

CEQA Guidelines specify that a “substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired” (CEQA Guidelines, Section 15064.5). Material impairment occurs when a project alters in an adverse manner or demolishes “those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion” or eligibility for inclusion in the NRHP, CRHR, or local register. In addition, pursuant to CEQA Guidelines, Section 15126.2, the “direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects.”

ARCHAEOLOGICAL RESOURCES

In terms of archaeological resources, PRC 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

CALIFORNIA STATE ASSEMBLY BILL 52

Assembly Bill (AB) 52 amended PRC 5097.94 and added PRC 21073, 21074(a) and (b), 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 formalizes the lead agency–tribal consultation process, requiring the lead agency to initiate consultation with California Native American groups that are traditionally and culturally affiliated with the project, including tribes that may not be federally recognized. Lead agencies are required to begin consultation prior to the release of a Negative Declaration, Mitigated Negative Declaration (MND), or Environmental Impact Report (EIR).

Section 4 of AB 52 adds Sections 21074(a) and (b) to the PRC, which address TCRs and cultural landscapes. PRC 21074(a) defines TCRs as one of the following:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - a. Included or determined to be eligible for inclusion in the CRHR.

- b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Section 1(a)(9) of AB 52 establishes that “a substantial adverse change to a tribal cultural resource has a significant effect on the environment.” Effects on TCRs should be considered under CEQA. Section 6 of AB 52 adds Section 21080.3.2 to the PRC, which states that parties may propose mitigation measures “capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource.” Further, if a California Native American tribe requests consultation regarding project alternatives, mitigation measures, or significant effects on TCRs, the consultation shall include those topics (PRC 21080.3.2[a]). The environmental document and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (PRC 21082.3[a]).

California Register of Historical Resources

Created in 1992 and implemented in 1998, the CRHR is “an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state’s historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC 21083.2 and 21084.1). Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys, or designated by local landmarks programs, may be nominated for the CRHR. According to PRC 5024.1(c), a resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria.

- **Criterion 1:** It is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- **Criterion 2:** It is associated with the lives of persons important in California’s past.
- **Criterion 3:** It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- **Criterion 4:** It has yielded, or may be likely to yield, information important in history or prehistory.

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity does not meet NRHP criteria may still be eligible for listing in the CRHR. While all sites are evaluated according to all four of the CRHR criteria, the eligibility for archaeological resources is typically considered under Criterion 4. Most prehistoric archaeological sites are lacking identifiable or important association with specific persons or events of regional or national history (Criteria 1 and 2) or lack the formal and structural attributes necessary to qualify as eligible under Criterion 3.

An archaeological site may be considered significant if it displays one or more of the following attributes: chronologically diagnostic, functionally diagnostic, or exotic artifacts; datable materials; definable

activity areas; multiple components; faunal or floral remains; archaeological or architectural features; notable complexity, size, integrity, time span, or depth; or stratified deposits. Determining the period(s) of occupation at a site provides a context for the types of activities undertaken and may supply a link with other sites and cultural processes in the region. Further, well-defined temporal parameters can help illuminate processes of culture change and continuity in relation to natural environmental factors and interactions with other cultural groups. Finally, chronological controls might provide a link to regionally important research questions and topics of more general theoretical relevance. As a result, the ability to determine the temporal parameters of a site's occupation is critical for a finding of eligibility under Criterion 4 (information potential). A site that cannot be dated is unlikely to possess the quality of significance required for CRHR eligibility or be considered a unique archaeological resource. The content of an archaeological site provides information regarding its cultural affiliations, temporal periods of use, functionality, and other aspects of its occupation history. The range and variability of artifacts present in the site can allow for reconstruction of changes in ethnic affiliation, diet, social structure, economics, technology, industrial change, and other aspects of culture.

Treatment of Human Remains

The disposition of burials falls first under the general prohibition on disturbing or removing human remains under California Health and Safety Code 7050.5. More specifically, remains suspected to be Native American are treated under CEQA at CCR 15064.5; PRC 5097.98 illustrates the process to be followed in the event that remains are discovered. If human remains are discovered during construction, no further disturbance to the site shall occur, and the County Coroner must be notified (CCR 15064.5 and PRC 5097.98).

Local Regulations

The City of Temecula General Plan Open Space/Conservation Element contains goals and policies to ensure the preservation of cultural heritage. Historical and cultural resources may include buildings, structures, landscape features, roads, trails, objects, and sites that represent significant contributions to local culture, history, and public art (City of Temecula 2005). Associated General Plan goals and policies include:

Goal 6 Preservation of significant historical and cultural resources.

- | | |
|-------------------|---|
| Policy 6.1 | Maintain an inventory of areas with archaeological/paleontological sensitivity, and historic sites in the Planning Area. |
| Policy 6.2 | Work to preserve or salvage potential archaeological and paleontological resources on sites proposed for future development through the development review and mitigation monitoring processes. |
| Policy 6.3 | Preserve and reuse historical buildings in accordance with the Old Town Specific Plan. |
| Policy 6.4 | Assist property owners in seeking state and/or federal registration and appropriate zoning for historic sites and assets. |
| Policy 6.5 | Pursue the acquisition and preservation of historical buildings for public facilities in accordance with the Old Town Specific Plan when appropriate. |
| Policy 6.6 | Ensure compatibility between land uses and building designs in the Old Town Specific Plan Area and areas adjacent to Old Town. |

- Policy 6.7** Encourage use of California's Historic Building Code when preserving/rehabilitating historic structures.
- Policy 6.8** Support an integrated approach to historic preservation in coordination with other affected jurisdictions, agencies, and organizations for areas within the Planning Area and surrounding region that seeks to establish linkages between historic sites or buildings with other historic features such as roads, trails, ridges, and seasonal waterways.
- Policy 6.9** Encourage the preservation and re-use of historic structures, landscape features, roads, landmark trees, and trails.
- Policy 6.10** Work with the Pechanga Band of Luiseño Indians to identify and appropriately address cultural resources and tribal sacred sites through the development review process.
- Policy 6.11** Encourage voluntary landowner efforts to protect cultural resource and tribal sacred sites consistent with State requirements (City of Temecula 2005).

The City Municipal Code defines a Historic Building as “a building listed individually on the National Register of Historic places, or by a state or county agency charged with recognition or preservation of historic structures, or by resolution of the city council as having significant local or regional historical importance and value to the community” (Temecula Municipal Code Section 17.34.010). A review of City documents indicates that the following shall be considered for requests for the addition or removal of buildings/structures to the Temecula Local Historic Register:

- That the proposed structure is associated with events that have made a significant contribution to the broad patterns of Temecula’s historic and cultural heritage.
- That the structure is associated with the lives of persons important in Temecula’s past.
- That the structure embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important individual, or possesses high artistic value.
- That the structure yielded, or may be likely to yield information in prehistory or history of Temecula. (City of Temecula 2011)

METHODS

In support of this CIA, SWCA completed a confidential records search of the California Historical Resources Information System (CHRIS), a Sacred Lands File (SLF) search through the California Native American Heritage Commission (NAHC), and archival research. The results of these searches were used to identify the presence/absence of known cultural resources or the likelihood of encountering cultural resources within the project area.

California Historical Resources Information System Records Search

On April 13, 2023, SWCA requested an in-house records search of the CHRIS at the Eastern Information Center (EIC) located at the University of California, Riverside. The search included any previously recorded cultural resources and investigations within a 0.8-kilometer (km) (0.5-mile) radius of the CWPP area. For the purposes of this CIA, only previous studies and California Department of Parks and Recreation (DPR) 523 Series site records for resources within the CWPP area were requested and

reviewed (Exhibit A). The previously recorded cultural resources and previously completed cultural resource studies that are within a 0.5-mile radius of the project area were requested but not assessed or reviewed in detail. The CHRIS records search also included a review of listings for the NRHP, CRHR, California Points of Historical Interest, and California Historical Landmarks.

Sacred Lands File Search

The NAHC is charged with identifying, cataloging, and protecting Native American cultural resources within an SLF database. These resources include ancient places of special religious or social significance to Native Americans and known ancient graves and cemeteries of Native Americans on private and public lands in California. In addition to the SLF, the NAHC maintains a list of tribal contacts affiliated with various geographic regions of California. The contents of the SLF are strictly confidential and the results are simply reported as “positive” or “negative.” In addition to the SLF results the NAHC includes a list of tribal contacts with affiliation to the specified location and recommends contacting each person for any additional or unrecorded information.

On April 13, 2023, SWCA contacted the California NAHC for a review of its SLF to determine whether any NAHC-listed Native American sacred lands are within or adjacent to the project area. A letter from the NAHC summarizing the results of the records search was received on April 27, 2023, and a copy of the letter is provided in Exhibit B.

Archival Research

Concurrent with the confidential CHRIS records search, SWCA conducted a desktop review of available historic maps, aerial images, and quadrangles. This archival research focused on assessing the general sequence of historic-era development and identifying any natural, built, or other resources that may have previously existed within the project area. The aerial images and maps were also used to assess the potential for previously unrecorded built environment or archaeological resources present on the surface of the project area. Sources consulted included the following publicly accessible data sources: U.S. Geological Survey (USGS) (2023) historical topographic maps; University of California, Santa Barbara Aerial Imagery Library (2023); and NETROnline Historical Aerials (2023) (historic topographic maps and aerial images).

In addition, as part of the effort to identify known built environment historical resources within or adjacent to the project area, SWCA reviewed the following: the City of Temecula General Plan, Old Town Specific Plan, Municipal Code, and a list of “Historical Places” identified by the City (City of Temecula 2005, 2011, 2023); the County of Riverside General Plan; the OHP-prepared Built Environment Resources Directory (BERD) for Riverside County; and determination of eligibility listings for the NRHP (National Park Service 2023; OHP 2023a; Riverside County 2015).

RESULTS

The goal of this CIA is to identify cultural resources constraints that may be present within the project area. This was completed using the results of a confidential records search of the CHRIS, an SLF search through the California NAHC, and archival research.

CHRIS Records Search

SWCA received the results of the CHRIS records search from the EIC on August 22, 2023, which included a search of the project area and a 0.8-km (0.5-mile) radius.

Previously Conducted Cultural Resource Studies

The results of the cultural resources records search at the EIC identified 94 previously conducted cultural resources studies within a 0.8-km (0.5-mile) radius of the project area, of which 37 studies intersect the project area (Table 1). These include 17 archaeological field studies, eight archaeological field studies with literature searches, one evaluation, one literature search, one evaluation and excavation, one monitoring, one archaeological excavation and monitoring, and seven studies that did not explicitly identify the type of study that occurred. Four of these studies have been published within the last 10 years (RI-09155, RI-09986, RI-10106, and RI-10114).

Of the 57 previously conducted cultural resource studies outside the project area but within the 0.8-km (0.5-mile) radius, 31 are archaeological field studies, nine consist of archaeological field studies with literature searches, two are archaeological field studies with a literature search and management planning, one is an evaluation and excavation, one is a monitoring study, four are archaeological evaluations with field studies, one is an excavation and monitoring study, one is a literature search, one is an archaeological and architectural/historical study, one is an archaeological and architectural/historical study with monitoring, one is an archaeological and architectural/historical study with management/planning, one is an architectural/historical evaluation and literature search, and three are projects that did not explicitly identify the type of study within the records search results

Table 1. Previous Cultural Resources Studies within 0.5 Mile of the Project Area

Report Number	Report Title	Author (Affiliation)	Year	Relationship to the Project Area
RI-00110	<i>Archaeological Impact Evaluation: Wolf's Grave Property</i>	Stuart, James (Archaeological Research Unit, U.C. Riverside)	1973	Outside
RI-00111	<i>Archaeological Impact Evaluation: Proposed Pala Village Development Rancho California</i>	Leslie E. Wildesen (Archaeological Research Unit, U.C. Riverside)	1973	Within
RI-00328	<i>Environmental Impact Evaluation: Archaeological Assessment of Parcel 11, 984</i>	Larry L. Bowles (Archaeological Consultant, Colton, CA)	1978	Within
RI-00513	<i>Environmental Impact Evaluation: Archaeological Assessment of EMWD Proposed Effluent Holding Ponds and Pipeline, Rancho California Regional Plant, Riverside County</i>	Stan Wilmoth (Archaeological Research Unit, U.C. Riverside)	1978	Within
RI-00545	<i>An Archaeological Assessment of Tentative Tract No. 3983</i>	Bowles, Larry L. and Jean A. Salpas (Archaeological Consultant)	1979	Outside
RI-00707	<i>An Archaeological/Paleontological Survey, Inventory and Assessment of the Proposed San Diego "Pipeline 5" Right-of-Way and Attendant Facilities Located in the Counties of Riverside and San Diego, California</i>	Roeder, Mark (Scientific Resource Surveys, Inc., Santa Ana, CA)	1979	Outside

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Report Number	Report Title	Author (Affiliation)	Year	Relationship to the Project Area
RI-00968	<i>Environmental Impact Evaluation: Archaeological Assessment of Tentative Parcel 15211, Riverside County, California</i>	Drover, Christopher E. (Consulting Archaeologist)	1980	Outside
RI-01048	<i>Cultural Resource Inventory and Impact Assessment for the KACOR/Rancho California Property</i>	White, Christopher W. (Archaeological Systems Management, Inc.)	1980	Outside
RI-01323	<i>Archaeological Assessment of TR 3750, TR 3646, GPA 240</i>	Desautels, Roger J. (Scientific Resource Surveys, Inc., Santa Ana, CA)	1981	Outside
RI-01426	<i>Archaeological Assessment for Tentative Parcel 18254</i>	Bowles, Larry L. (Unknown)	1982	Within
RI-01857	<i>An Archaeological Assessment of TT 19872, Temecula Area of Riverside County, California</i>	Yohe, Robert M. II (Archaeological Research Unit, U.C. Riverside)	1984	Outside
RI-02034	<i>Archaeological Survey of Tentative Parcel No. 21769, Rainbow Canyon Road, Riverside County, California</i>	Lerch, Michael K. (Lerch and Associates)	1986	Outside
RI-02070	<i>Negative Archaeological Survey Report: Route 15, P.M. 1.1/1.6</i>	Crotteau, Karen (CALTRANS District 8, San Bernardino)	1984	Within
RI-02169	<i>Rancho Villages Assessment District Cultural Resources Element</i>	Christopher E. Drover (Consulting Archaeologist, Tustin, CA)	1987	Within
RI-02186	<i>Letter Report: Cultural Resources Assessment of Temecula Creek Bridge No. 56C-165</i>	Philip Wilke (Archaeological Research Unit, U.C. Riverside)	1987	Within
RI-02261	<i>The Tonan Ranch Cultural Resources Assessment</i>	Drover, C.E. (Consulting Archaeologist, Tustin, CA)	1988	Within
RI-02262	<i>Letter Report: Tonan Ranch, CA-RIV-3410.</i>	Drover, Christopher E. (Drover Consulting Archaeology)	2000	Within
RI-02343	<i>An Archaeological Assessment of Temecula Creek Inn Golf Course Expansion, Riverside County, California</i>	Drover, C.E. (Unknown)	1988	Outside
RI-02384	<i>Reevaluation of Archaeological Sites Recorded on TPM 23987, Located in the Temecula Area of Riverside County, California</i>	McCarthy, Daniel F. (Archaeological Research Unit, U.C. Riverside)	1988	Within
RI-02421	<i>The Tonan Ranch - Cultural Resources Assessment; An Archaeological Test Excavation of RIV-3410</i>	Drover, C.E. (Unknown)	1988	Within
RI-02422	<i>Data Recovery at Tonan Ranch, CA-RIV-3410</i>	Drover, Christopher and Diane Pinto (Christopher Drover)	1991	Within
RI-02471	<i>An Archaeological Assessment of Temecula Creek Inn Expansion, Riverside County, California</i>	Drover, C.E. (Unknown)	1989	Outside
RI-02522	<i>The Murdy Ranch Cultural Resources Assessment.</i>	Drover, Christopher E. (Unknown)	1989	Outside
RI-02543	<i>An Archaeological Assessment of Tentative Parcel Map No. 22806, Riverside County, California.</i>	Keller, Jean S. (Unknown)	1989	Outside

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Report Number	Report Title	Author (Affiliation)	Year	Relationship to the Project Area
RI-02545	<i>An Archaeological Assessment of Tentative Map No 24739, Riverside County, California.</i>	Keller, Jean S. (Unknown)	1989	Outside
RI-02546	<i>An Archaeological Assessment of Tentative Parcel Map No. 24741, Riverside County, California.</i>	Keller, Jean S. (Unknown)	1989	Outside
RI-02547	<i>Rancho Villages Assessment District Sewer Lift Station: The Vail Site, RIV-365. An Archaeological Test and Mitigation.</i>	Drover, Christopher E. and Cole Parker (Unknown)	1989	Within
RI-02727	<i>An Archaeological Assessment of Tentative Parcel Map 25582 Riverside County, California</i>	Keller, Jean A. (Unknown)	1990	Outside
RI-02729	<i>An Archaeological Assessment of Tentative Tract Map 25980 Riverside County, California</i>	Keller, Jean A. (Unknown)	1990	Outside
RI-02757	<i>An Archaeological Assessment of Tentative Tract #21067, Rancho California, Riverside County, California</i>	Brock, James (Archaeological Advisor Group)	1990	Within
RI-03116	<i>A Cultural Resources Reconnaissance of Tentative Parcel No. 22515 Near Temecula, Riverside County, California</i>	Bissell, R.M. (RMW Paleo Associates)	1987	Outside
RI-03189	<i>Cultural Resources Assessment of AT&T's Proposed San Bernardino To San Diego Fiber Optic Cable, San Bernardino, Riverside And San Diego Counties, California</i>	Anonymous (Peak And Associates and Brian F. Mooney Associates)	1990	Within
RI-03312	<i>Cultural Resources Reconnaissance of Tentative Tract 22286, Temecula, Riverside County</i>	Shinn, Juanita R. (RMW Paleo Associates)	1990	Outside
RI-03436	<i>Cultural Resources Assessment: Pala Road Bridge Sewer and Road Realignment Project at Temecula Creek, Temecula Area of Riverside County, California</i>	Petersen, C.J., Rachel Greeley, and Bruce Love (Archaeological Research Unit, U.C. Riverside)	1992	Within
RI-03437	<i>Extended Phase I Survey Of CA-RIV-4707/H for the Temecula Creek (Pala Road) Bridge, City of Temecula, Riverside County, California</i>	Joyce M. Clevenger (Ogden Environmental and Energy Services Co., Inc.)	1997	Within
RI-03439	<i>Archaeological Survey Report for The Temecula Creek (Pala Road) Bridge in The City of Temecula Riverside County, California 08-RIV-CR-Pala Road</i>	De Barros, Philip (Professional Archaeological Services)	1997	Within
RI-03440	<i>Phase II Evaluation of Archaeological Site CA-RIV-4707/H for Determination of Eligibility Temecula Creek (Pala Road) Bridge Project City of Temecula, Riverside County, California 08-RIV-CR-Pala Road</i>	Phillip de Barros and Christopher E. Drover (Professional Archaeological Services)	1997	Within
RI-03496	<i>Archaeological Survey Report for Riverside County Murrieta Creek Flood Control Project</i>	Jones & Stokes Associates, Inc. (Jones & Stokes Associates, Inc.)	1992	Within
RI-04085	<i>Cultural Resources Survey of A 7.5 Acre Parcel Located at the Western Edge of Temecula Valley, Riverside County, California</i>	Horne, Melinda (Applied Earthworks)	1998	Outside
RI-04147	<i>Cultural Resources Records Search and Survey Report for A Pacific Bell Mobile Telecommunications Facility: Cm 258-11, City of Murrieta, California</i>	Mason, Roger, Philippe Lapin, and Wayne H. Bonner (Chambers Group, Inc.)	1998	Outside
RI-04346	<i>Identification And Evaluation of Historic Properties: AT&T Wireless Site C792, City of Temecula, Riverside County, California.</i>	Love, Bruce and Michael Hogan (CRM TECH)	2000	Outside

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Report Number	Report Title	Author (Affiliation)	Year	Relationship to the Project Area
RI-04381	<i>Cultural Resources Reconnaissance for the Rancho Community Church, Temecula, Riverside County, California.</i>	Brown, Joan C. (RMW Paleo Associates)	2000	Outside
RI-04404	<i>Final Cultural Resources Inventory Report for The Williams Communications, Inc., Fiber Optic Cable System Installation Project, Riverside to San Diego, California Vol I-IV.</i>	Jones And Stokes Associates, Inc. (Jones & Stokes Associates, Inc.)	2000	Within
RI-04647	<i>A Phase I Cultural Resources Assessment of APN 961-010-016, 018-020, 25.50 Acres of Land in The City of Temecula, Riverside County, California</i>	Keller, Jean A. (Unknown)	2003	Within
RI-04689	<i>Cultural Resources Evaluation of CA-RIV-6499 Located in Temecula, Riverside County, California</i>	Brown, Joan (SWCA Environmental Consultants)	2003	Outside
RI-04865	<i>A Phase I Archaeological Resource Survey and A Paleontological Records Review of the Temecula Marketplace Project, Located Near Highway 79 And Avenida De Misiones, City of Temecula, California</i>	Dice, Michael, E. Bruce Lander, and Leslie Nay Irish (L&L Environmental, Inc.)	2001	Within
RI-05012	<i>A Phase I Cultural Resources Investigation of the Proposed Santa Margarita Outfall Project Area, Riverside County, California</i>	Mckenna Et Al. (McKenna et al.)	2001	Within
RI-05027	<i>A Phase I Cultural Resources Investigation of the Vesta Telecommunications, Inc. Fiber Optic Alignment, Riverside County to San Diego County, California</i>	Jeanette A. McKenna (McKenna et al.)	2000	Within
RI-05065	<i>Cultural Resources Records and Literature Review for The Temecula Creek Inn Project, Temecula, California</i>	Mirro, Vanessa (Applied Earthworks)	2005	Within
RI-05108	<i>Cultural Resources Survey Of 21.47 Acres, APN# 961-010-014 And APN# 961-010-015 Temecula, California</i>	Anonymous (APPLIED EARTH WORKS)	2003	Outside
RI-05277	<i>Cultural Resource Survey: I-15/ SR79 Land Acquisition Project City of Temecula, Riverside County, CA (APN# 922-210-052, -060, and -061)</i>	Dice, Michael and Marnie Aislin-Kay (Michael Brandman Associates)	2004	Within
RI-05430	<i>Archaeological Monitoring Report: Middle School Site #5 (Wolf Creek), City of Temecula, Riverside County, California</i>	Love, Bruce, Harry Quinn, and Michael Hogan (CRM TECH)	2001	Outside
RI-05535	<i>A Phase I Cultural Resources Assessment of Tentative Tract Map 31946, +/-46.58 Acres of Land in Temecula, Riverside County, CA</i>	Keller, Jean A. (Unknown)	2005	Within
RI-05733	<i>Cultural Resources Records Search and Field Survey Report for A Verizon Telecommunications Facility: Avocado in the City of Temecula, Riverside County, CA</i>	Mason, Rodger D. (Chambers Group, Inc.)	2003	Outside
RI-05880	<i>Phase I Cultural Resources Survey of the Temecula Creek Inn Property, Temecula, California</i>	Mirro, Vanessa (APPLIED EARTH WORKS)	2006	Outside
RI-05992	<i>Archaeological Testing and Evaluation: Western Portions of Site CA-Riv-3410/H, Temecula Marketplace Project, City of Temecula, Riverside, CA</i>	Mariam Dahdul, Harry M. Quinn, and Adrian Sanchez Moreno (CRM TECH)	2003	Within
RI-06057	<i>Cultural Resources Survey for the Pujol Street Condominiums, City of Temecula, Riverside County, California</i>	Moslak, Ken (ASM Affiliates)	2006	Outside

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Report Number	Report Title	Author (Affiliation)	Year	Relationship to the Project Area
RI-06169	<i>Letter Report: Records Search Results and Site Visit for Sprint Telecommunications Facility Rv54xc468h (Carl's Jr.), 44515 Bedford Court, Temecula, Riverside County, CA</i>	Dice, Michael (Michael Brandman Associates)	2003	Outside
RI-06323	<i>Historical/Archaeological Resources Survey Report: Temecula Hospital Project, Tentative Parcel Map No. 32468, City of Temecula, Riverside County, California</i>	Tang, Bai, Michael Hogan, Deirdre Encarnacion, John J. Eddy, and Casey Tibbet (CRM TECH)	2004	Outside
RI-06340	<i>Historical/Archaeological Resources Survey Report, Tentative Tract Map 27890, In the City of Temecula, Riverside County, CA</i>	Tang, Bai, Michael Hogan, Casey Tibbet, and Daniel Ballester (CRM TECH)	2004	Outside
RI-06487	<i>Historical/Archaeological Resources Survey Report, Assessor's Parcel Nos. 922-170-014, and -015, In the City of Temecula, Riverside County, CA</i>	Tang, Bai, Michael Hogan, Matthew Wetherbee, and Daniel Ballester (CRM TECH)	2005	Outside
RI-06612	<i>Historical/Archaeological Resources Survey Report: Assessor's Parcel Number 922-130-016, City of Temecula, Riverside County, California</i>	Tang, Bai "Tom", Michael Hogan, Josh Smallwood, and Thomas Shackford (CRM TECH)	2006	Outside
RI-06790	<i>An Archaeological and Paleontological Mitigation-Monitoring Report on Wolf Creek, Tract 29798, +/- 175 Acres, City of Temecula, Riverside County, California</i>	Hoover, Anna M. and Dailey, Brian C. (L&L Environmental, Inc.)	2006	Outside
RI-06881	<i>Cultural Resources Monitoring of the Temecula Lane Project, Tentative Tract Map 31946, City of Temecula, Riverside County, California.</i>	Christopher Corey and Cindy Arrington, M.S., RPA (SWCA Environmental Consultants)	2007	Within
RI-07024	<i>A Phase I Cultural Resources Assessment of Tentative Parcel Map 34699, +/- 4.98 Acres of Land in the City of Temecula, Riverside County, California</i>	Keller, Jean A. (Jean A. Keller)	2006	Outside
RI-07387	<i>Phase I Cultural Resources Assessment, Temecula Lane 2 Property, City of Temecula, Riverside County, California.</i>	Lord, Kenneth J. (MBA)	2006	Outside
RI-07489	<i>Letter Report: Cultural Resource Records Search and Site Visit Results for Verizon Telecommunications Facility Candidate "Redhaw" 31524 Rancho Pueblo Road, Temecula, Riverside County, California</i>	Bonner, Wayne H. and Marnie Aislin-Kay (Michael Brandman Associates)	2007	Outside
RI-07540	<i>A Phase I Cultural Resources Assessment of Pujol Street Apartments, Planning Application 07-0229, +/- 13.72 Acres of Land in the City of Temecula, Riverside County, California</i>	Keller, Jean A. (Jean A. Keller, Cultural Resources Consultant)	2007	Outside
RI-07646	<i>A Cultural Resources Survey for the Star World Center Project, City of Temecula, Riverside County</i>	Clifford, James, Scott Mattingly, and Brian F. Smith (Brian F. Smith and Associates)	2005	Outside
RI-08171	<i>Cultural Resources Assessment Public Safety Enterprise Communication Project Riverside, Orange, San Bernadino, and San Diego Counties, FM 04174400010</i>	Sanka, Jennifer M. and Marnie Aislin-Kay (Michael Brandman Associates)	2008	Outside

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Report Number	Report Title	Author (Affiliation)	Year	Relationship to the Project Area
RI-08327	<i>Letter Report: Cultural Resource Records Search and Site Visit for Royal Street Communications California, LLC Candidate LA3454A (Temecula Creek Inn), 44501 Rainbow Canyon Road, Temecula, Riverside County, California.</i>	Bonner, Wayne H. and Sarah A. Williams (Michael Brandman Associates (MBA))	2009	Outside
RI-08485	<i>Archaeological Survey for Southern California Edison's Service Pole Installations in Temecula, Murrieta, and Lake Elsinore, Riverside County, California</i>	Heidelberg, Kurt (AECOM, Inc.)	2009	Outside
RI-08881	<i>An Archaeological Mitigation-Monitoring Report for the Temecula Creek Project</i>	Anna M. Hoover, Kristie R. Blevins, Jim McPherson, and Barbara Loren-Webb (L&L Environmental, Inc.)	2012	Within
RI-09146	<i>Phase I Archaeological Assessment for the Ridge Park Project, City of Temecula, California</i>	Stropes, Tracy A. and Brian F. Smith (Brian F. Smith and Associates, Inc.)	2013	Outside
RI-09155	<i>Environmental Sensitive Area Action Plan: For the Cajalco/Alexander Street Traffic Signal Project, City of Perris, Riverside County, California, 08-RIV-Cajalco Road, Federal Project No. HSIPL-5956 (203)</i>	Mark C. Robinson (ICF International)	2014	Within
RI-09257	<i>Cultural Resources Assessment of the New Path Networks, LLC DAS Project in the Cities of Murrieta and Temecula, Riverside County, California (BCR Consulting Project No. SYN0901)</i>	Brunzell, David (BCR Consulting)	2011	Outside
RI-09272	<i>Cultural Resources Assessment Temecula Creek Inn Project City of Temecula, Riverside County, California</i>	Brunzell, David (BCR Consulting)	2014	Outside
RI-09293	<i>Historical Resources Evaluation Old U.S. Route 395/Rainbow Canyon Road Segment City of Temecula, Riverside County, California</i>	Brunzell, David (BCR Consulting)	2013	Outside
RI-09346	<i>A Phase IV Cultural Resources Monitoring Report of United Surgery Center PA13-0166 APN 959-070-031 Grading Permit No. LD13-085GR 1.01 Acres of Land Located at 31469 Rancho Pueblo Road, Temecula Riverside County, California USGS Murrieta, California Quadrangle, 7.5' Series Section 17, Township 8 South, Range 2 West, SBM</i>	Keller, Jean (Jean A. Keller, Cultural Resources Consultant)	2014	Outside
RI-09350	<i>Cultural Resources Records Search and Site Visit for Temecula Creek Inn, ATC Site No. 274611, Unsectioned Portion of Township 7S, Range 2W, 44501 Rainbow Canyon Road, Temecula, Riverside County, California</i>	Harvey, Victoria (Cogstone Resource Management)	2014	Outside
RI-09380	<i>Historical/Archaeological Monitoring Program Rancho Community Reformed Church Sports Field Project Site</i>	Ballester, David (CRM Tech)	2015	Outside
RI-09554	<i>Bella Linda Residential Project, Temecula, Riverside County, California</i>	Bray, Madeleine, Chris Lockwood, and Robert Ramirez (ESA)	2012	Outside
RI-09601	<i>Archaeological Survey Report for the Temecula Park and Ride Facility Project, City of Temecula, Riverside County, California</i>	Vasik, Molly (Cogstone)	2015	Outside
RI-09623	<i>Cultural Resources Assessment for the Temecula Gateway Project, Riverside County, California</i>	Keeler, Dustin (Cogstone)	2015	Outside

Report Number	Report Title	Author (Affiliation)	Year	Relationship to the Project Area
RI-09986	<i>Cultural Resources Assessment Mexico Café Development Plan Temecula, Riverside County, California</i>	David Brunzell (BCR Consulting LLC)	2016	Within
RI-10048	<i>Letter Report: Nextel Communications Proposed Wireless Telecommunications Service Facilities in Southern California</i>	Billat, Lorna (Earthtouch LLC)	2002	Outside
RI-10088	<i>Archaeological Assessment: Proposed Collocation of Antennas on an Existing 73-Foot Stealth Telecommunications Equipment Compound.</i>	Beazley, Matthew and Matthew Fields (Environmental Corporation of America)	2014	Outside
RI-10106	<i>Cultural Resources Assessment Pechanga Parkway Widening Project Temecula, Riverside County, California</i>	David Brunzell (BCR Consulting LLC)	2017	Within
RI-10114	<i>Altair Specific Plan EIR Project Temecula Riverside County California</i>	Candace Ehringer, Michael Vader, and Chris Lockwood (ESA)	2015	Within
RI-10220	<i>Letter Report: Cultural Resources Record Search and Archaeological Survey Results for the proposed Royal Street Communications, California, LLC, Site LA3453A (Rancho Baptist Church) located at 29775 Santiago Road, Temecula, Riverside County, California 92592-3055</i>	Bonner, Diane F. and Robert J. Wlodarski (Historical Environmental Archaeological Research Team (H.E.A.R.T.))	2009	Outside
RI-10483	<i>Cultural Resources Assessment Ynez Road Improvements Project Temecula, Riverside County, California</i>	Brunzell, David (BCR Consulting LLC)	2018	Outside
RI-10722	<i>Cultural Resources Records Search Results for Verizon Wireless Candidate "Temecula Creek" 44618 Pechanga Parkway, Temecula, CA 92592</i>	Wayne H. Bonner and Arabesque Said (Michael Brandman Associates)	2009	Within
RI-10724	<i>Archaeological Sensitivity Assessment Temecula Creek 44618 Pechanga Parkway, Temecula, Riverside County, CA EBI Project #61097011</i>	Aniela Travers (EBI Consulting)	2010	Within
RI-10893	<i>Cultural Resources Assessment Temecula Park and Ride Project</i>	Brunzell, David (BCR Consulting LLC)	2019	Outside

Previously Recorded Cultural Resources

The results of the cultural resources records search at the EIC identified 30 previously recorded cultural resources within a 0.8-km (0.5-mile) radius of the project area, of which nine intersect the project area (Table 2). These consist of an archaeological district (P-33-011443 [Murrieta Canyon Archaeological Area]) and three pre-contact sites (RIV-50, RIV-270, and RIV-365) that are elements of that district, two multicomponent sites with both pre-contact and historic-era resources (RIV-3410H and RIV-4707H), an additional pre-contact site (P-33-011222), a historic-era bridge (P-33-013135), and a pre-contact isolated find (P-33-025246). Three of these resources are slightly outside of the project area but are either elements of the archaeological district P-33-011443 (RIV-50 and RIV-270) or within the boundaries of the district but not considered an element of the district (P-33-025246). Of the 21 previously recorded cultural resources that do not intersect the project area but were within 0.8 km (0.5 mile) of the project area consisted of 18 pre-contact cultural resources and three historic-era cultural resources. Table 3 below includes the list of previously recorded cultural resources identified within the vicinity of the project; each of the resources recorded within the project area are also briefly described below.

Table 2. Previously Recorded Resources within 0.5 Mile of the Project Area

Primary Number	Trinomial Number	Resource Period	Resource Type	Resource Description	Year (Author, Affiliation)	Relationship to Project Area
P-33-000050	CA-RIV-50	Pre-contact	Site, element of district	22 bedrock milling features, lithic scatter, fire-affected rock (FAR), and midden	1952 (Pilling, UCR ARU); 1965a (J&K Chartkoff, L Kona, UCR ARU); 1970 (Dorothy Luhrs, UCR ARU); 1981 (M. Stein, n/a); 1982 (L.L. Bowles, UCR ARU); 2002 (Cheryl Bowden, Renna EDAW, Inc.)	Within
P-33-000270	CA-RIV-270	Pre-contact	Site, element of district	20 bedrock milling features, midden, ground stone artifacts, ceramic, and lithic scatter	1966 (T. Blackburn, State of California Division of Beaches & Parks); 1982 (L.L. Bowles, UCR ARU)	Within
P-33-000365	CA-RIV-365	Pre-contact	Site, element of district	10 bedrock mortars, ground stone artifacts, FAR, lithic scatter and debitage	1965 (D.S. Miller, J.L. Chartkoff, UCR ARU); 1965b (Joe and Kerry Chartkoff, Leuirc Kona, UCLA); 1972 (T.F. King, Department of Anthropology, UCR); 1988 (Daniel F. McCarthy, ARU UCR)	Within
P-33-001071	CA-RIV-001071	Pre-contact	Other	AP01: Unknown (no characteristics listed on the site record)	1976 (Eastvold, n/a); 1987 (R.E. Parr, Archaeological Research Unit, UC Riverside); 1989 (C.E. Drover, D.M. Smith, n/a); 2006 (B. Sheets, K. McLean, A. Ruelas, Applied EarthWorks, Inc.)	Outside
P-33-003410	CA-RIV-3410/H	Multicomponent		Burials, grave goods/ceremonial artifacts, ground stone, lithic scatter with historic foundations and structures, and fencing	1988 (C.E. Drover—Andrew Jackson); 2001 (Michael Dice, L&L Environmental, Inc.); 2003 (Unknown)	Within
P-33-003411	CA-RIV-003411	Historic	—	—	1988 (C.E. Drover)	Outside
P-33-004707	CA-RIV-4707/H	Multicomponent	Site	Lithic scatter, midden, formal tools, ground stone, bone awl, FAR and historic refuse scatter (glass, ceramic, bone, nails, and other debris)	1992 (C. J. Petersen, Archaeological Research Unit, UC Riverside); 1996 (Del James, S. Briggs, Joyce Clevenger, Ogden Environmental and Energy Services Co.); 1997 (Philip de Barros, Professional Archaeological Services)	Within

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Primary Number	Trinomial Number	Resource Period	Resource Type	Resource Description	Year (Author, Affiliation)	Relationship to Project Area
P-33-004949	CA-RIV-004949	Historic	Structure	HP08: industrial building	1983 (Judy Stewart, Riverside County Historical Commission); 1992 (J. Russell, Jones & Stokes Associates, Inc.)	Outside
P-33-009753	CA-RIV-006499	Pre-contact	Site	Lithic scatter	2000 (Joan C. Brown, RMW Paleo Associates, Incorporated); 2003 (Joan C. Brown, RMW Paleo Associates, Incorporated); 2015 (Daniel Ballester, Nina Gallardo, and Michael Hogan, CRM TECH)	Outside
P-33-011005	CA-RIV-006645	Pre-contact	Site	Habitation debris and hearth(s)	2001 (Harry Quinn and Mariam Dahdul, CRM TECH)	Outside
P-33-011222	-	Pre-contact	Site	Two concentric-circle petroglyphs	2001 (Jeanette A. McKenna, McKenna et al.)	Within
P-33-011443	-	Pre-contact	Site, District	Cremations/burials, lithic scatter, pottery, and middens	1972 (Thomas F. King, UCR ARU)	Within
P-33-012517	-	Pre-contact	Site	Lithic scatter with bedrock milling feature(s)	2002 (C. Bowden-Renna, S.Jenkins, L. Dreibelbis, EDAW, Inc.)	Outside
P-33-012520	-	Pre-contact	Site	Bedrock milling feature(s)	2002 (C. Bowden-Renna, S. Jenkins, S. Diaz, L. Dreibelbis, EDAW, Inc.)	Outside
P-33-012731	-	Pre-contact	Site	Bedrock milling feature(s)	1990 (J. Brock and W.A. Sawyer, Archaeological Advisory Group)	Outside
P-33-012732	-	Pre-contact	–	Ceramic scatter	1990 (J. Brock and W.A. Sawyer, Archaeological Advisory Group)	Outside
P-33-012742	-	Pre-contact	Site	Bedrock milling feature(s)	1988 (C. E. Drover, n/a); 2011 (David Brunzell, BCR Consulting)	Outside
P-33-013135	-	Historic	Other	Temecula bridge	1986 (Roger G. Hatheway, Scientific Resource Surveys, Inc.); 1999 (S. Ashkar, Jones & Stokes)	Within
P-33-014928	-	Pre-contact	Isolate	AP16: other (isolated find)	2006 (McLean, K. and A. Ruelas, Applied EarthWorks, Inc.); 2011 (David Brunzell, BCR)	Outside

Primary Number	Trinomial Number	Resource Period	Resource Type	Resource Description	Year (Author, Affiliation)	Relationship to Project Area
P-33-014929	CA-RIV-007941	Pre-contact	Site	Bedrock milling feature(s)	2006 (Sheets, B., K. McLean, and A. Ruelas, Applied EarthWorks, Inc.); 2011 (David Brunzell and Christina Peterson, BCR)	Outside
P-33-014930	CA-RIV-007942	Pre-contact	Site	Bedrock milling feature(s)	2006 (Ruelas, A., Applied EarthWorks, Inc.); 2011 (David Brunzell and Christina Peterson, BCR)	Outside
P-33-023889	-	Pre-contact	Isolate	Lithic scatter	2014 (Brad Comeau, Dudek)	Outside
P-33-024088	-	Pre-contact	Other	AP16: other	2012 (M. Bray and C. Ehringer)	Outside
P-33-024089	-	Pre-contact	Isolate	AP16: other (Isolated find)	2012 (M. Bray and C. Ehringer, n/a)	Outside
P-33-024090	-	Pre-contact	Other	AP16: other	2012 (M. Bray and C. Ehringer)	Outside
P-33-024091	-	Pre-contact	Isolate	AP16: other (isolated find)	2012 (M. Bray and C. Ehringer, n/a)	Outside
P-33-024153	-	Historic	Other	Rainbow Canyon Road/Old U.S. Route 395	2011 (David Brunzell, BCR Consulting)	Outside
P-33-025246	-	Pre-contact	Isolate	Ground stone mano	2015 (Michael Vader, ESA)	Within
P-33-029407	-	Pre-contact	Other	AP16: other	2019 (Damien Tietjen, BCR Consulting LLC)	Outside
P-33-029766	-	Pre-contact	Other	AP16: other	2019 (Damien Tietjen, BCR Consulting LLC)	Outside

P-33-000050 (RIV-50)

P-33-000050 (RIV-50) is a large pre-contact village site identified as “Temeku” (Chartkoff et al. 1965a). The site is on a hill adjacent to an unpaved access road, just south of the Santa Margarita River, to the west of Interstate 15, and can be identified by an extensive dark midden (Bowden-Renna 2002; Bowles 1982). Components of the site include ramadas, fire rings, a lithic scatter, stone tools, ceramics, and milling features (Bowden-Renna 2002; Bowles 1982; Chartkoff et al. 1965a; Stein 1981). Previous excavations also identified Spanish-period elements among the pre-contact components (RI-01462) (Bowles 1982). The integrity of the site is unknown, but P-33-000050 is listed in the NRHP as being an element of the Murietta Creek Archaeological District (Bowden-Renna 2002).

P-33-000270 (RIV-270)

P-33-000270 (RIV-270) is a large pre-contact habitation site consisting of milling features, ground stone, ceramics, and lithics (Blackburn 1966; Bowles 1982; Vader 2015). The site is in an oak grove on a hill above the confluence of Murietta Creek and Santa Margarita River, bounded by a series of unpaved roads (Vader 2015). The site is intact with the only disturbances being access roads in and around the site.

Bowels (1982) also noted evidence of pot hunting. P-33-000270 is listed in the NRHP as an element of the Murietta Creek Archaeological District (Vader 2015).

P-33-000365 (RIV-365)

P-33-000365 (RIV-365) is a large pre-contact site near the conjunction of Murietta and Temecula Creeks (Chartkoff et al. 1965b; King 1972; McCarthy 1988). The site consists of milling features, ground stone, and a lithic scatter. King (1972) also noted evidence of cremations and hearths eroding out of a stream bed, but these components were not observed during subsequent surveys or excavations. The site has a deep midden, as observed in road cuts within the site (RI-02384) (McCarthy 1988). Other disturbances include grading along the southwest corner of the site and pothunting along the creek (King 1972; McCarthy 1988). P-33-000365 is listed in the NRHP as an element of the Murietta Creek Archaeological District (King 1972).

P-33-003410 (RIV-3410/H)

P-33-003410 (RIV-3410/H) is a multicomponent site consisting of both historic and pre-contact elements. The site is located between State Route 79 and Temecula Creek, southeast of the State Route 79 and Jedediah Smith Road intersection (Dice et al. 2001). The pre-contact component consists of an extensive assemblage of ground stone, stone bowls, stone balls, cooking stones, pottery anvils, pendants, debitage, projectile points, stone pipes, modified flake tools, and burials (Dice et al. 2001). The historic component consists of ranch buildings that were part of Vail Ranch and household refuse (Dice et al. 2001). P-33-003410 has not been evaluated for the NRHP, but according to Dice et al. (2001), the site has likely been destroyed by construction activities. Prior to construction activities at the site, the site was highly disturbed by agricultural activities.

P-33-004707 (RIV-4707/H)

P-33-004707 (RIV-4707/H) is a multicomponent site consisting of both historic and pre-contact components located at the southeast corner of State Route 79 and Pala Road, above Temecula Creek. The pre-contact component consists of ground stone, a sparse lithic scatter, a hearth, pottery sherds, projectile points, and a bone awl (Clevenger and James 1996; de Barros and Drover 1997). The historic component consists of a purple glass fragment, domestic refuse, and nails. P-33-004707 has not been evaluated for its NRHP eligibility.

P-33-011222

P-33-011222 is a pre-contact site located along Murietta Creek, just north of Santa Margarita River. The site consists of possible rock art. The rock art is two circles carved into a natural granitic outcrop (McKenna et al. 2001). P-33-011222 has not been evaluated for listing in the NRHP.

P-33-011443

P-33-011443 is the primary designation for the Murietta Creek Archaeological District. The main components of the district include RIV-50, RIV-270, RIV-365, and P-33-012520. RIV-50, RIV-270, and RIV-365 are large pre-contact habitation areas, and P-33-012520 is a pre-contact milling site (Brunzell 2011). The district is within an oak woodland concentrated around Temecula and Murietta Creeks. This area covers sites RIV-50, RIV-270, RIV-365, and P-33-012520 and has an arbitrary square boundary covering 180 acres. Tom King nominated the sites to the NRHP as a single archaeological district in 1972, and the district was listed (NRHP listing #73000424) on April 24, 1973; the district has both pre-contact and historic period components (ICF 2023:2-43).

P-33-013135

P-33-013135 was recorded in 1999 as a historic-age bridge on Pala Road that spanned Temecula Creek. It was described as a three-span, earth-filled reinforced concrete bridge with reinforced concrete cantilever bracket and deck on both sides of the span (Ashkar 1999). The bridge had previously been determined ineligible by Caltrans as a Category 5 bridge. It was removed and replaced by a new structure in 1999–2000 (Ashkar 1999; Google Earth 1996, 2002).

P-33-025246

P-33-025246 is an isolated find of a unifacial ground stone mano. It was found along Murieta Creek, just north of Santa Margarita River (Vader 2015).

NATIVE AMERICAN COORDINATION

Sacred Lands File Search

On April 27, 2023, SWCA received the results of the SLF search from the NAHC. These results indicated that the project area is positive for sacred Native American cultural resources. The NAHC recommended that the Pechanga Band of Indians, as well as other tribes, be contacted; the NAHC provided a complete list of 19 tribal representatives who may have concerns or further knowledge of resources and sites within the project vicinity. SWCA forwarded the NAHC results to the applicant (the City). The confidential NAHC SLF search results letter and contact list is included in Exhibit B.

Coordination letters were sent to all tribes included in the NAHC contact list on December 21, 2023, in order to seek any knowledge that the tribes, including the Pechanga Band, wished to share about the project area, and give the Pechanga Band and others the opportunity to provide the project proponents with their recommendations and advice for implementation of the project and for integrating Traditional Ecological Knowledge (TEK) into the project design.

The project area is within the NRHP-listed Luiseño Ancestral Origin Landscape and the Murrieta Creek Archaeological Area/District (P-33-011443), which overlap. Both resources are of great significance to the Luiseño, in general, but especially to the Pechanga Band, who reside on the Pechanga Reservation. The Luiseño Traditional Origin Landscape is important in the traditions of the Luiseño as the place of the creation of the first people (*Káamalam*), the death (the first ever) and cremation of the hero *Wuyoot*, and the transformation of the *Káamalam* into the rock outcrops present in the surrounding hills. To the Luiseño, the landscape is of utmost cultural, historical, and spiritual significance. It covers approximately 8.39 miles and includes the confluence of Murrieta and Temecula Creeks, considered the origin place of the Pechanga Band (ICF 2023:2-42).

Native American Contact Results

Initial coordination letters were mailed on December 21, 2023, to all tribal entities with email addresses using the contact list provided by the NAHC. The purpose of the coordination letters were to request information from local Native American tribes and individuals regarding Native American land use, history, and knowledge of the Temecula area. More specifically, the coordination effort is seeking information on cultural resources that may exist in the vicinity of the CWPP project area. The letter is part of SWCA's scoping for the cultural resource background research effort; government-to-government consultation requirements as stipulated in AB 52 remains the responsibility of the City of Temecula.

The letters were sent via USPS certified mail and were delivered between December 26, 2023, and January 9, 2024; a copy of the coordination letter is included in Exhibit B. All correspondence between SWCA and local tribes is summarized below and in Table 3.

Table 3. Native American Scoping Record for the City of Temecula Community Wildfire Protection Plan Project*

Tribe/Individual Name	Date Contact Was Initiated, Type and Method of Contact	Date of Follow-up/ Method of Contact	Results/Responses
Agua Caliente Band of Cahuilla Indians/Patricia Garcia-Plotkin, Director	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail). Delivered on or prior to 1/02/2024.	1/03/2024: responded to email sent from contact representative.	1/03/2024: Email response received from Clarista Duarte (Cultural Resources Analyst, on behalf of Patricia Garcia-Plotkin – Director). They “defer to the other tribes in the area. This letter shall conclude our consultation efforts.”
Agua Caliente Band of Cahuilla Indians/Reid Milanovich, Chairperson	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail). Delivered on or prior to 1/09/2024)	1/11/2024: Phone call	1/11/2024: Left voicemail at 12:58 p.m. 1/11/2024: Email received at 2:04 p.m. See email sent from Clarista Duarte. No further consultation for the project needed.
Juaneno Band of Mission Indians Acjachemen Nation - Belardes/Joyce Perry, Cultural Resources Director	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail)	1/11/2024: Phone call 1/17/2024: Email	1/11/2024: Left voicemail at 1:01 p.m. 1/17/2024: Email sent at 11:10 a.m. with digital copy of letter attached. No response as of 1/24/2024
Juaneno Band of Mission Indians Acjachemen Nation 84A/Heidi Lucero, Chairperson, THPO	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail)	1/11/2024: Phone call 1/17/2024: Email	1/11/2024: Left voicemail at 1:04 p.m. 1/17/2024: Email sent at 11:17 a.m. with digital copy of letter attached. No response as of 1/24/2024
La Jolla Band of Luiseño Indians/Norma Contreras, Chairperson	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail). <i>No email provided.</i>	1/11/2024: Phone call 1/17/2024: Phone call	1/11/2024: Left voicemail at 1:06 p.m. 1/17/2024: Left voicemail at 3:50 p.m. No response as of 1/24/2024
Pala Band of Mission Indians/Alexis Wallick, Assistant THPO	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail). Delivered on 12/28/2023.	1/11/2024: Phone call 1/17/2024: Email	1/11/2024: Left voicemail at 1:09 p.m. 1/17/2024: Email sent at 11:23 a.m. with digital copy of letter attached. No response as of 1/24/2024
Pala Band of Mission Indians/Shasta Gaughen, Tribal Historic Preservation Officer	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail). Delivered on 12/28/2023.	1/11/2024: Phone call 1/17/2024: Email	1/11/2024: Left voicemail at 1:11 p.m. 1/17/2024: Email sent at 11:37 a.m. with digital copy of letter attached. No response as of 1/24/2024

Cultural Resources Critical Issues Analysis for the City of Temecula – Temecula Creek Community Wildfire Protection Plan

Tribe/Individual Name	Date Contact Was Initiated, Type and Method of Contact	Date of Follow-up/ Method of Contact	Results/Responses
Pauma Band of Luiseno Indians/Temet Aguilar, Chairperson	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail). Delivered on 12/26/2023.	1/11/2024: Phone call 1/17/2024: Email	1/11/2024: Spoke to the operator (Annabelle Ramirez) at 1:13 p.m. and left a voicemail for Temet Aguilar. Annabelle Ramirez said the committee will be meeting this week and this project may be on the meeting agenda if there is time to review the project prior to the meeting. 1/17/2024: Email sent at 1:37 p.m. with digital copy of letter attached. No response as of 1/24/2024
Pechanga Band of Indians/Paul Macarro, Cultural Resources Coordinator	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail). Delivered on 12/26/2023.	1/10/2024: Phone call and email. 1/23/2024: Phone call	1/10/2024: Left voicemail at 1:08 p.m. Paul Macarro returned call at 1:20 p.m. and said he did not receive the letter sent via USPS (may have been received by the tribe, but not by him). He requested that we send him an email today with digital version of letter. Email with digital copy sent to Paul Macarro on 1/10/2024. 1/23/2024: Left voicemail at 3:17 p.m. 1/27/2024: Received response letter to SWCA scoping letter (see Exhibit B).
Pechanga Band of Indians/Mark Macarro, Chairperson	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail). Delivered on 12/26/2023.	1/11/2024: Phone call 1/25/2024: Phone call	1/11/2024: Left voicemail at 1:25 p.m. 1/25/2024: Left voicemail at 1:45 p.m. No response as of 1/25/2024
Quechan Tribe of the Fort Yuma Reservation/Manfred Scott, Acting Chairman Kw'ts'an Cultural Committee	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail)	1/11/2024: Phone call	1/11/2024: Spoke to Manfred Scott at 1:25 p.m. He indicated the tribe's decision to defer to other tribes in the area, concluding their involvement. Was also informed that Jill McCormick no longer works for the tribe.
Quechan Tribe of the Fort Yuma Reservation/Jill McCormick, Historic Preservation Officer	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail)	See above	See above
Rincon Band of Luiseño Indians/Bo Mazzetti, Chairperson	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail)	1/11/2024: Phone call	1/11/2024: Left voicemail at 1:40 p.m.

Tribe/Individual Name	Date Contact Was Initiated, Type and Method of Contact	Date of Follow-up/ Method of Contact	Results/Responses
Rincon Band of Luiseño Indians/Cheryl Madrigal, Tribal Historic Preservation Officer	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail). Delivered on or prior to 1/02/2024.	1/11/2024: Phone call. 1/12/2024: Email reply from SWCA to Rincon Band at 9:18 a.m.	1/11/2024: Left voicemail at 1:45 p.m. 1/12/2024: Received email with letter at 8:58 a.m.; letter included recommendation to work “closely with the Pechanga Band of Luiseño Indians as they may have pertinent information to provide,” as well as to “please forward a final copy of the cultural resources study upon completion to the Rincon Band.” The letter also stated that “the tribe has no further comments.”
San Luis Rey Band of Mission Indians	See below (Carmen Mojado)		
San Luis Rey Band of Mission Indians/San Luis Rey, Tribal Council (Carmen Mojado)	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail). Delivered on or prior to 1/02/2024 (no signature/date on delivery receipt)	1/11/2024: Phone call	1/11/2024: Spoke with Carmen Mojado at 1:48 p.m., who informed SWCA to call her daughter Cami Mojado at (760) 917-1736 regarding the tribe's interest in the project. 1/11/2024: Called Cami Mojado at 2:12 p.m.: Spoke to Cami Mojado and the tribe prefers to defer to Pechanga. No further involvement with the project.
Santa Rosa Band of Cahuilla Indians/Lovina Redner, Tribal Chair	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail). Delivered on 12/23/2023.	1/11/2024: Phone call 1/12/2024: Email to Lovina Redner	1/11/2024: Called at 1:55 p.m.: Administrative assistant suggested to follow up via email rather than a phone call. 1/12/2024: Email sent to Lovina Redner at 9:19 a.m. with scoping letter attached. No response as of 1/24/2024
Soboba Band of Luiseno Indians/Isaiah Vivanco, Chairperson	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail). Delivered on 12/26/2023.	1/11/2024: Phone call	1/11/2024: Left voicemail at 2:00 p.m.
Soboba Band of Luiseno Indians/Joseph Ontiveros, Cultural Resource Department	12/21/2023 – Informational; Tribal Coordination/Outreach Letter (sent via USPS – Certified Mail). Delivered on 12/26/2023.	1/11/2024: Phone call	1/11/2024: Spoke with Joseph Ontiveros at 2:07 p.m.: The tribe prefers to defer to Pechanga. No further involvement with the project. *Indicated they wanted us to communicate their preference to Pechanga.

* Date NAHC Contact Initiated: 4/13/2023
Date NAHC Response Received: 4/27/2023

SWCA received a response letter from Paul Macarro, Cultural Coordinator for the Pechanga Band, on January 27, 2024. The letter pointed out that, “overall for any project, there is not a more culturally sensitive-span in our entire Ancestral Territory.” Furthermore, the tribe’s response letter indicates that the tribe reserves its “rights to participate in the formal environmental review process, including government-to-government consultation with the Lead Agency, and requests to be included in all correspondence regarding this Project” (Macarro 2024) (Exhibit B).

A response was received from Clarista Duarte on behalf of Director Patricia Garcia-Plotkin for the Agua Caliente Band of Cahuilla Indians on January 3, 2024, via email; the response indicated the tribe's preference to defer to other tribes in the area, effectively concluding their involvement in the project.

On January 10, 2024, SWCA called Paul Macarro (Cultural Resources Coordinator, Pechanga Band) as a follow-up to the scoping letter as a means of verifying receipt of the letter and to confirm whether Pechanga plans to share TEK for the project. Mr. Macarro indicated he did not personally receive the letter and requested a digital copy to be sent; SWCA sent a digital copy of the scoping letter via email on January 10, 2024. No further comment has been received from Mr. Macarro since the email was sent, and a follow-up call will be made to verify receipt of the email.

On January 11, 2024, SWCA contacted by phone the remaining tribes that had not responded to the initial scoping letter. Voicemails were left for individuals that did not immediately answer the phone calls. The administrative assistant for Lovina Redner (Tribal Chair, Santa Rosa Band of Cahuilla Indians) indicated that email was a better way to coordinate with L. Redner, so an email was sent on January 12, 2024, and included a digital copy of the scoping letter. Manfred Scott (Acting Chairman Kw'ts'an Cultural Committee, Quechan Tribe of the Fort Yuma Reservation) stated that the tribe prefers to defer to other tribes in the area, concluding their involvement in the project. Carmen Mojado (San Luis Rey Band of Mission Indians) indicated that she no longer handles project scoping inquiries for projects and SWCA was directed to contact Cami Mojado, who is now the person of contact. Cami Mojado indicated that the San Luis Rey Band of Mission Indians prefers to defer to Pechanga, ending their involvement in the project. SWCA received phone call responses on January 11, 2024, on behalf of Reid Milanovich (Chairperson, Agua Caliente Band of Cahuilla Indians) and Joseph Ontiveros (Cultural Resources Department, Soboba Band of Luiseño Indians), both of whom indicated their preference to defer to other tribes in the area.

Shuuluk Linton (Tribal Historic Preservation Coordinator) responded via email on behalf of the Rincon Band of Luiseño Indians, and recommended that SWCA work closely with the Pechanga Band over the course of the project. While the Rincon Band recommended SWCA coordinate directly with Pechanga during the project, they did request that a final copy of any cultural resources studies be shared with them upon completion of the project.

As of January 17, 2024, no other responses to the certified letters sent via USPS or voicemails have been received. That being the case, emails including digital copies of the scoping letter were sent to Joyce Perry (Cultural Resources Director, Juaneno Band of Mission Indians Acjachemen Nation – Belardes), Heidi Lucero (Chairperson/Tribal Historic Preservation Officer [THPO], Juaneno Band of Mission Indians Acjachemen Nation 84A), Alexis Wallick (Assistant THPO, Pala Band of Mission Indians), Shasta Gaughen (THPO, Pala Band of Mission Indians), and Temet Aguilar (Chairperson, Pauma Band of Luiseño Indians). A second follow-up call was made to Norma Contreras (Chairperson, La Jolla Band of Luiseño Indians) because no email was provided by the NAHC. SWCA left another voicemail, as Chairperson Contreras was not available to respond to the follow-up phone call.

Consultation with local Native American tribes, in accordance with Senate Bill 18 and AB 52 for this CWPP has not yet been initiated by the City of Temecula. Information previously provided by culturally affiliated tribes in Riverside County have been incorporated into this report.

Desktop Review

A review of the BERD; listings of the NRHP, CRHR, California Historical Landmarks, and Points of Historical Interest; determinations of eligibility for the NRHP; and locally designated historical resources

did not identify any designated or eligible historical resources within or adjacent to the project area (City of Temecula 2005, 2011, 2023; National Park Service 2023a, 2023b; OHP 2023a, 2023b).

Additionally, SWCA reviewed Riverside County Assessor data for parcels within and adjacent to the project area to assess the general age of development to ascertain the potential presence of unidentified built environment historical resources (properties generally need to be over 45 years old). The majority of the surrounding residential, commercial, and institutional properties were constructed between the 1980s and 2000s, with the exception of a portion of the Temecula Creek Inn golf course adjacent to the project area (44051 Rainbow Canyon Road, Assessor Parcel Number [APN] 922220002), which the county assessor identified as constructed in 1969 (Riverside County 2023). This desktop analysis indicates that the potential for unidentified built environment historical resources is relatively low for the areas immediately adjacent to the project area, aside from the golf course.

SWCA reviewed aerial images and historic USGS topographic maps, available via the University of California, Santa Barbara Aerial Imagery Library (2023) and NETROnline Historic Aerials (2023) dating from 1901 to 2020. The settlement of Éxva Teméeku (Temekkungna) is plotted by Johnston (1962) as approximately 3.0 miles west-northwest of the project area (Figure 4). The project area is mostly within the southern portion of Rancho Temecula and the very eastern portion of the project area is within the Apis Grant, which was also known as Rancho Little Temecula. The topographic maps depict the rural setting of the project area during the early twentieth century to the present. A 1901 topographic map depicts the project area along Temecula River within Temecula Valley and southeast of the town of Murrieta, which is now the present-day City of Temecula (Figure 5). The San Bernardino and Temecula Line of the Southern California Railroad, which roughly follows the route of present-day Interstate 15, is shown ending just north of the project area and southeast of Murrieta and the then called “Temecula Indian Reservation”, is plotted directly south of Temecula Valley. At least nine roads are depicted as transecting or intersecting the project area, with most of the routes crossing Temecula Creek.

Topographic maps from 1948 and 1949 show a “Gaging Sta[tion]” at the northwest corner of the project area along Temecula Creek with a cul-de-sac leading from the gauging station within the northern boundary of the project area to the east of the project area (Figure 6). Another road is depicted as ending near the confluence of Margarita River with Temecula Creek within the project area, and the road transects a narrow portion of the project area and is oriented northeast-southwest. Present-day Pechanga Parkway can be seen transecting the central portion of the project area (Figure 7).

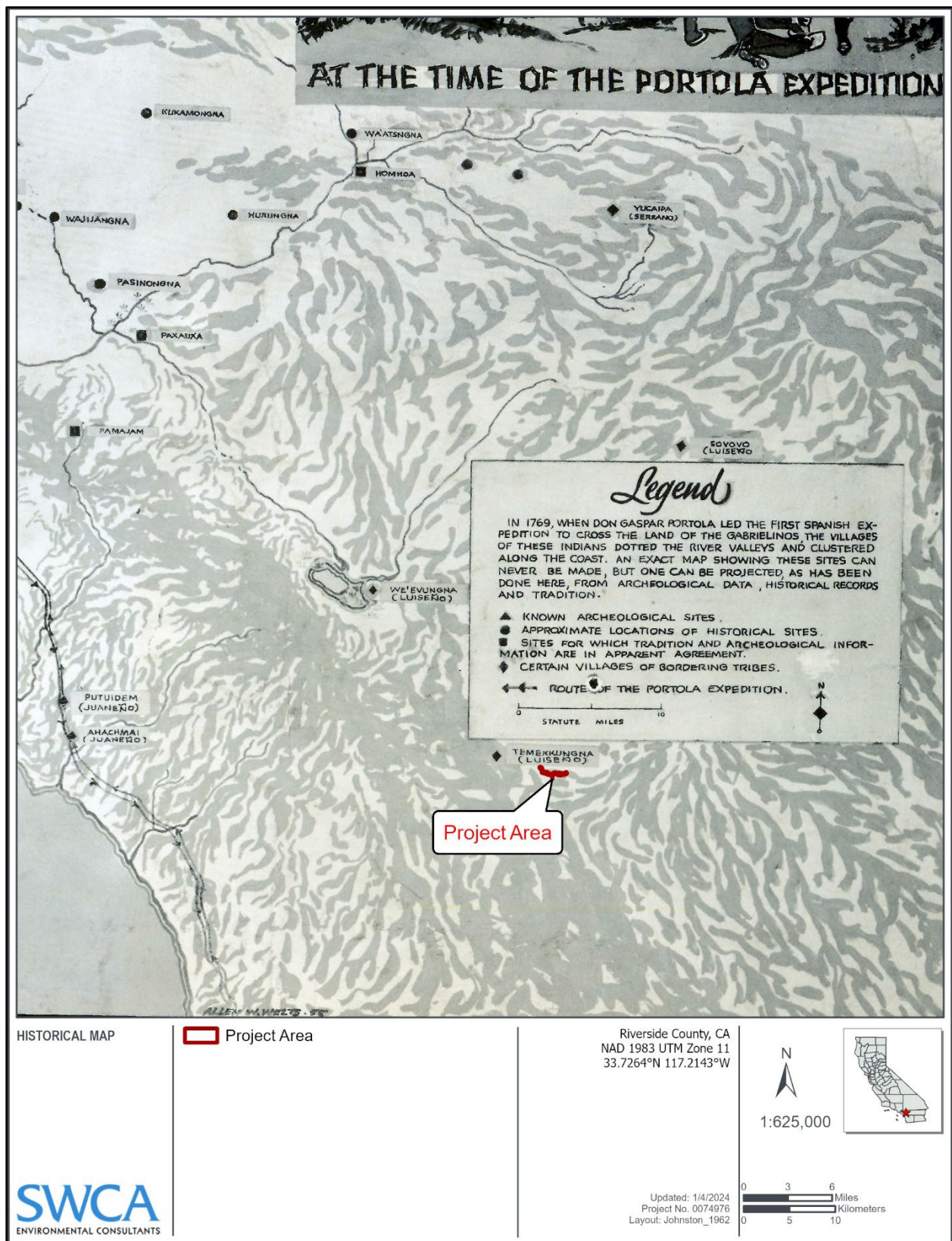


Figure 4. Project area plotted on a map of Native American and historical sites published by the Southwest Museum (1962) and re-printed in Johnston (1962).

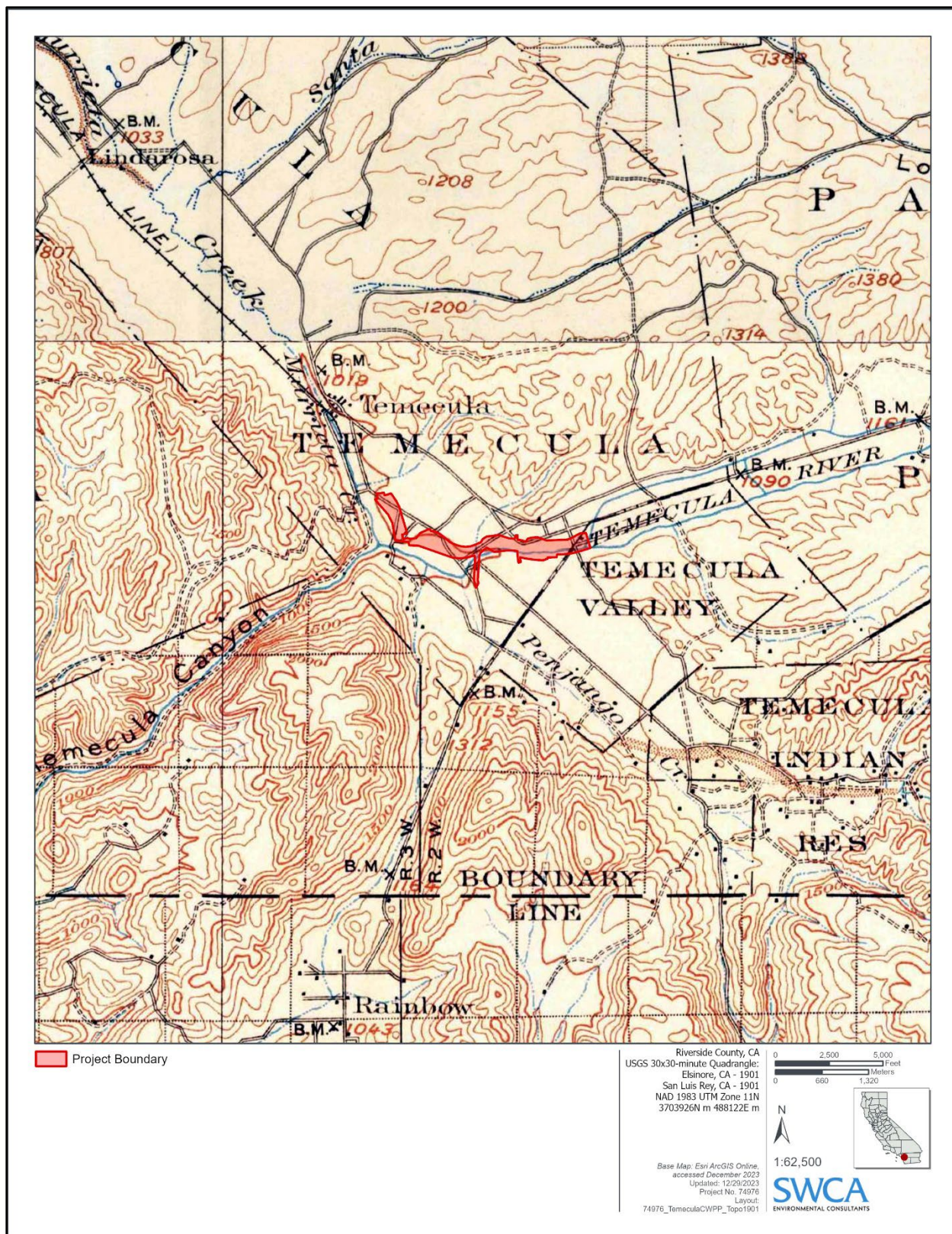


Figure 5. Project site plotted on 1901 USGS San Luis Rey and Lake Elsinore, California, 30-minute topographic quadrangles.

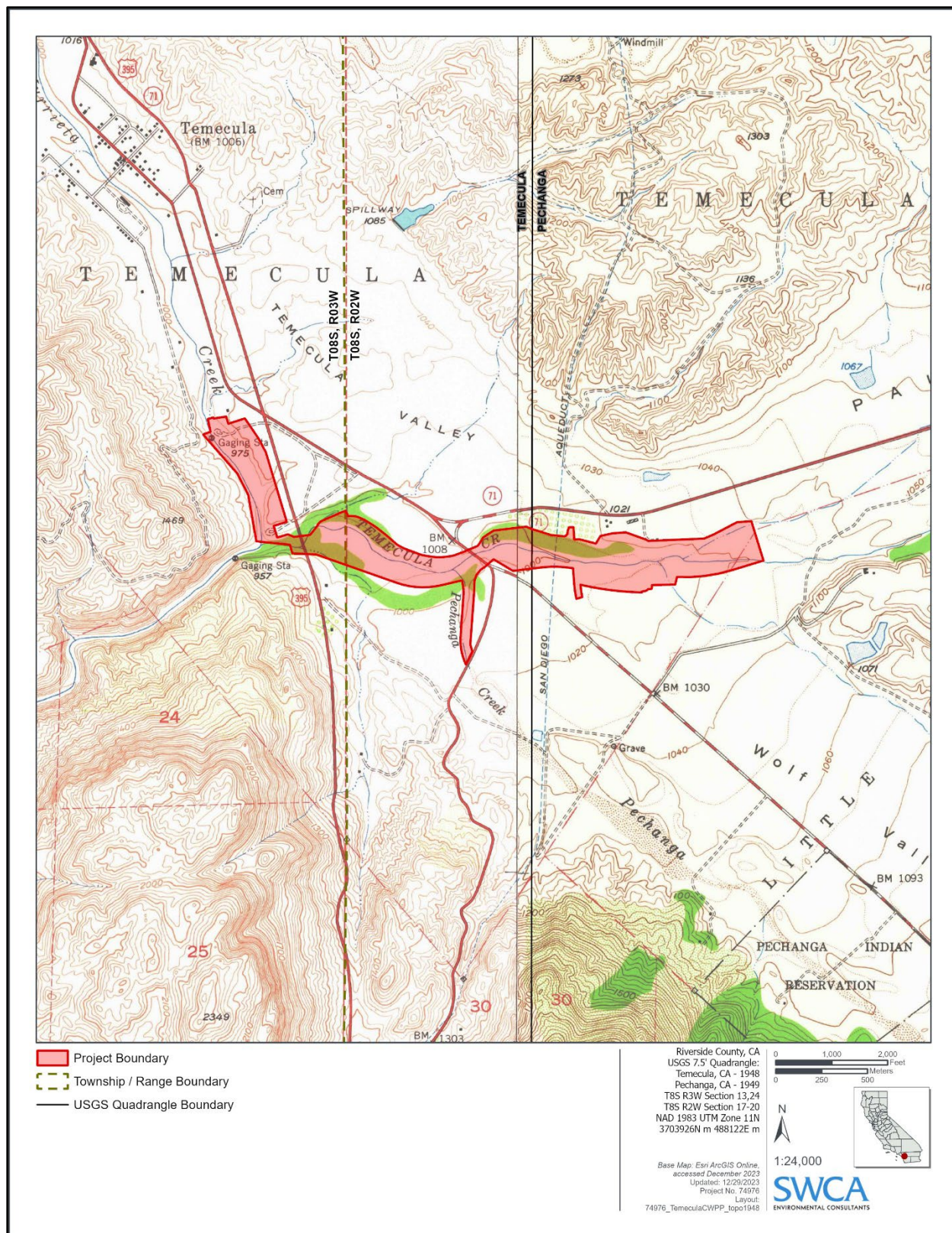


Figure 6. Project site plotted on 1948 USGS Temecula and 1949 USGS Pechanga, California, 7.5-minute topographic quadrangles.

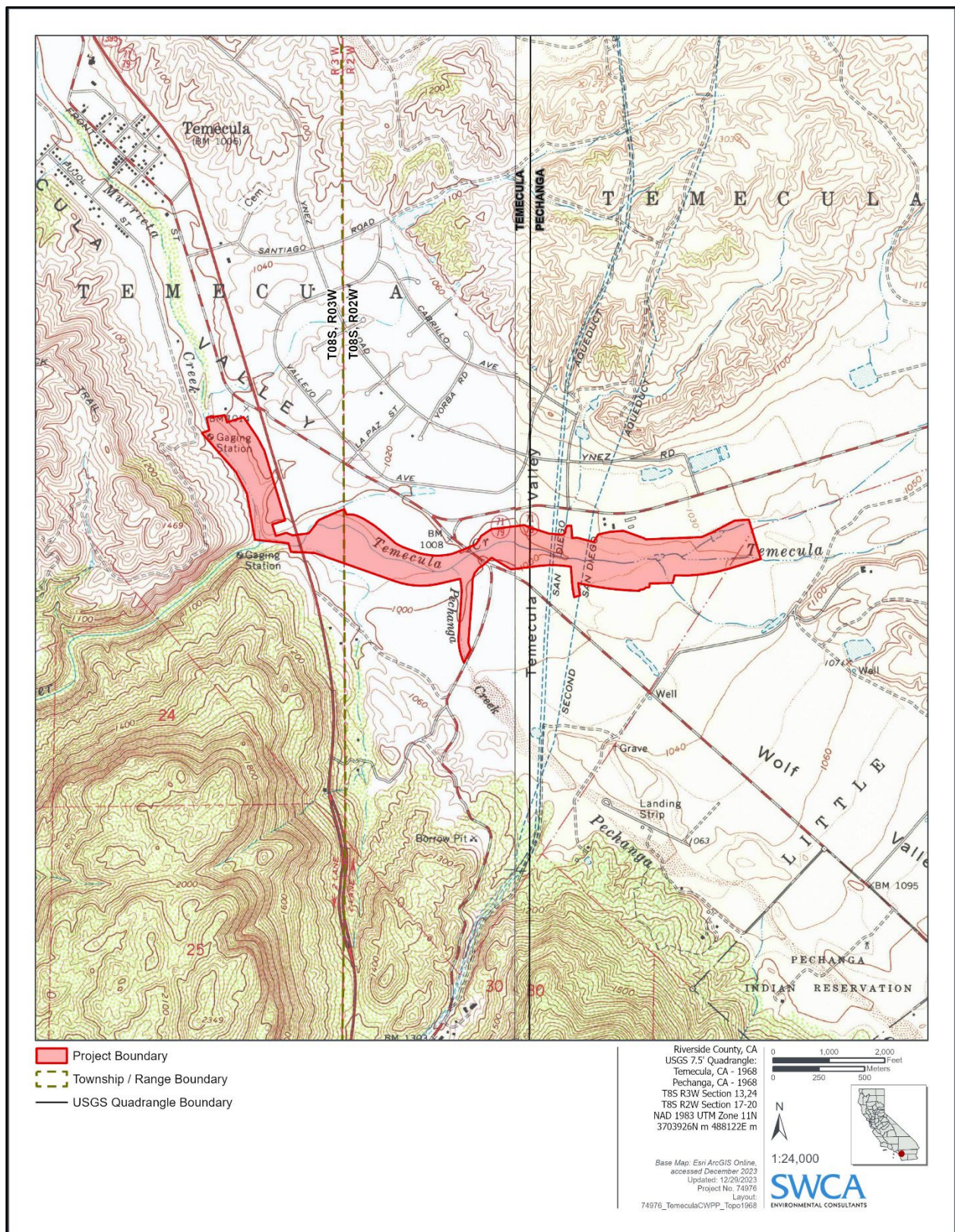


Figure 7. Project site plotted on 1968 USGS Temecula and Pechanga, California, 7.5-minute topographic quadrangles.

Aerial photographs from 1938 and 1947 (Figure 8) depict one area adjacent to the project area as partially developed with several residential structures and smaller outbuildings (no longer extant). These structures and cleared area are within APNs 961450005, 961410030, 961410046, 961410047, 961410048, and 961410049, and two parcels in the northern cleared area labeled as “RW”, which most likely designates the parcels as the right-of-way for State Route 79/Temecula Parkway. The road along the eastern edge of this cleared area leads down to the Temecula Creek bed. Present-day Pechanga Parkway and several unpaved roads can be seen networking the project area.

A 1947 aerial photograph depicts what looks like a residential parcel with a structure directly northwest of the project area (see Figure 8) within present-day APNs 922210057 and 922210057, as well as a portion of the present-day right-of-way (“RW”) for State Route 79. A small strip of agricultural land is north of the creek and more extensively south of the creek. By 1962, additional agricultural fields appear further north of the creek (Figure 9), and by 1976, additional residential roads and residences are north and south of the creek (Figure 9). By 1976, Interstate 15 crossed through the western portion of the project area.

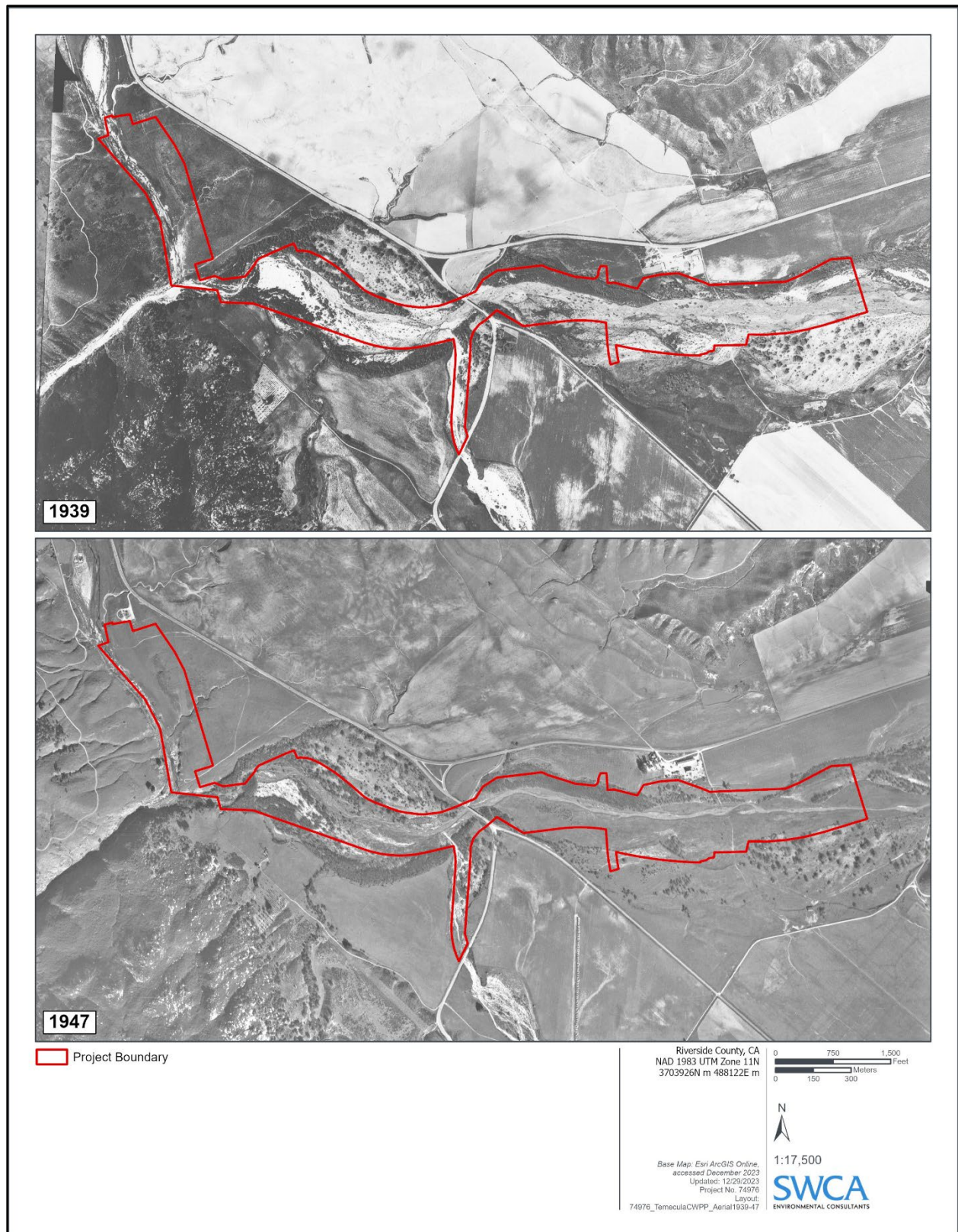


Figure 8. Project site plotted on aerial photographs from 1939 (top) and 1947 (bottom).

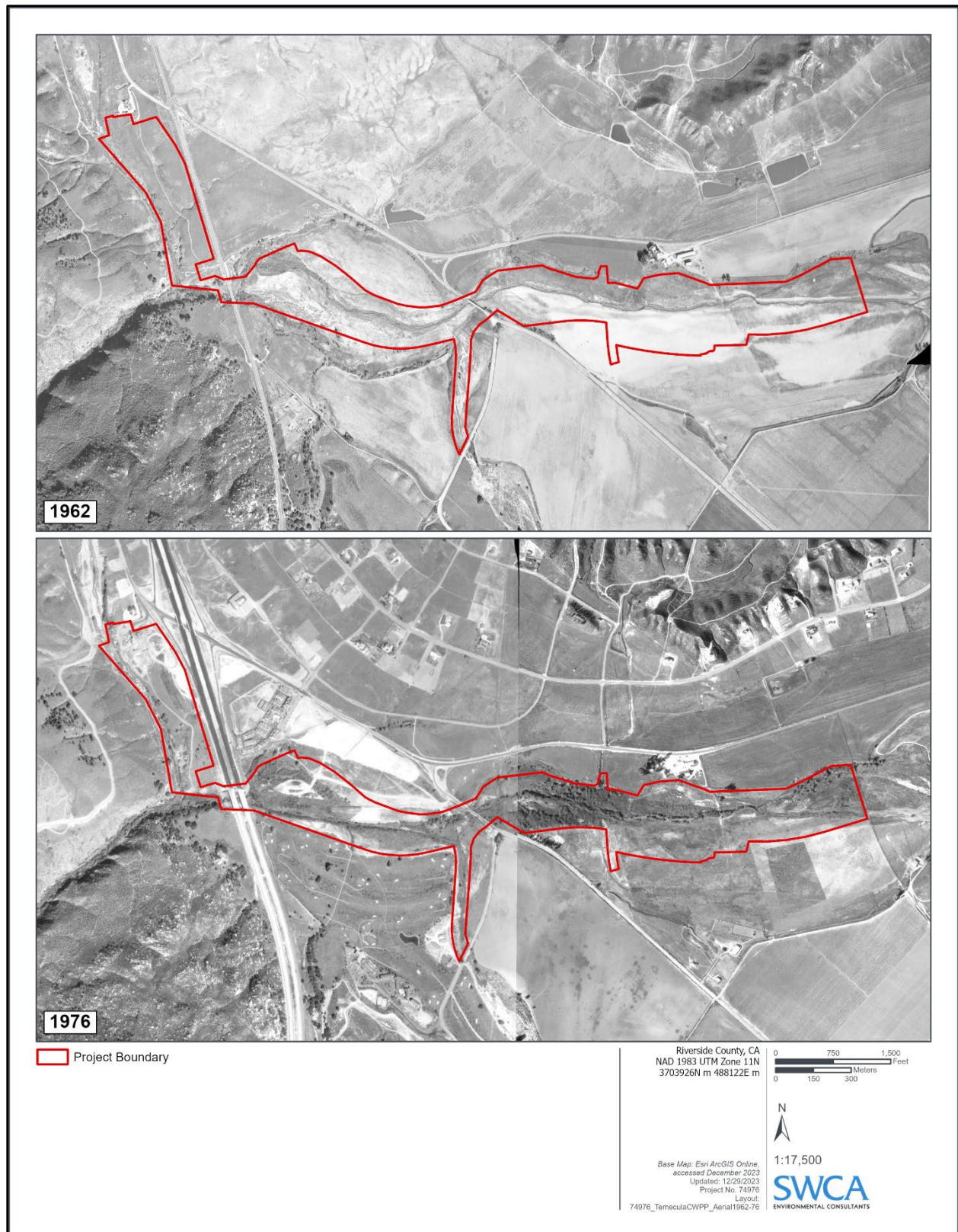


Figure 9. Project site plotted on aerial photographs from 1962 (top) and 1976 (bottom).

Initial Sensitivity Assessment

The results of the cultural resources analysis thus far indicate that the entire project area is within a highly sensitive area for pre-contact archaeological resources and a Native American TCR. Background and archival research identified the project area as being within one of the Luiseño peoples' most sacred spaces and the location of important events and ancestors related to the very beginning of the Luiseño people. Tribal members have previously indicated that the project area is sensitive not only for TCRs, but also for its spiritual significance to current tribal members as continuum with their past. According to ICF (2023:2-43, 2-44), tribal representatives specifically pointed out the confluence of Murrieta and Temecula Creeks and the surrounding canyons, including Rainbow Canyon and Pechanga Creek.

The archaeological records search indicated that the western portion of the project area is within the NRHP-listed Murrieta Creek Archaeological Area. In addition to the archaeological resources that have been recorded, the project area is considered to be highly sensitive for potential archaeological resources, especially along the terraces above the creeks.

Certain environmental features, such as water features, foothills, historic trails, and meadows, can indicate a higher sensitivity for pre-contact archaeological resources since these types of resources would have been useful for Native American peoples. Portions of Pechanga Creek, Temecula Creek, and Murrieta Creek cross the project area and would have provided useful resources to pre-contact peoples. While residential and commercial development occurs in the vicinity of the project, the project area itself has not been extensively developed. As such, it is possible that new surficial and buried archaeological resources associated with Native American land use is present in the project area. Based on these factors, SWCA considers the project area to have a very high sensitivity for the presence of pre-contact-era, Native American-affiliated archaeological resources.

SWCA's current desktop review identified nine previously recorded cultural resources within the project area: six designated as pre-contact resources, one as a historic-age resource, and two with both pre-contact and historic-age components. Four of the resources within the project area identified through the records search are archaeological in nature and appear to be either listed in or eligible for listing in the NRHP, the CRHR, or local listings. Twenty-one previously recorded resources are located outside of the project area but within a 0.5-mile radius of the project. A multicomponent site (RIV-3410H), which consists of both pre-contact and historic-era components, has a historic component that includes ranch buildings that were part of Vail Ranch and has not been evaluated for the NRHP, but according to site records, the site has likely been destroyed by construction activities (Dice et al. 2001).

Archival research also identified at least nine roads that transected or intersected the project area during the early twentieth century, and additional roads and a gauging station at the northwest corner of the project area depicted on topographic maps dating to the late 1940s. Interstate 15, which crosses through the project area, was constructed in the 1970s but is likely exempt from evaluation (Property Type 6) under Attachment 4 of the First Amended Caltrans Section 106 Programmatic Agreement. The likelihood of encountering new historic-era archaeological resources such as trash deposits, privies, structural remains, etc., in the identified areas of historical interest is considered moderate. Outside these areas of historic interest, the project area remained vacant and undeveloped, and as such, the likelihood of encountering historic-era archaeological resources in remaining portions of the project area is considered low. Similarly, the project area has a low sensitivity for encountering built environment resources.

Impacts to sensitive archaeological resources and TCRs (including the above-mentioned resources and any, as of yet, unidentified resources) have not been determined to date because focused surveys within the project were not authorized at this time, responses/input from interested tribes have not yet been fully captured, and a formal project description outlining specific CWPP fuel reduction activities has not yet been identified and approved.

Risk Category: Very high sensitivity for pre-contact archaeological resources and TCRs. Low sensitivity for historic-era archaeological resources in the project area. Low sensitivity for built environment resources and historic-era resources outside the project area.

Given the very high sensitivity for pre-contact archaeological resources and TCRs, it is unlikely that the project would qualify for a CEQA Exemption (Statutory or Categorical Exemptions), and that cultural and tribal resources assessments/technical studies will be required under CEQA, NEPA, and/or Section 106 of the NHPA (should the project receive federal funding). These resource assessments/technical studies would be prepared and included as an addendum to the CalVTP PEIR. In addition, Caltrans encroachment permit(s) may be required if work occurs within Caltrans right-of-way along Interstate 15. The appropriate Caltrans district should be contacted to confirm whether encroachment permit(s) would be required.

Recommendations: The CWPP-recommended fuels treatments are actions that must comply with CEQA. Although portions of the project area were previously surveyed for cultural resources, the most recent surveys were completed more than 10 years ago, and under current OHP guidelines and standards, a focused systematic archaeological survey, performed by qualified archaeologists and Native American tribal representatives, is recommended. The purpose of the archaeological survey is to identify previously unknown cultural resources, assess the current condition of previously recorded cultural resources, and assess recommended fuel reduction strategies and their potential impacts to NRHP-eligible or listed historic properties, cultural resources, and TCRs within the project area. An intensive archaeological survey will help provide the basis for the development of effective protection measures for cultural resources within the treatment area(s).

Much of the project area could be covered in dense vegetation obscuring ground visibility. As such, it may be necessary to perform supplemental surveys and monitoring during fuels reduction activities associated with implementation of the CWPP.

To date, all NAHC-listed tribal contacts responding to SWCA's coordination letter have indicated their preference to defer project participation to the Pechanga Band (Exhibit B). The project also requires an offer of tribal consultation from the City of Temecula under AB 52 (PRC 21080.3.1), as well as formal government-to-government consultation. The Pechanga Band has communicated their interest in participating in the project and have reserved their rights to engage in formal government-to-government consultation (Exhibit B). Tribal participation in any archaeological survey is anticipated, and tribal input and TEK should be incorporated in the development of any protection measures and taken into consideration prior to the removal of native species. Participation of and consultation with the Pechanga Band community is crucial to the effective identification and protection of cultural resources within the CWPP area (City of Temecula 2005). Native American participation is required for all levels of future investigations in the CWPP area, including those areas that have been previously developed, unless additional information can be provided to demonstrate that the property has been graded to a point where no cultural resources would be impacted. Areas that have not been previously developed should be surveyed to determine potential for historical resources to be encountered, and whether additional evaluation is required.

All invasive and nonnative plant-removal methods should be designed to minimize potential impacts to cultural resources, and excavation of root mass is not recommended. Low-impact fuels reduction approaches should be designed with assistance from Pechanga Band members and should minimize ground disturbance to the extent possible. TEK should be integrated into the revegetation components of the fuels reduction efforts. Culturally significant plant species, such as yerba mansa (*Anemopsis californica*, Luiseño word is *Chevnash*), rush (*Juncus* sp., Luiseño word is *Shoila*), deer grass (*Muhlenbergia rigens*; Luiseño word is *Yulalac*), and others should be discussed with Pechanga Band

members and be incorporated into project implementation plans. Should the project qualify for CEQA coverage by tiering from the CalVTP PEIR, or if a new EIR or IS/MND is required, it is recommended that cultural and tribal resources assessments/technical studies be prepared. Nevertheless, tribal consultation pursuant to AB 52 would be required.

A paleontological records search and desktop analysis should also be performed. Impacts to paleontological and cultural resources will be determined once a project description of sufficient detail to quantify impacts is available. Once a detailed project description is available, a paleontological assessment is performed, tribal input has been shared/received, and the surveys have been conducted, impacts can be adequately identified and quantified, and appropriate mitigation can be determined.

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- King, T.F.
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- Macarro, Paul
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McCarthy, Daniel F.

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Riverside County

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Southwest Museum

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Stein, M.

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Vader, Michael

- 2015 Department of Parks and Recreation Archaeological Site Survey Record for Site P-33-025246. ESA, San Diego, California. On file, California Historical Resources Information System, Eastern Information Center, Department of Anthropology, University of California, Riverside.

EXHIBIT A

California Historical Resources Information System Records Search Results

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**CONTENT FROM THIS SECTION HAS BEEN REMOVED FROM
PUBLICLY CIRCULATED DRAFTS**

Archaeological and other heritage resources can be damaged or destroyed through uncontrolled public disclosure of information regarding their location. This document contains sensitive information regarding the nature and location of archaeological sites, which should not be disclosed to the general public or unauthorized persons pursuant to California Government Code 6254(r) and 6254.10.

Information regarding the location, character, or ownership of a cultural resource is exempt from the Freedom of Information Act pursuant to 54 USC 307103 (National Historic Preservation Act) and 16 USC Section 470(h) (Archaeological Resources Protections Act)

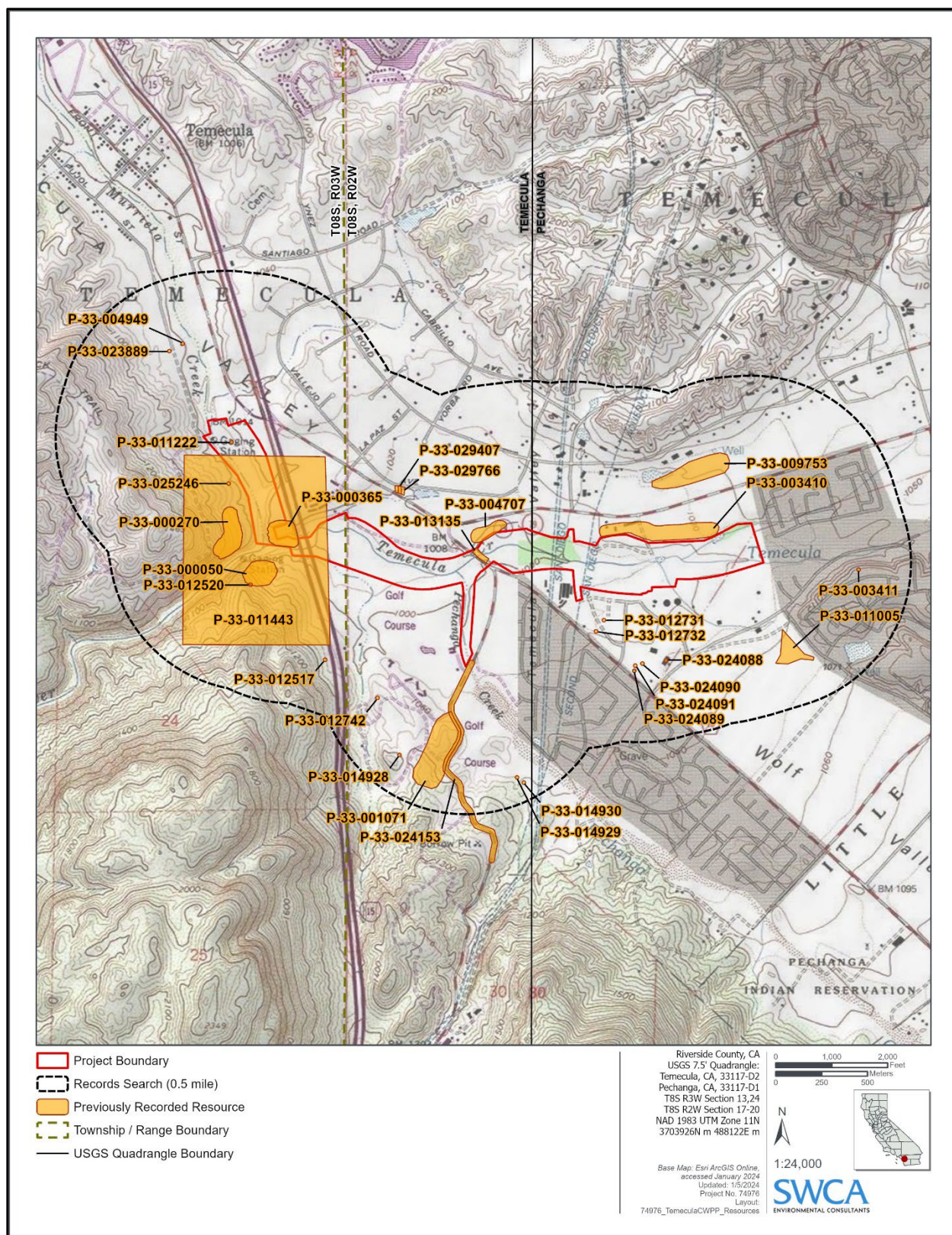


Figure A-1. CHRIS records search results: resources.

EXHIBIT B

Sacred Lands File Search Results and Native American Coordination

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PUBLICLY CIRCULATED DRAFTS



STATE OF CALIFORNIA

Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION

April 27, 2023

Aaron Elzinga
SWCA Environmental Consultants

Via Email to: aelzinga@swca.com

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Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
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Nomlaki*

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Kumeyaay

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[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
**Raymond C.
Hitchcock**
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

Re: City of Temecula Community Wildfire Protection Plan Project, Riverside County

Dear Mr. Elzinga:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information submitted for the above referenced project. The results were positive. Please contact the Pechanga Band of Indians on the attached list for information. Please note that tribes do not always record their sacred sites in the SLF, nor are they required to do so. A SLF search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with a project's geographic area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites, such as the appropriate regional California Historical Research Information System (CHRIS) archaeological information center for the presence of recorded archaeological sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. Please contact all of those listed; if they cannot supply information, they may recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green
Cultural Resources Analyst

Attachment

**Native American Heritage Commission
Native American Contact List
Riverside County
4/27/2023**

Agua Caliente Band of Cahuilla Indians

Patricia Garcia-Plotkin, Director
5401 Dinah Shore Drive Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6907
Fax: (760) 699-6924
ACBCI-THPO@aguacaliente.net

Agua Caliente Band of Cahuilla Indians

Reid Milanovich, Chairperson
5401 Dinah Shore Drive Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6800
Fax: (760) 699-6919
laviles@aguacaliente.net

Juaneno Band of Mission Indians Acjachemen Nation - Belardes

Joyce Perry, Cultural Resource Director
4955 Paseo Segovia Juaneno
Irvine, CA, 92603
Phone: (949) 293 - 8522
kaamalam@gmail.com

Juaneno Band of Mission Indians Acjachemen Nation 84A

Heidi Lucero, Chairperson, THPO
31411-A La Matanza Street Juaneno
San Juan Capistrano, CA, 92675
Phone: (562) 879 - 2884
jbmian.chairwoman@gmail.com

La Jolla Band of Luiseno Indians

Norma Contreras, Chairperson
22000 Highway 76 Luiseno
Pauma Valley, CA, 92061
Phone: (760) 742 - 3771

Pala Band of Mission Indians

Alexis Wallick, Assistant THPO
PMB 50, 35008 Pala Temecula Cupeno
Road Luiseno
Pala, CA, 92059
Phone: (760) 891 - 3537
awallick@palatribe.com

Pala Band of Mission Indians

Shasta Gaughen, Tribal Historic Preservation Officer
PMB 50, 35008 Pala Temecula Cupeno
Road Luiseno
Pala, CA, 92059
Phone: (760) 891 - 3515
Fax: (760) 742-3189
sgaughen@palatribe.com

Pauma Band of Luiseno Indians

Temet Aguilar, Chairperson
P.O. Box 369 Luiseno
Pauma Valley, CA, 92061
Phone: (760) 742 - 1289
Fax: (760) 742-3422
bennaecalac@aol.com

Pechanga Band of Indians

Paul Macarro, Cultural Resources Coordinator
P.O. Box 1477 Luiseno
Temecula, CA, 92593
Phone: (951) 770 - 6306
Fax: (951) 506-9491
pmacarro@pechanga-nsn.gov

Pechanga Band of Indians

Mark Macarro, Chairperson
P.O. Box 1477 Luiseno
Temecula, CA, 92593
Phone: (951) 770 - 6000
Fax: (951) 695-1778
epreston@pechanga-nsn.gov

Quechan Tribe of the Fort Yuma Reservation

Manfred Scott, Acting Chairman
Kw'ts'an Cultural Committee
P.O. Box 1899 Quechan
Yuma, AZ, 85366
Phone: (928) 750 - 2516
scottmanfred@yahoo.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed City of Temecula Community Wildfire Protection Plan Project, Riverside County.

**Native American Heritage Commission
Native American Contact List
Riverside County
4/27/2023**

**Quechan Tribe of the Fort Yuma
Reservation**

Jill McCormick, Historic
Preservation Officer
P.O. Box 1899 Quechan
Yuma, AZ, 85366
Phone: (760) 572 - 2423
historicpreservation@quechantribe.com

**Soboba Band of Luiseno
Indians**

Isaiah Vivanco, Chairperson
P. O. Box 487 Cahuilla
San Jacinto, CA, 92581 Luiseno
Phone: (951) 654 - 5544
Fax: (951) 654-4198
ivivanco@soboba-nsn.gov

Rincon Band of Luiseno Indians

Bo Mazzetti, Chairperson
One Government Center Lane Luiseno
Valley Center, CA, 92082
Phone: (760) 749 - 1051
Fax: (760) 749-5144
bomazzetti@aol.com

**Soboba Band of Luiseno
Indians**

Joseph Ontiveros, Cultural
Resource Department
P.O. BOX 487 Cahuilla
San Jacinto, CA, 92581 Luiseno
Phone: (951) 663 - 5279
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

Rincon Band of Luiseno Indians

Cheryl Madrigal, Tribal Historic
Preservation Officer
One Government Center Lane Luiseno
Valley Center, CA, 92082
Phone: (760) 297 - 2635
crd@rincon-nsn.gov

**San Luis Rey Band of Mission
Indians**

1889 Sunset Drive Luiseno
Vista, CA, 92081
Phone: (760) 724 - 8505
Fax: (760) 724-2172
cjmojado@slrmissionindians.org

**San Luis Rey Band of Mission
Indians**

San Luis Rey, Tribal Council
1889 Sunset Drive Luiseno
Vista, CA, 92081
Phone: (760) 724 - 8505
Fax: (760) 724-2172
cjmojado@slrmissionindians.org

**Santa Rosa Band of Cahuilla
Indians**

Lovina Redner, Tribal Chair
P.O. Box 391820 Cahuilla
Anza, CA, 92539
Phone: (951) 659 - 2700
Fax: (951) 659-2228
lsaul@santarosa-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed City of Temecula Community Wildfire Protection Plan Project, Riverside County.



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320 North Halstead Street, Suite 120
Pasadena, California 91107
Tel 626.240.0587 Fax 626.568.2958
www.swca.com

December 21, 2023

Paul Macarro, Cultural Resources Coordinator
Pechanga Band of Indians
P.O. Box 1477
Temecula, CA, 92593

Subject: Scoping Letter for Cultural Resources for the City of Temecula Wildfire Prevention Plan and Community Wildfire Protection Plan (CWPP), City of Temecula, Riverside County, California

Dear Mr. Macarro,

The City of Temecula has contracted SWCA Environmental Consultants (SWCA) to conduct a cultural resources constraints analysis as part of the development of a strategic, comprehensive Wildfire Prevention Plan and Community Wildfire Protection Plan (CWPP), in the city of Temecula, Riverside County, California (Project). The Project is immediately south of Temecula Parkway/State Route (SR) 79 and intersects with a portion of Interstate 15 (I-15) on the west. It is situated along sections of Temecula Creek, Murrieta Creek, and Pechanga Creek near the terminus of Temecula Parkway at the northwestern end to the Saint Thomas of Canterbury Episcopal Church at the east end. Several conservation easements are included within the Project area, and it is in proximity to other protected areas. Surrounding land use is mostly residential with a mix of commercial properties. The Project area itself remains mostly undeveloped. Specifically, the Project area is depicted on the U.S. Geological Survey's (USGS's) 7.5-Minute Temecula, California Quadrangle at Township 8 South; Range 3 West; Sections 13 and 24 and the Pechanga, California Quadrangle at Township 8 South; Range 2 West; Sections 17-20.

The CWPP focuses on the 177-acre Temecula Creek project site (please refer to attached maps) and its purpose is to reduce the risk of wildfire in an urban/wildlands interface area containing sensitive cultural and biological resources abutting residential and commercial developments within the city. This would occur through fuels reduction focused on removing non-native species with some removal of native vegetation where there is an especially high risk of wildfire. No development or earth-moving is proposed and the CWPP is being designed to maximize avoidance of sensitive resources to the greatest extent practicable. The CWPP is only in a preliminary phase of development, and there is currently no schedule for project implementation.

The purpose of this letter is to request information from local Native American tribes and individuals regarding Native American land use, history, and knowledge of the Temecula area. More specifically, we are seeking information on cultural resources that may exist in the vicinity of the CWPP Project area. We are interested in any information you may choose to share with us. It is important to note that this letter is part of SWCA's scoping for the cultural resource background research effort; government-to-government consultation requirements as stipulated in Assembly Bill (AB) 52 remains the responsibility of the City of Temecula.

SWCA completed a record search of the California Historical Resources Information System (CHRIS) at the Eastern Information Center located on the campus of the University of California at Riverside and coordinated with the Native American Heritage Commission (NAHC), including a search of the Sacred Lands File (SLF), among other efforts. The results of the records search identified nine previously recorded cultural resources within the Project Area, including six designated as pre-contact resources, one historic-age resource, and two resources with both pre-contact and historic-age components. Twenty-five (25) additional previously recorded resources were identified within a 0.5-mile radius. The SLF search was returned by the NAHC on April 27, 2023, with positive results for the presence of Native American sacred sites in the vicinity of the Project, and a recommendation to contact the Pechanga Band of Indians for more information.

Please contact me and we can discuss an appropriate means of incorporating any information you are willing to provide into the cultural resources constraints analysis and any future cultural resources assessment or technical study that may be required. All non-confidential information will be included in the cultural resource analysis and provided to the City of Temecula. Any information considered confidential will be redacted from versions of reports made available to the public.

You can contact me directly via telephone at (661) 341-0001 or via email at aelzinga@swca.com. I would greatly appreciate a response within 30 days of receipt of this letter. Thank you for your time and assistance in this matter.

Sincerely,



Aaron Elzinga, M.A., RPA
Cultural Resources Team Lead

SWCA Environmental Consultants

Phone: (626) 240-0587 x6606 | Cell: (661) 341-0001

aelzinga@swca.com

Attachment A: Project Vicinity Map, Project Location Map, and Project Overview Map

ATTACHMENT A

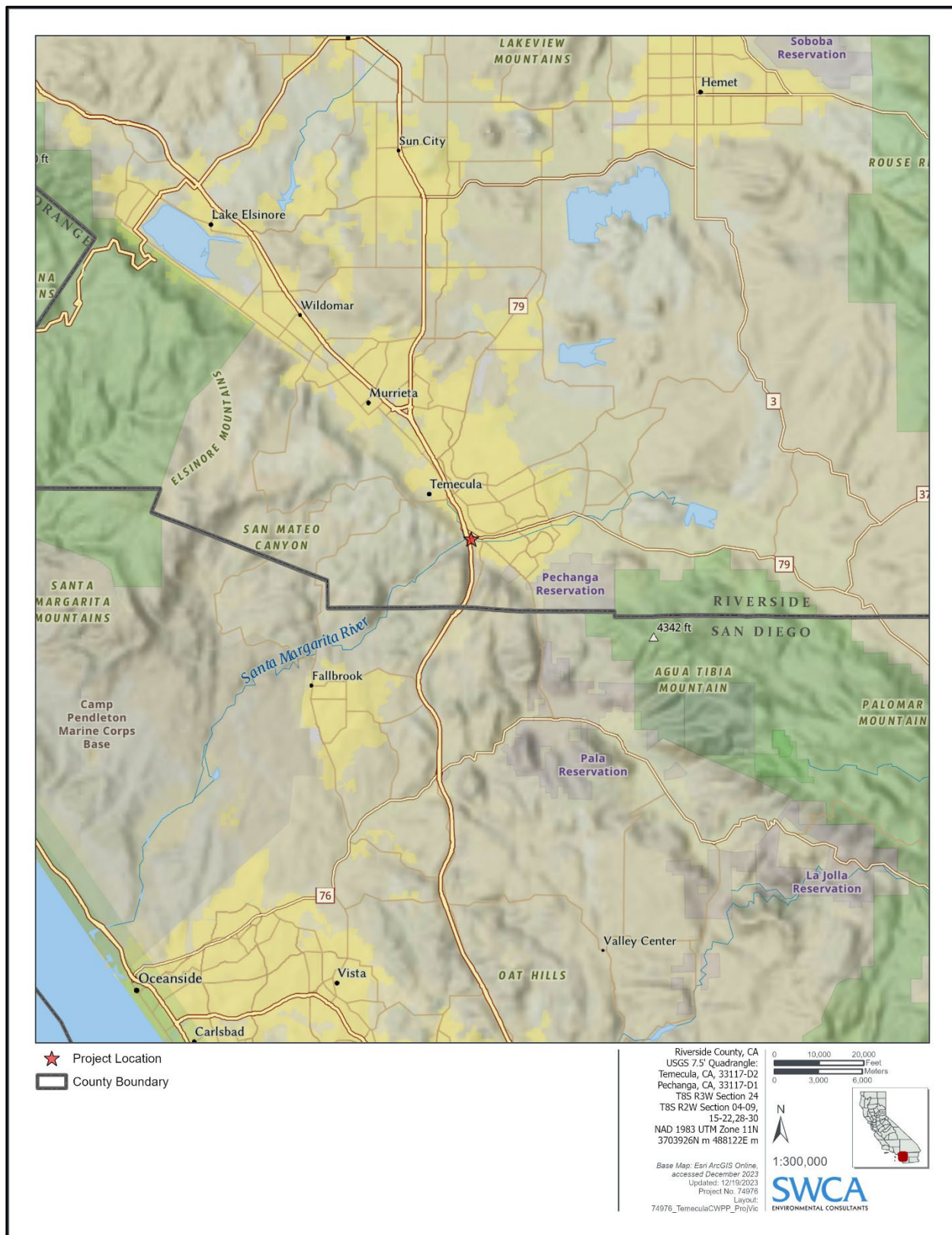


Figure 1. Project Vicinity

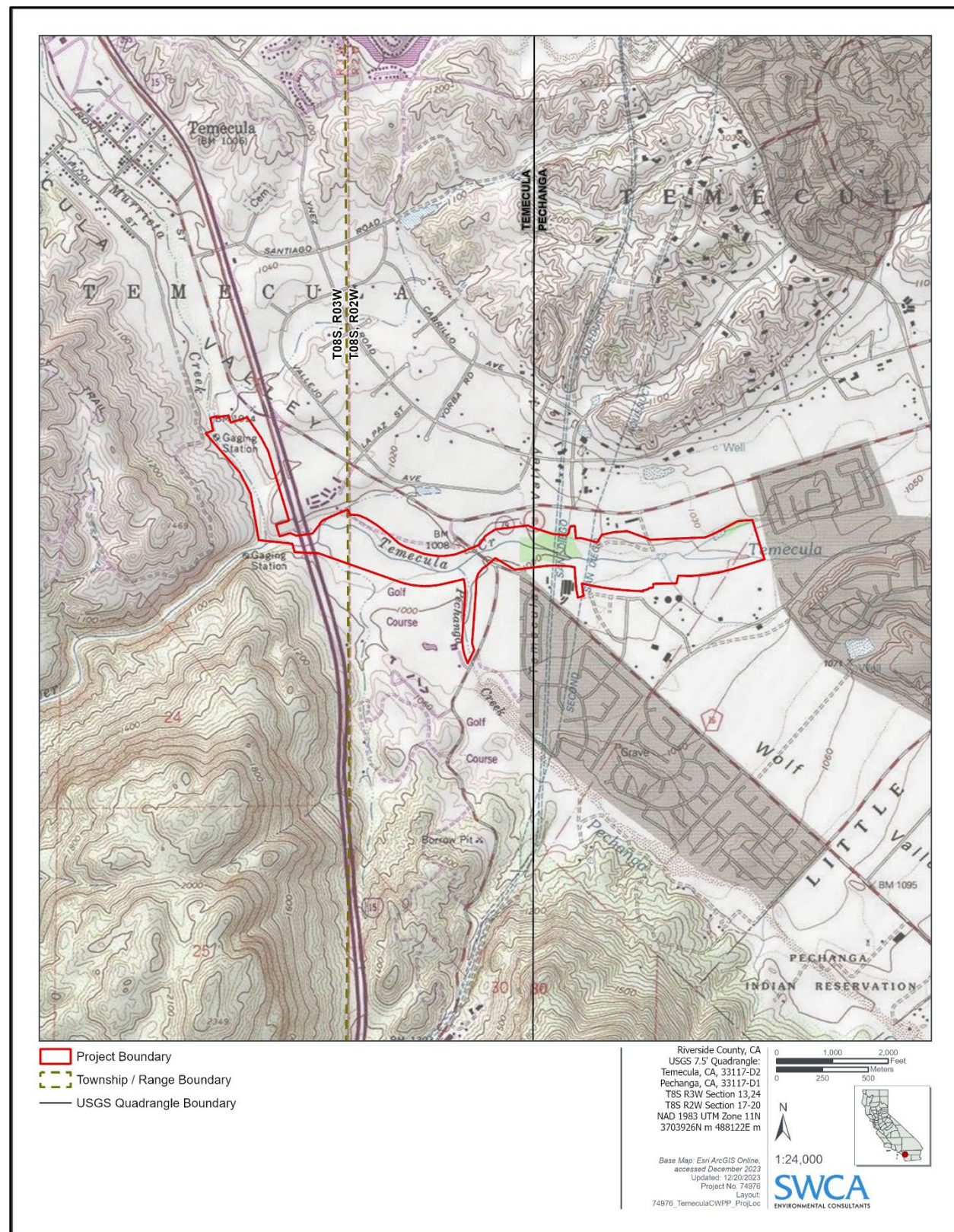


Figure 2. Project Location

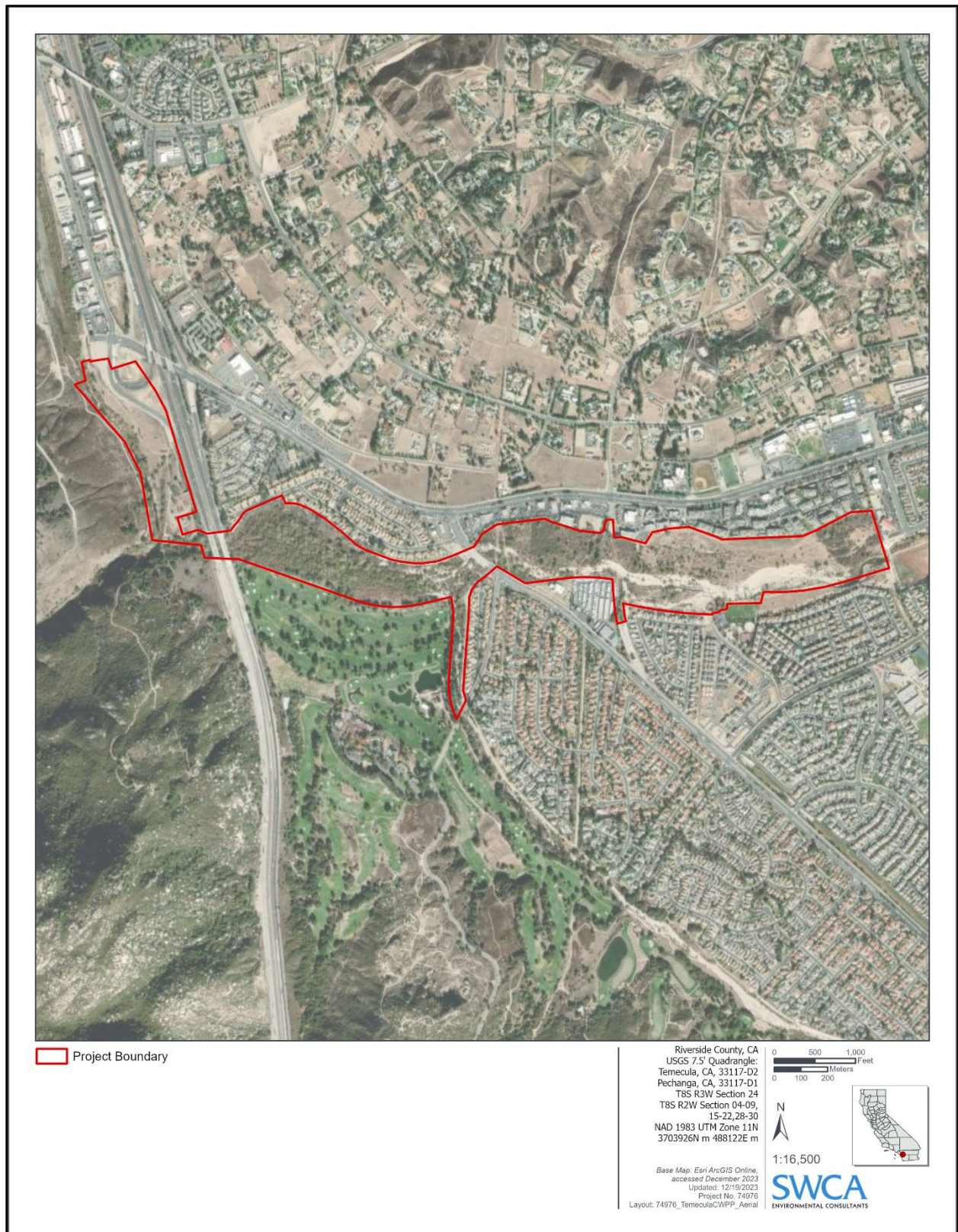


Figure 3. Project Overview



PECHANGA CULTURAL RESOURCES

Pechanga Band of Indians

Post Office, Box 2183 • Temecula, CA 92593
Telephone (951) 770-6300 • Fax (951) 506-9491

January 27, 2024

VIA E-Mail and USPS

Aaron Elzinga, M.A., RPA
Cultural Resources Team Lead
SWCA Environmental Consultants
aelzinga@swca.com

RE: Request for Information for the City of Temecula Wildfire Prevention Plan and Community Wildfire Protection Plan (CWPP), City of Temecula, Riverside County, California

Dear Mr. Elzinga,

The Pechanga Band of Indians ("the Tribe") appreciates your request for information regarding the above referenced Project. After reviewing the provided maps and our internal documents we have determined that the Project area is not within Reservation land's but is located .75 of-a-mile away from our Reservation and the Project's central-portion is directly adjacent to Pechanga's Temecula Creek Inn Property. This Undertaking is located in the very heart of Our Ancestral Territory. We are interested in participating in this Project based upon our 'Ayékwish/Traditional Knowledge of the area and its location being *entirely within* two Traditional Cultural Properties, both encompassing the historic Village of Temecula. The first of these Sacred Lands Filings entails the Avenida de Misiones-to-Jedidiah Smith segment of the Project (just west of J.Smith AKA the west portion of the In-N-Out parking lot), where our two mapped Sacred Land's Filings overlap. The Project's middle to west-northwest Area of Potential Effects, is situated *completely within* the Luiseño Ancestral Origin Area—which is a Listed Property on the National Register of Historic Places. Overall for any project, there is not a more culturally sensitive-span in our entire Ancestral Territory. The very flash-point for Creation of our Culture's World occurs at the confluence of the Murrieta and Temecula Creeks and both Creek's-ends are within this Undertaking's-sphere. There are 4 Ancestral Placenames within this Project's-APE and another 5 Placenames are located 1 mile from the Project. For over four decades the Tribe has been formally responsible for over two dozen Ancestral sacred site burials, within this Project's particular APE. Between 1979-2004 Ancestors were directly impacted by the construction of the 15 Freeway and Temecula Creek developments. Within this Project's-APE there are 11 recorded Ancestral-archaeological sites and another 42 sites located from 1 mile of the Project Boundary. The perennial Temecula and Murrieta Creeks once coursed through numerous Ancestral Communities, before becoming Táatamay/the Santa Margarita River, on its way to Móomat/the Pacific Ocean. Notably, NHD (National Hydrologic Dataset) bluelines representing the Temecula and Murrieta Creeks exist *directly within* this Project's-APE. As evidenced by more than 24 Ancestral burials and when considering Our Culture's burial-practices the immediate proximities of these Creeks to this Project are very concerning to the Tribe because, such an adjacency to these long-term waterways increases the likelihood for impacts to our Ancestral burial-areas.

Chairperson:
Neal Ibanez

Vice Chairperson:
Bridgett Barcello

Committee Members:
Darlene Miranda
Richard B. Searce, III
Robert Villalobos
Shevon Torres
Juan Rodriguez

Director:
Gary DuBois

Coordinator:
Paul Macarro

Cultural Analyst:
Tuba Ebru Ozdil

Because of this Project's immediate proximity to previously impacted Ancestral human remains, since this Project is *entirely within* our Traditional Cultural Landscape and the Project's-impacts within the TCL will be requiring a proper-assessment due to its National Register Listing. Because the project is situated within a second and distinct TCP, is surrounded by numerous Ancestral Placenames, considering the NHD-blueline's immediate proximities and impacts, in view of the 11 previously recorded culturally sensitive-sites in the APE and another 42 sites located only 1 mile away, and because of longstanding project experience within this Project's vicinity the Tribe therefore, is interested in participating in this Project. Pechanga believes that the possibility of recovering sensitive subsurface resources during ground-disturbing activities for this Project is extremely high.

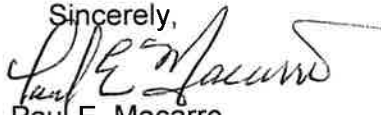
The Tribe is dedicated to providing comprehensive cultural information to you and your firm for inclusion in the archaeological study as well as to the Lead Agency for CEQA review. At this time, the Tribe requests the following so we may continue the consultation process and to provide adequate and appropriate recommendations for the Project:

- 1) Notification once the Project begins the entitlement process, if it has not already;
- 2) Copies of all applicable archaeological reports, site records, proposed grading plans and environmental documents (EA/IS/MND/EIR, etc);
- 3) Government-to-government consultation with the Lead Agency; and
- 4) The Tribe believes that monitoring by a Riverside County qualified archaeologist and a professional Pechanga Tribal Monitor may be required during earthmoving activities. Therefore, the Tribe reserves its right to make additional comments and recommendations once the environmental documents have been received and fully reviewed.
- 5) In the event that subsurface cultural resources are identified, the Tribe requests consultation with the Project proponent and Lead Agency regarding the treatment and disposition of all artifacts.

As a Sovereign governmental entity, the Tribe is entitled to appropriate and adequate government-to-government consultation regarding the proposed Project. We would like you and your client to know that the Tribe does not consider initial inquiry letters from project consultants to constitute appropriate government-to-government consultation, but rather tools to obtain further information about the Project area. Therefore, the Tribe reserves its rights to participate in the formal environmental review process, including government-to-government consultation with the Lead Agency, and requests to be included in all correspondence regarding this Project.

Please note that we are interested in participating in surveys within 'Atáaxum/Payómkawichum Ancestral Territory. Prior to conducting any surveys, please contact the Cultural Department to schedule specifics. If you have any additional questions or comments, please contact me at pmacarro@pechanga-nsn.gov or 951-770-6306.

Sincerely,



Paul E. Macarro

Cultural Coordinator

Pechanga Cultural Resources Department
Pechanga Reservation
Post Office Box 2183 • Temecula, CA 92592

Sacred Is The Duty Trusted Unto Our Care And With Honor We Rise To The Need

APPENDIX C

CEQA Resources

STRATEGY FOR CEQA COMPLIANCE

The Temecula Creek Community Wildfire Protection Plan (CWPP) identifies various recommendations for creating fire-adapted communities in Table 4.2, some of which may require compliance with the California Environmental Quality Act (CEQA). Pursuant to Public Resources Code 21065, a project subject to CEQA compliance means an activity that may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following:

- a) An activity directly undertaken by that public agency.
- b) An activity undertaken by a person that is supported, in whole or in part, through contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.
- c) An activity that involves the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

For activities identified in the CWPP that are determined to qualify as projects subject to CEQA compliance, the following levels of CEQA review may be applicable:

- Statutory exemption pursuant to Article 18 of the State CEQA Guidelines
- Categorical exemption pursuant to Article 19 of the State CEQA Guidelines
- CEQA tiering documentation pursuant to the California Vegetation Treatment Program (CalVTP) Programmatic Environmental Impact Report (PEIR)

A CEQA process flowchart and descriptions of the various levels of CEQA review and associated activities are provided below to help facilitate the CEQA review decision-making process.

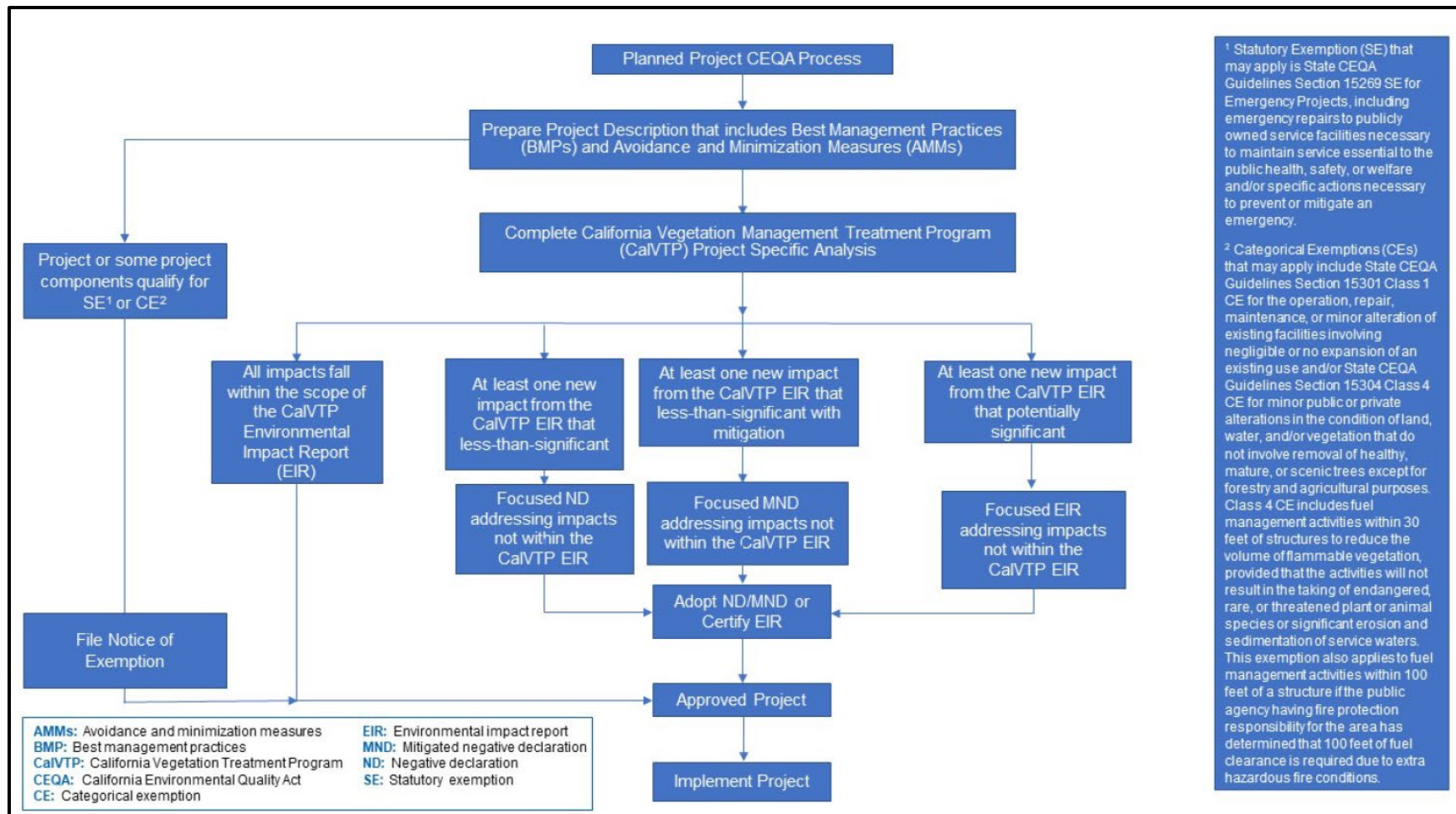


Figure 1. CEQA process flowchart.

Statutory Exemptions

Pursuant to Article 18 of the State CEQA Guidelines (Section 21083 of the Public Resources Code), certain activities have been granted statutory exemptions from CEQA by the Legislature. Statutorily exempt activities that may be applicable to the recommendations identified in the CWPP include the following:

CEQA Guidelines Section 15262, Feasibility and Planning Studies

A project involving only feasibility or planning studies for possible future actions that the agency, board, or commission has not approved, adopted, or funded does not require the preparation of an Environmental Impact Report (EIR) or Negative Declaration but does require consideration of environmental factors. This section does not apply to the adoption of a plan that will have a legally binding effect on later activities.

CEQA Guidelines Section 15269, Emergency Projects

The following emergency projects are exempt from the requirements of CEQA.

- (a) Projects to maintain, repair, restore, demolish, or replace property or facilities damaged or destroyed as a result of a disaster in a disaster stricken area in which a state of emergency has been proclaimed by the Governor pursuant to the California Emergency Services Act, commencing with Section 8550 of the Government Code. This includes projects that will remove, destroy, or significantly alter an historical resource when that resource represents an imminent threat to the public of bodily harm or of damage to adjacent property or when the project has received a determination by the State Office of Historic Preservation pursuant to Section 5028(b) of Public Resources Code.
- (b) Emergency repairs to publicly or privately owned service facilities necessary to maintain service essential to the public health, safety or welfare. Emergency repairs include those that require a reasonable amount of planning to address an anticipated emergency.
- (c) Specific actions necessary to prevent or mitigate an emergency. This does not include long-term projects undertaken for the purpose of preventing or mitigating a situation that has a low probability of occurrence in the short-term, but this exclusion does not apply (i) if the anticipated period of time to conduct an environmental review of such a long-term project would create a risk to public health, safety or welfare, or (ii) if activities (such as fire or catastrophic risk mitigation or modifications to improve facility integrity) are proposed for existing facilities in response to an emergency at a similar existing facility.
- (d) Projects undertaken, carried out, or approved by a public agency to maintain, repair, or restore an existing highway damaged by fire, flood, storm, earthquake, land subsidence, gradual earth movement, or landslide, provided that the project is within the existing right of way of that highway and is initiated within one year of the damage occurring. This exemption does not apply to highways designated as official state scenic highways, nor any project undertaken, carried out, or approved by a public agency to expand or widen a highway damaged by fire, flood, storm, earthquake, land subsidence, gradual earth movement, or landslide.
- (e) Seismic work on highways and bridges pursuant to Section 180.2 of the Streets and Highways Code, Section 180 et seq.

Categorical Exemptions

Pursuant to Article 19 of the State CEQA Guidelines (Section 21084 of the Public Resources Code), classes of projects have been identified that have been determined not to have a significant effect on the environment and that are, therefore, exempt from the provisions of CEQA. Exceptions to the list of categorically excluded activities include the following, pursuant to State CEQA Guidelines Section 15300.2:

- (a) Location. Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located – a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant. Therefore, these classes are considered to apply all instances, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.
- (b) Cumulative Impact. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.
- (c) Significant Effect. A categorical exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.
- (d) Scenic Highways. A categorical exemption shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway. This does not apply to improvements which are required as mitigation by an adopted negative declaration or certified EIR.
- (e) Hazardous Waste Sites. A categorical exemption shall not be used for a project located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code.
- (f) Historical Resources. A categorical exemption shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

Categorically exempt activities that may be applicable to the recommendations identified in the CWPP include the following:

CEQA Guidelines Section 15300.3, Revisions to List of Categorical Exemptions

Pursuant to Section 15300.3 of the State CEQA Guidelines, a public agency may, at any time, request that a new class of categorical exemptions be added, or an existing one amended or deleted. This request must be made in writing to the Office of Planning and Research and shall contain detailed information to support the request. The granting of such request shall be by amendment to the State CEQA Guidelines.

In response to SWCA's request made to the Office of Planning and Research on June 30, 2022, for specific steps required for this approach and examples of past requests that have been successful, the Office of Planning and Research indicated that no specific guidance or examples are available beyond the language provided above in Section 15300.3 of the State CEQA Guidelines. The Office of Planning and Research would need to review the request made in writing and decide if the requested exemption should be forwarded to the California Natural Resources Agency to go through a formal rulemaking process to be included in the California Code of Regulations and the State CEQA Guidelines.

It is SWCA's opinion that this approach is not often pursued because it can take years to work through the process and is unlikely to be successful.

State CEQA Guidelines Section 15301, Existing Facilities

Class 1 consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use. The types of "existing facilities" itemized below are not intended to be all-inclusive of the types of projects which might fall within Class 1. The key consideration is whether the project involves negligible or no expansion of use.

Examples include but are not limited to:

- (a) Interior or exterior alterations involving such things as interior partitions, plumbing, and electrical conveyances;
- (b) Existing facilities of both investor and publicly owned utilities used to provide electric power, natural gas, sewerage, or other public utility services;
- (c) Existing highways and streets, sidewalks, gutters, bicycle and pedestrian trails, and similar facilities (this includes road grading for the purpose of public safety), and other alterations such as the addition of bicycle facilities, including but not limited to bicycle parking, bicycle-share facilities and bicycle lanes, transit improvements such as bus lanes, pedestrian crossings, street trees, and other similar alterations that do not create additional automobile lanes);
- (d) Restoration or rehabilitation of deteriorated or damaged structures, facilities, or mechanical equipment to meet current standards of public health and safety, unless it is determined that the damage was substantial and resulted from an environmental hazard such as earthquake, landslide, or flood;
- (e) Additions to existing structures provided that the addition will not result in an increase of more than:
 - (1) 50 percent of the floor area of the structures before the addition, or 2,500 square feet, whichever is less; or
 - (2) 10,000 square feet if:
 - (A) The project is in an area where all public services and facilities are available to allow for maximum development permissible in the General Plan and
 - (B) The area in which the project is located is not environmentally sensitive.
- (f) Addition of safety or health protection devices for use during construction of or in conjunction with existing structures, facilities, or mechanical equipment, or topographical features including navigational devices;
- (g) New copy on existing on and off-premise signs;
- (h) Maintenance of existing landscaping, native growth, and water supply reservoirs (excluding the use of pesticides, as defined in Section 12753, Division 7, Chapter 2, Food and Agricultural Code);
- (i) Maintenance of fish screens, fish ladders, wildlife habitat areas, artificial wildlife waterway devices, streamflows, springs and waterholes, and stream channels (clearing of debris) to protect fish and wildlife resources;
- (j) Fish stocking by the California Department of Fish and Game;

- (k) Division of existing multiple family or single-family residences into common-interest ownership and subdivision of existing commercial or industrial buildings, where no physical changes occur which are not otherwise exempt;
- (l) Demolition and removal of individual small structures listed in this subdivision:
 - (1) One single-family residence. In urbanized areas, up to three single-family residences may be demolished under this exemption.
 - (2) A duplex or similar multifamily residential structure. In urbanized areas, this exemption applies to duplexes and similar structures where not more than six dwelling units will be demolished.
 - (3) A store, motel, office, restaurant, or similar small commercial structure if designed for an occupant load of 30 persons or less. In urbanized areas, the exemption also applies to the demolition of up to three such commercial buildings on sites zoned for such use.
 - (4) Accessory (appurtenant) structures including garages, carports, patios, swimming pools, and fences.
- (m) Minor repairs and alterations to existing dams and appurtenant structures under the supervision of the Department of Water Resources.
- (n) Conversion of a single family residence to office use.
- (o) Installation, in an existing facility occupied by a medical waste generator, of a steam sterilization unit for the treatment of medical waste generated by that facility provided that the unit is installed and operated in accordance with the Medical Waste Management Act (Section 117600, et seq., of the Health and Safety Code) and accepts no offsite waste.
- (p) Use of a single-family residence as a small family day care home, as defined in Section 1596.78 of the Health and Safety Code.

State CEQA Guidelines Section 15304, Minor Alterations to Land

Class 4 consists of minor public or private alterations in the condition of land, water, and/or vegetation that do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes. Examples include, but are not limited to:

- (a) Grading on land with a slope of less than 10 percent, except that grading shall not be exempt in a waterway, in any wetland, in an officially designated (by federal, state, or local government action) scenic area, or in officially mapped areas of severe geologic hazard such as an Alquist-Priolo Earthquake Fault Zone or within an official Seismic Hazard Zone, as delineated by the State Geologist.
- (b) New gardening or landscaping, including the replacement of existing conventional landscaping with water efficient or fire resistant landscaping.
- (c) Filling of earth into previously excavated land with material compatible with the natural features of the site;
- (d) Minor alterations in land, water, and vegetation on existing officially designated wildlife management areas or fish production facilities which result in improvement of habitat for fish and wildlife resources or greater fish production;
- (e) Minor temporary use of land having negligible or no permanent effects on the environment, including carnivals, sales of Christmas trees, etc.;
- (f) Minor trenching and backfilling where the surface is restored;

- (g) Maintenance dredging where the spoil is deposited in a spoil area authorized by all applicable state and federal regulatory agencies;
- (h) The creation of bicycle lanes on existing rights-of-way.
- (i) Fuel management activities within 30 feet of structures to reduce the volume of flammable vegetation, provided that the activities will not result in the taking of endangered, rare, or threatened plant or animal species or significant erosion and sedimentation of surface waters.
- (j) **This exemption shall apply to fuel management activities within 100 feet of a structure if the public agency having fire protection responsibility for the area has determined that 100 feet of fuel clearance is required due to extra hazardous fire conditions.**

State CEQA Guidelines Section 15306, Information Collection

Class 6 consists of basic data collection, research, experimental management, and resource evaluation activities that do not result in a serious or major disturbance to an environmental resource. These may be strictly for information gathering purposes, or as part of a study leading to an action that a public agency has not yet approved, adopted, or funded.

State CEQA Guidelines Section 15307, Actions by Regulatory Agencies for Protection of Natural Resources

Class 7 consists of actions taken by regulatory agencies as authorized by state law or local ordinance to ensure the maintenance, restoration, or enhancement of a natural resource where the regulatory process involves procedures for protection of the environment. Examples include, but are not limited to, wildlife preservation activities of the California Department of Fish and Wildlife. Construction activities are not included in this exemption.

State CEQA Guidelines Section 15308, Actions by Regulatory Agencies for Protection of the Environment

Class 8 consists of actions taken by regulatory agencies, as authorized by state or local ordinance, to ensure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment. Construction activities and relaxation of standards allowing environmental degradation are not included in this exemption.

CalVTP CEQA Tiering

For activities that do not qualify for a Statutory Exemption or Categorical Exemption, SWCA feels confident they will qualify for CEQA coverage by tiering from the CalVTP PEIR. The CalVTP PEIR provides a powerful CEQA compliance tool to expedite the implementation of wildfire resilience projects. For proposed activities to qualify for tiering using the CalVTP, the following conditions must apply:

1. **Project Proponents: can be any local or state agency providing funding or with land ownership and/or land management, or other regulatory responsibility in the treatable landscape.**
2. **Project Areas: Determine if project is within the CalVTP Treatable Landscape**
 - The project does not have to be entirely within the State Responsibility Area (SRA). SRA treatable landscape needs to be a substantial part of the project, but Local Responsibility Area

(LRA) or Federal Responsibility Area (FRA) and potentially tribal land can be added via an addendum or supplement.

- Applicable to projects on private land if they receive state or local government grants for vegetation treatment.

As shown on Figure 2, portions of the Temecula Creek CWPP area are within the CalVTP Treatable Landscape, but it is not entirely located within the CalVTP Treatable Landscape; therefore, an Addendum will need to be prepared for any CalVTP tiering documentation.

3. Covered treatment types/activities include:

Covered Treatment Types

- Wildland-urban interface (WUI) fuel reduction: focused in WUI-designated areas and generally consist of treatments to reduce fuel loads and slow or prevent the spread of fire between wildlands and structures, and vice versa.
- Fuel breaks: strategically placed vegetation treatment areas that actively support fire-control activities.
- Ecological restoration projects: generally occur outside the WUI in areas that have departed from the natural fire regime as a result of fire exclusion, and would focus on restoring ecosystem processes, conditions, and resiliency.

Covered Treatment Activities

- Prescribed burning
- Manual vegetation treatment
- Mechanical vegetation treatment
- Prescribed herbivory (targeted grazing)
- Targeted ground application of herbicides

4. Activities/Areas Outside Scope of CalVTP PEIR

- Activities solely within the FRA and/or LRA
- Implementation of defensible space programs and building code creation/enforcement
- Removal of trees for commercial purposes (timber harvesting) – subject to the Forest Protection Act.

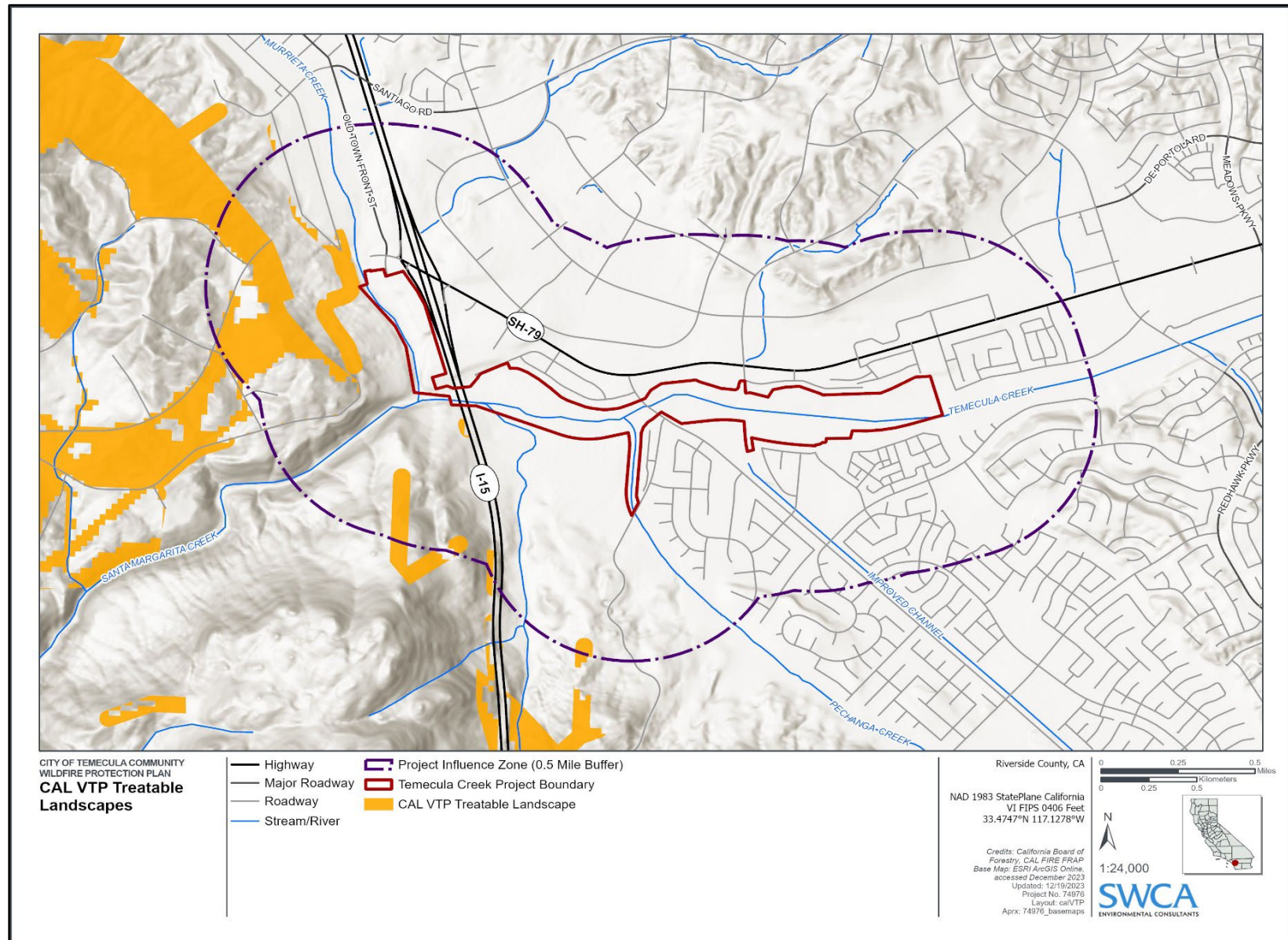


Figure 2. CalVTP treatable landscape.

How to Tier Using the CalVTP PEIR

1. **Tiering:** First, determine whether the proposed project is suitable to tier from CalVTP PEIR based on the project proponent, project area (within treatable landscape), funding source, and proposed treatment types/activities.
2. **CalVTP PEIR SPRs and MMs:** Confirm that the CalVTP PEIR Standard Project Requirements (SPRs) and Mitigation Measures (MMs) included in the CalVTP PEIR Mitigation Monitoring and Reporting Program (MMRP) can be implemented for the proposed project (see Attachment C.1). Determine whether avoidance of all sensitive resources would be feasible or whether avoidance would be infeasible for any resources.
3. **Project Specific Analysis (PSA):** If the City confirms CalVTP PEIR SPRs and MMs can be implemented for the project and there are no known potential impacts outside the scope of the CalVTP PEIR, the appropriate approach will be to prepare a Project Specific Analysis (PSA), which is the CalVTP PEIR CEQA equivalent of an Initial Study/Mitigated Negative Declaration (IS/MND). Preparation of a PSA generally includes the following steps:
 - a. **Prepare Project Description**
 - b. **SPR AD-7 (Planned Project):** While the project description is being prepared, it will be important to complete the Planned Project CAL FIRE notification step required by SPR AD-7 (see CalVTP PEIR MMRP).
 - i. For projects planning to prepare a PSA, complete the SPR AD-7 Form and submit it to CalVTPprojects@fire.ca.gov at least 15 days prior to filing the Notice of Determination for the project. Submit Planned Project Form and Project Map.
 - c. **PSA:** Use CalVTP PSA template (see Attachment C.2) and MMRP template to prepare for the proposed project.
 - i. Use PSA to determine whether the project qualifies as within the scope of the CalVTP PEIR or requires additional environmental documentation or its own independent environmental review. If the project would (1) cause any new type of impact, (2) cause any substantially more severe significant impact than was addressed in the PEIR, or (3) reveal a mitigation measure or alternative that is substantially different from those in the PEIR or found infeasible in the PEIR, but that is now feasible, and that the project proponent declines to implement, additional environmental documentation would be required (see Figure 1). If none of those outcomes are determined, and the effects on the environment were covered in the PEIR, no additional environmental documentation would be required.
 - ii. **PSA Addendum:** A PSA Addendum may be appropriate if necessary to add treatment areas that are outside the treatable landscape, if an herbicide not considered in the PEIR is proposed, or for other minor changes in scope. The schedule for preparing a PSA/Addendum is the same as a PSA and the templates are the same, but additional approval language needs to be added to the PSA/Addendum, Findings, Statement of Overriding Considerations, and NOD. No new public review is required for a PSA/Addendum.
 - iii. **Project Approval:** Once the PSA and Project-Specific MMRP have been prepared and approved by the lead agency, the lead agency can follow its own agency-specific procedures for project approval (CAL FIRE approval and public circulation are not required). As part of project approval, the lead agency adopts CEQA Findings,

Statement of Overriding Considerations, and MMRP. PSA or PSA/Addendum provides substantial evidence supporting adoption of CEQA Findings.

- iv. **NOD:** Lead Agency files NOD with the State Clearinghouse within 5 days of project approval. Use CalVTP PEIR CDFW CEQA Filing Fee Receipt (see Attachment C.3) when filing NOD.
- d. **SPR AD-7 (Approved Project):** Once the NOD has been filed, it will be important to complete the Approved Project CAL FIRE notification step required by SPR AD-7; see CalVTP PEIR MMRP (Attachment C.1).
 - i. Submit final PSA, project MMRP, and GIS package of project areas.
 - ii. Once the PSA has been approved, use the CalVTP Project Data Entry Guide and the CalVTP Project Template to send the project boundary to CalVTPprojects@fire.ca.gov. This template requires input of the project boundary into the geodatabase and filling in the required attributes.
- e. **Project Implementation:** Once the NOD has been filed and the Approved Project CAL FIRE notification step has been completed, the lead agency can move forward with project implementation. Note: there are many SPRs and MMs that need to be implemented before project implementation. The City will also be required to submit a Post Project Implementation Report (or Completion Report) that includes the following information following project implementation:
 - Size of treated area (typically acres)
 - Treatment types and activities
 - Dates of work
 - A list of the SPRs and MMs that were implemented
 - Any explanations regarding implementation if required by SPRs and MMs (e.g., explanation for feasibility determination required by SPR BIO-12; explanation for reduction of a no-disturbance buffer below the general minimum size described in Mitigation Measures BIO-1a and BIO-2b)

The Fire Board does not have a template for the completion report. The format is up to the project proponent so long as it includes the information identified in SPR AD-7. The MMRP table could be adapted to meet the requirements of SPR AD-7.

Non-CalVTP CEQA Compliance

If project activities are determined not to qualify for a Statutory Exemption, Categorical Exemption, or tiering from the CalVTP PEIR, the City should prepare an Initial Study using Appendix G of the State CEQA Guidelines. Based on the impact determinations identified, either a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report should be prepared and compliance with State CEQA Guidelines Articles 5, 6, and/or 7 should be followed as appropriate.

ATTACHMENT C.1

CaIVTP MMRP

Appendix B

Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

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

PROGRAM-LEVEL MMRP AND LATER TREATMENT PROJECTS

This program-level MMRP for the CalVTP PEIR will be adopted by the Board when it approves the CalVTP. This program-level MMRP provides a comprehensive list of all SPRs and mitigation measures identified in the PEIR, which have been adopted or made a condition of project approval to avoid or mitigate significant effects on the environment resulting from implementation of the CalVTP.

For each later vegetation treatment project implemented under the CalVTP, a project-specific MMRP will be completed along with the Project-Specific Analysis (PSA) (see Attachment A to the PSA). The initial step in CEQA compliance for later vegetation treatment projects under the CalVTP (which are “later activities” pursuant to Section 15168 of the State CEQA Guidelines) is completion of the PSA by the project proponent. The PSA will document the determination of whether the proposed later vegetation treatment project qualifies as within the scope of the PEIR. Under this CEQA compliance approach, a project proponent must incorporate from the PEIR into the later vegetation treatment project all SPRs relevant to the proposed activity and all feasible mitigation measures in response to significant impacts caused by the later vegetation treatment project. Some SPRs and mitigation measures would apply to all projects, while others would only apply to projects that include specific treatment types or treatment activities, would affect certain resources, or result in certain potentially significant impacts. The project-specific MMRP will identify all SPRs and mitigation measures that are applicable to the later vegetation treatment project evaluated in the PSA, the timing for the implementation of each (e.g., prior to or during initial treatment and/or maintenance activities), and the entity(ies) responsible for implementation of the SPRs and mitigation measures. The project proponent for each treatment will be responsible for implementation of the SPRs and mitigation measures pursuant to Section 15097 of the State CEQA Guidelines. For the purposes of this PEIR, SPRs are intended to be implemented and enforced in the same way as mitigation measures consistent with Section 15126.4 of the State CEQA Guidelines.

If a later vegetation treatment project is not within the scope of the PEIR and additional CEQA documentation is needed, it may be a Negative Declaration (ND), Mitigated Negative Declaration (MND), or an EIR, depending on the environmental impact differences encountered. If additional CEQA documentation is needed for a later vegetation treatment project, a project-specific MMRP will be prepared by the project proponent as part of the additional CEQA documentation if SPRs and/or mitigation measures are required to avoid or mitigate significant effects on the environment resulting from the later vegetation treatment project.

PURPOSE OF MITIGATION MONITORING AND REPORTING PROGRAM

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

ROLES AND RESPONSIBILITIES

The Board is the lead agency for adoption of the program-level MMRP. The project proponent for each later treatment project would prepare a project-specific MMRPs in connection with its PSA and approval of the project, as described above.

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

The project proponent is responsible for overall administration of the project-specific MMRP and for verifying that staff members or contractors have completed the necessary actions for each measure (i.e., appropriate amendments to the proposed ordinance).

REPORTING

The project proponent shall document and describe the compliance of the later treatment project with the required SPRs and mitigation measures either by adapting the project-specific MMRP table or preparing a separate post-project implementation report (referred to by CAL FIRE as a Completion Report).

MITIGATION MONITORING AND REPORTING PROGRAM TABLE

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

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

Program-Level Mitigation Monitoring and Reporting Program

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
STANDARD PROJECT REQUIREMENTS (SPRS)			
Administrative Standard Project Requirements			
SPR AD-1 Project Proponent Coordination: For treatments coordinated with CAL FIRE, CAL FIRE will meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE will also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to treatment projects	Project Proponent	Project Proponent
SPR AD-2 Delineate Protected Resources: The project proponent will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area and with highly-visible flagging or clear, existing landscape demarcations (e.g., edge of a roadway) prior to beginning any treatment to avoid disturbing the resource. "Protected Resources" refers to environmentally sensitive places within or adjacent to the treatment areas that would be avoided or protected to the extent feasible during planned treatment activities to sustain their natural qualities and processes. This work will be performed by a qualified person, as defined for the specific resource (e.g., qualified Registered Professional Forester or biologist). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to treatment projects	Project Proponent	Project Proponent
SPR AD-3 Consistency with Local Plans, Policies, and Ordinances: The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to treatment projects	Project Proponent	Project Proponent
SPR AD-4 Public Notifications for Prescribed Burning: At least three days prior to the commencement of prescribed burning operations, the project proponent will: 1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.	At least three days prior to prescribed burn activities	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
SPR AD-5 Maintain Site Cleanliness: If trash receptacles are used on-site, the project proponent will use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	During treatment projects	Project Proponent	Project Proponent
SPR AD-6 Public Notifications for Treatment Projects. One to three days prior to the commencement of a treatment activity, the project proponent will post signs in a conspicuous location near the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.	One to three days prior to the prescribed burn activities	Project Proponent	Project Proponent
<p>SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects. For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, the project proponent will provide the information listed below to the Board or CAL FIRE during the proposed, approved, and completed stages of the project. The Board or CAL FIRE will make this information available to the public via an online database or other mechanism.</p> <p>Information on proposed projects (PSA in progress):</p> <ul style="list-style-type: none"> ► GIS data that include project location (as a point); ► project size (typically acres); ► treatment types and activities; and ► contact information for a representative of the project proponent. <p><u>The project proponent will provide information on the proposed project to the Board or CAL FIRE as early as feasible in the planning phase. The project proponent will provide this information to the Board or CAL FIRE with sufficient lead time to allow those agencies to make the information available to the public at least two weeks prior to project approval. The project proponent may also make information available to the public via other mechanisms (e.g., the proponent's own website).</u></p> <p>Information on approved projects (PSA complete):</p> <ul style="list-style-type: none"> ► A completed PSA Environmental Checklist; ► A completed Mitigation Monitoring and Reporting Program (using Attachment A to the Environmental Checklist); 	Prior to, during, and following treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> ▶ GIS data that include a polygon(s) of the project area, showing the extent of each treatment type included in the project (ecological restoration, fuel break, WUI fuel reduction) <p>Information on completed projects:</p> <ul style="list-style-type: none"> ▶ GIS data that include a polygon(s) of the treated area, showing the extent of each treatment type implemented (ecological restoration, fuel break, WUI fuel reduction) ▶ A post-project implementation report (referred to by CAL FIRE as a Completion Report) that includes <ul style="list-style-type: none"> ▪ Size of treated area (typically acres); ▪ Treatment types and activities; ▪ Dates of work; ▪ A list of the SPRs and mitigation measures that were implemented ▪ Any explanations regarding implementation if required by SPRs and mitigation measures (e.g., explanation for feasibility determination required by SPR BIO-12; explanation for reduction of a no-disturbance buffer below the general minimum size described in Mitigation Measures BIO-1a and BIO-2b). <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>			
<p>SPR AD-8 Request Access for Post-Treatment Assessment. For CAL FIRE projects, during contract development, CAL FIRE will include access to the treated area over a prescribed period (usually up to three years) to assess treatment effectiveness in achieving desired fuel conditions and other CalVTP objectives as well as any necessary maintenance, as a contract term for consideration by the landowner. For public landowners, access to the treated area over a prescribed period will be a requirement of the executed contract. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	Prior to treatment projects	Project Proponent	Project Proponent
<p>SPR AD-9: Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required. When planning a treatment project within the Coastal Zone, the project proponent will contact the local Coastal Commission district office, or applicable local government to determine if the project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. All treatment projects in the Coastal Zone will be reviewed by the local Coastal Commission district office or local government with a certified LCP (in consultation with the local Coastal Commission district office regarding whether a Coastal Development Permit (CDP) is required). If a CDP is required, the treatment project will be designed to meet the following conditions:</p> <p>i. The treatment project will be designed in compliance with applicable provisions of the Coastal Act that provide substantive performance standards for the protection of</p>	Prior to treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>potentially affected coastal resources, if the treatment activity will occur within the original jurisdiction of the Commission or an area of a local coastal government without a certified LCP; and</p> <p>ii. The treatment project will be designed in compliance with the applicable provisions of the certified LCP, specifically the substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the jurisdiction of a local coastal government with a certified LCP.</p> <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>			
Aesthetic and Visual Resource Standard Project Requirements			
<p>SPR AES-1 Vegetation Thinning and Edge Feathering: The project proponent will thin and feather adjacent vegetation to break up or screen linear edges of the clearing and mimic forms of natural clearings as reasonable or appropriate for vegetation conditions. In general, thinning and feathering in irregular patches of varying densities, as well as a gradation of tall to short vegetation at the clearing edge, will achieve a natural transitional appearance. The contrast of a distinct clearing edge will be faded into this transitional band. This SPR only applies to mechanical and manual treatment activities and all treatment types, including treatment maintenance.</p>	During mechanical and manual treatment activities	Project Proponent	Project Proponent
<p>SPR AES-2 Avoid Staging within Viewsheds: The project proponent will store all treatment-related materials, including vehicles, vegetation treatment debris, and equipment, outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. The project proponent will also locate materials staging and storage areas outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	During treatment projects	Project Proponent	Project Proponent
<p>SPR AES-3 Provide Vegetation Screening: The project proponent will preserve sufficient vegetation within, at the edge of, or adjacent to treatment areas to screen views from public trails, parks, recreation areas, and roadways as reasonable or appropriate for vegetation conditions. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	During design of treatment projects	Project Proponent	Project Proponent
Air Quality Standard Project Requirements			
<p>SPR AQ-1 Comply with Air Quality Regulations: The project proponent will comply with the applicable air quality requirements of air districts within whose jurisdiction the project is located. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	During treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
SPR AQ-2 Submit Smoke Management Plan: The project proponent will submit a smoke management plan for all prescribed burns to the applicable air district, in accordance with 17 CCR Section 80160. Pursuant to this regulation a smoke management plan will not be required for burns less than 10 acres that also will not be conducted near smoke sensitive areas, unless otherwise directed by the air district. Burning will only be conducted in compliance with the burn authorization program of the applicable air district(s) having jurisdiction over the treatment area. Example of a smoke management plan is in Appendix PD-2. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	Prior to prescribed burn treatment activities	Project Proponent	Project Proponent
SPR AQ-3 Create Burn Plan: The project proponent will create a burn plan using the CAL FIRE burn plan template for all prescribed burns. The burn plan will include a fire behavior model output of First Order Fire Effects Model and BEHAVE or other fire behavior modeling simulation and that is performed by a qualified fire behavior technical specialist that predicts fire behavior, calculates consumption of fuels, tree mortality, predicted emissions, greenhouse gas emissions, and soil heating. The project proponent will minimize soil burn severity from broadcast burning to reduce the potential for runoff and soil erosion. The burn plan will be created with input from a qualified technician or certified State burn boss. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	Prior to prescribed burn treatment activities	Project Proponent	Project Proponent
SPR AQ-4 Minimize Dust: To minimize dust during treatment activities, the project proponent will implement the following measures: <ul style="list-style-type: none"> ▶ Limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board (CARB) Fugitive Dust protocol. ▶ If road use creates excessive dust, the project proponent will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board (SWRCB). The project proponent will not over-water exposed areas such that the water results in runoff. The type of dust suppression method will be selected by the project proponent based on soil, traffic, site-specific conditions, and air quality regulations. ▶ Remove visible dust, silt, or mud tracked-out on to public paved roadways where sufficient water supplies and access to water is available. The project proponent will remove dust, silt, and mud from vehicles at the conclusion of each workday, or at a 	During treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>minimum of every 24 hours for continuous treatment activities, in accordance with Vehicle Code Section 23113.</p> <p>► Suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may "cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property," per Health and Safety Code Section 41700.</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>			
<p>SPR AQ-5 Avoid Naturally Occurring Asbestos: The project proponent will avoid ground-disturbing treatment activities in areas identified as likely to contain naturally occurring asbestos (NOA) per maps and guidance published by the California Geological Survey, unless an Asbestos Dust Control Plan (17 CCR Section 93105) is prepared and approved by the air district(s) with jurisdiction over the treatment area. Any NOA-related guidance provided by the applicable air district will be followed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	During treatment projects	Project Proponent	Project Proponent
<p>SPR AQ-6: Prescribed Burn Safety Procedures. Prescribed burns planned and managed by non-CAL FIRE crews will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP). The IAP will include the burn dates; burn hours; weather limitations; the specific burn prescription; a communications plan; a medical plan; a traffic plan; and special instructions such as minimizing smoke impacts to specific local roadways. The IAP will also assign responsibilities for coordination with the appropriate air district, such as conducting onsite briefings, posting notifications, weather monitoring during burning, and other burn related preparations. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.</p>	During prescribed burn treatment activities	Project Proponent	Project Proponent
Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements			
<p>SPR CUL-1 Conduct Record Search: An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures. Instead of conducting a new search, the project proponent may use recent record searches containing the treatment area requested by a landowner or other public agency in accordance applicable agency guidance. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	Prior to treatment projects	Project Proponent	Project Proponent
<p>SPR CUL-2 Contact Geographically Affiliated Native American Tribes: The project proponent will obtain the latest Native American Heritage Commission (NAHC) provided</p>	Prior to treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>Native Americans Contact List. Using the appropriate Native Americans Contact List, the project proponent will notify the California Native American Tribes in the counties where the treatment activity is located. The notification will contain the following:</p> <ul style="list-style-type: none"> ▶ A written description of the treatment location and boundaries. ▶ Brief narrative of the treatment objectives. ▶ A description of the activities used (e.g., prescribed burning, mastication) and associated acreages. ▶ A map of the treatment area at a sufficient scale to indicate the spatial extent of activities. ▶ A request for information regarding potential impacts to cultural resources from the proposed treatment. ▶ A detailed description of the depth of excavation, if ground disturbance is expected. <p>In addition, the project proponent will contact the NAHC for a review of their Sacred Lands File. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>			
<p>SPR-CUL-3 Pre-field Research: The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. The purpose of this research is to properly inform survey design, based on the types of resources likely to be encountered within the treatment area, and to be prepared to interpret, record, and evaluate these findings within the context of local history and prehistory. The qualified archaeologist and/or archaeologically-trained resource professional will review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the area being studied, and conduct other tasks to maximize the effectiveness of the survey. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	Prior to treatment projects	Project Proponent	Project Proponent
<p>SPR CUL-4 Archaeological Surveys: The project proponent will coordinate with an archaeologically-trained resource professional and/or qualified archaeologist to conduct a site-specific survey of the treatment area. The survey methodology (e.g., pedestrian survey, subsurface investigation) depends on whether the area has a low, moderate, or high sensitivity for resources, which is based on whether the records search, pre-field research, and/or Native American consultation identifies archaeological or historical resources near or within the treatment area. A survey report will be completed for every cultural resource survey completed. The specific requirements will comply with the applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	Prior to treatment projects	Project Proponent	Project Proponent
<p>SPR CUL-5 Treatment of Archaeological Resources: If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the</p>	Prior to and during treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. The project proponent, in consultation with culturally affiliated tribe(s), will develop effective protection measures for important cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. These protection measures will be written in clear, enforceable language, and will be included in the survey report in accordance with applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.			
SPR CUL-6 Treatment of Tribal Cultural Resources: The project proponent, in consultation with the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. The project proponent will provide the tribe(s) the opportunity to submit comments and participate in consultation to resolve issues of concern. The project proponent will defer implementing the treatment until the tribe approves protection measures, or if agreement cannot be reached after a good-faith effort, the proponent determines that any or all feasible measures have been implemented, where feasible, and the resource is either avoided or protected. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to and during treatment projects	Project Proponent	Project Proponent
SPR CUL-7 Avoid Built Historical Resources: If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources. Within a buffer of 100 feet of the built historical resource, there will be no prescribed burning or mechanical treatment activities. Buffers less than 100 feet for built historical resources will only be used after consultation with and receipt of written approval from a qualified archaeologist. If the records search does not identify known historical resources in the treatment area, but structures (i.e., buildings, bridges, roadways) over 50 years old that have not been evaluated for historic significance are present in the treatment area, they will similarly be avoided. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to treatment projects	Project Proponent	Project Proponent
SPR CUL-8 Cultural Resource Training: The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment	Prior to and during treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
method consists of physical disturbance of land surfaces (e.g., soil disturbance). This SPR applies to all treatment activities and treatment types, including treatment maintenance.			
Biological Resources Standard Project Requirements			
<p>SPR BIO-1: Review and Survey Project-Specific Biological Resources. The project proponent will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to treatment, no more than one year prior to the submittal of the PSA, and no more than one year between completion of the PSA and implementation of the treatment project. The data reviewed will include the biological resources setting, species and sensitive natural communities tables, and habitat information in this PEIR for the ecoregion(s) where the treatment will occur. It will also include review of the best available, current data for the area, including vegetation mapping data, species distribution/range information, CNDDDB, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. Reconnaissance-level biological surveys will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of a project site. The qualified surveyor will 1.) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural community, wetlands, or wildlife nursery site or habitat (including bird nests), and 2.) assess the suitability of habitat for special-status plant and animal species. The surveyor will also record any incidental wildlife observations. For each treatment project, habitat assessments will be completed at a time of year that is appropriate for identifying habitat and no more than one year prior to the submittal of the PSA, unless it can be demonstrated in the PSA that habitat assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, the project proponent, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment:</p> <p>1. Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided. If, based on the data review and reconnaissance-level survey, the qualified RPF or biologist determines that suitable habitat for sensitive biological resources is present but adverse effects on the suitable habitat can clearly be avoided through one of the following methods, the avoidance mechanism will be implemented prior to initiating treatment and will remain in effect throughout the treatment:</p> <p>a. by physically avoiding the suitable habitat, or</p>	Conduct data review and reconnaissance-level survey prior to treatment projects and no more than 1 year prior to submittal of the PSA for each treatment project	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>b. by conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites).</p> <p>Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified RPF or biologist.</p> <p>2. Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided. Further review and surveys will be conducted to determine presence/absence of sensitive biological resources that may be affected, as described in the SPRs below. Further review may include contacting USFWS, NOAA Fisheries, CDFW, CNPS, or local resource agencies as necessary to determine the potential for special-status species or other sensitive biological resources to be affected by the treatment activity. Focused or protocol-level surveys will be conducted as necessary to determine presence/absence. If protocol surveys are conducted, survey procedures will adhere to methodologies approved by resource agencies and the scientific community, such as those that are available on the CDFW webpage at: https://www.wildlife.ca.gov/Conservation/Survey-Protocols. Specific survey requirements are addressed for each resource type in relevant SPRs (e.g., additional survey requirements are presented for special-status plants in SPR BIO-7).</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>			
<p>SPR BIO-2: Require Biological Resource Training for Workers. The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot</p>	<p>Conduct biological resource training for crew members and contractors prior to treatment projects; contact CDFW or USFWS, as appropriate, if any wildlife protected by CESA or ESA is encountered and cannot leave the site on its own (without being handled) during treatment projects</p>	<p>Project Proponent</p>	<p>Project Proponent, CDFW, and USFWS, as appropriate</p>

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
leave the site on its own (without being handled). This SPR applies to all treatment activities and treatment types, including treatment maintenance.			
Sensitive Natural Communities and Other Sensitive Habitats			
<p>SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats. If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided, the project proponent will:</p> <ul style="list-style-type: none"> ▶ 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 http://vegetation.cnps.org/), or referring to relevant reports (e.g., reports found on the VegCAMP website). ▶ map and digitally record, using a Global Positioning System (GPS), the limits of any potential sensitive habitat and sensitive natural community identified in the treatment area. <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	Prior to treatment projects	Project Proponent	Project Proponent
<p>SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function. Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions by implementing the following within riparian habitats:</p> <ul style="list-style-type: none"> ▶ Retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat identified and mapped during surveys conducted pursuant to SPR BIO-3. Native riparian vegetation will be retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities. ▶ Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species. 	During design of treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> ▶ Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements. ▶ Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see <i>Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service</i>). ▶ Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided. ▶ Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints. ▶ Only hand application of herbicides approved for use in aquatic environments will be allowed and only during low-flow periods or when seasonal streams are dry. ▶ The project proponent will notify CDFW when required by pursuant to California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway. ▶ In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis 			

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW.</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>			
<p>SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub. The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. An ecological definition of type conversion is used in the CalVTP PEIR for assessment of environmental effects: a change from a vegetation type dominated by native shrub species that are characteristic of chaparral and coastal sage scrub vegetation alliances to a vegetation type characterized predominantly by weedy herbaceous cover or annual grasslands. For the PEIR, type conversion is considered in terms of habitat function, which is defined here as the arrangement and capability of habitat features to provide refuge, food source, and reproduction habitat to plants and animals, and thereby contribute to the conservation of biological and genetic diversity and evolutionary processes (de Groot et al. 2002). Some modification of habitat characteristics may occur provided habitat function is maintained (i.e., the location, essential habitat features, and species supported are not substantially changed).</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"> ► 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 	During design of treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <ul style="list-style-type: none"> ► The treatment design will maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function; the appropriate percent cover will be identified by the project proponent in the development of treatment design and be specific to the vegetation alliances that are present in the identified spatial scale used to evaluate type conversion. Mature native shrubs that are retained will be distributed contiguously or in patches within the stand. If the stand consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity, to the extent needed to avoid type conversion. <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"> ► For ecological restoration treatment types, complete removal of the mature shrub layer will not occur in native chaparral and coastal sage scrub vegetation types. ► Ecological restoration treatments will not be implemented in vegetation types that are within their natural fire return interval (i.e., time since last burn is less than the average time listed as the fire return interval range in Table 3.6-1) unless the project proponent demonstrates with substantial evidence that the habitat function of chaparral and coastal sage scrub would be improved. ► A minimum of 35 percent relative cover of existing shrubs and associated native vegetation will be retained at existing densities in patches distributed in a mosaic pattern within the treated area or the shrub canopy will be thinned by no more than 20 percent from baseline density (i.e., if baseline shrub canopy density is 60 percent, post treatment shrub canopy density will be no less than 40 percent). A different percent relative cover can be retained if the project proponent demonstrates with substantial evidence that alternative treatment design measures would result in effects on the habitat function of chaparral and coastal sage scrub that are equal or more favorable than those expected to result from application of the above measures. Biological considerations that may inform a deviation from the minimum 35 percent relative cover retention include but are not limited to soil moisture requirements, increased soil temperatures, changes in light/shading, presence of sufficient seed plants and nurse plants, erosion potential, and site hydrology. ► If the stand within the treatment area consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity. 			

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>These SPR requirements apply to all treatment activities and only the ecosystem restoration treatment type, including treatment maintenance.</p> <p>A determination of compliance with the SB 1260 prohibition of type conversion in chaparral and coastal sage scrub is a statutory issue separate from CEQA compliance that may involve factors additional to the ecological definition and habitat functions presented in the PEIR, such as geographic context. It is beyond the legal scope of the PEIR to define SB 1260 type conversion and statutory compliance. The project proponent, acting as lead agency for the proposed later treatment project, will be responsible for defining type conversion in the context of the project and making the finding that type conversion 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>SPR BIO-6: Prevent Spread of Plant Pathogens. When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., lone chaparral, blue oak woodland), the project proponent will implement the following best management practices to prevent the spread of <i>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"> ▶ clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site, or a site in a county where contamination is a risk; ▶ include training on <i>Phytophthora</i> diseases and other plant pathogens in the worker awareness training; ▶ minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment; ▶ minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination; ▶ clean soil and debris from equipment and sanitize hand tools, buckets, gloves, and footwear when moving from high risk to low risk areas or between widely separated portions of a treatment area; and ▶ follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration sites or with rare plants and sensitive habitat (Working Group for <i>Phytophtheras</i> in Native Habitats 2016). <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	During treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
Special-Status Plants			
<p>SPR BIO-7: Survey for Special-Status Plants. If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities."</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"> ▶ If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys. ▶ If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment. <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	Prior to treatment projects	Project Proponent	Project Proponent
Environmentally Sensitive Habitat Areas			
<p>SPR BIO-8: Identify and Avoid or Minimize Impacts in Coastal Zone ESHAs. When planning a treatment project within the Coastal Zone, the project proponent will, in consultation with the Coastal Commission or a local government with a certified Local Coastal Program (LCP) (as applicable), identify the habitat types and species present to determine if the area qualifies as an Environmentally Sensitive Habitat Area (ESHA). If the</p>	Prior to and during treatment projects	Project Proponent	Project Proponent and California Coastal Commission or a local government with a certified LCP (as applicable)

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<p>area is an ESHA, the treatment project may be allowed pursuant to this PEIR, if it meets the following conditions. If a project requires a CDP by the Coastal Commission or a local government with a certified LCP (as applicable), the CDP approval may require modification to these conditions to further avoid and minimize impacts:</p> <ul style="list-style-type: none"> ▪ The treatment will be designed, in compliance with the Coastal Act or LCP if a site is within a certified LCP area, to protect the habitat function of the affected ESHA, protect habitat values, and prevent loss or type conversion of habitat and vegetation types that define the ESHA, or loss of special-status species that inhabit the ESHA. ▪ Treatment actions will be limited to eradication or control of invasive plants, removal of uncharacteristic fuel loads (e.g., removing dead, diseased, 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 vegetation types present in the ESHA. ▪ A qualified biologist or RPF familiar with the ecology of the treatment area will monitor all treatment activities in ESHAs. ▪ Appropriate no-disturbance buffers will be developed in compliance with the Coastal Act or relevant LCP policies for treatment activities in the vicinity of ESHAs to avoid adverse direct and indirect effects to ESHAs. <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>			
Invasive Plants and Wildlife			
<p>SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail):</p> <ul style="list-style-type: none"> ▪ clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife; ▪ for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species; ► inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to 	During treatment projects	Project Proponent	Project Proponent

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<p>use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas;</p> <ul style="list-style-type: none"> ▶ stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area; ▶ identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles; ▶ treat invasive plant biomass onsite to eliminate seeds and propagules and prevent reestablishment or dispose of invasive plant biomass offsite at an appropriate waste collection facility (if not kept on site); transport invasive plant materials in a closed container or bag to prevent the spread of propagules during transport; and ▶ implement Fire and Fuel Management BMPs outlined in the "Preventing the Spread of Invasive Plants: Best Management Practices for Land Mangers" (Cal-IPC 2012, or current version). <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>			
Wildlife			
<p>SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites. If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries, monarch overwintering sites) with potential to be directly or indirectly affected by a treatment activity. The survey area will be determined by a qualified RPF or biologist based on the species and habitats and any recommended buffer distances in agency protocols.</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</p>	No more than 14 days prior to treatment projects	Project Proponent	Project Proponent, CDFW, and/or USFWS

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<p>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>SPR BIO-11. Install Wildlife-Friendly Fencing (Prescribed Herbivory). If temporary fencing is required for prescribed herbivory treatment, a wildlife-friendly fencing design will be used. The project proponent will require a qualified RPF or biologist to review and approve the design before installation to minimize the risk of wildlife entanglement. The fencing design will meet the following standards:</p> <ul style="list-style-type: none"> ▶ Minimize the chance of wildlife entanglement by avoiding barbed wire, loose or broken wires, or any material that could impale or snag a leaping animal; and, if feasible, keeping electric netting-type fencing electrified at all times or laid down while not in use. ▶ Charge temporary electric fencing with intermittent pulse energizers; continuous output fence chargers will not be permitted. ▶ Allow wildlife to jump over easily without injury by installing fencing that can flex as animals pass over it and installing the top wire low enough (no more than approximately 40 inches high on flat ground) to allow adult ungulates to jump over it. The determination of appropriate fence height will consider slope, as steep slopes are more difficult for wildlife to pass. ▶ Be highly visible to birds and mammals by using high-visibility tape or wire, flagging, or other markers. <p>This SPR applies only to prescribed herbivory and all treatment types, including treatment maintenance.</p>	Prior to and during treatment projects	Project Proponent	Project Proponent
<p>SPR BIO-12. Protect Common Nesting Birds, Including Raptors. The project proponent will schedule treatment activities to avoid the active nesting season of common native bird species, including raptors, that could be present within or adjacent to the treatment site, if feasible. Common native birds are species not otherwise treated as special status in the CalVTP PEIR. The active nesting season will be defined by the qualified RPF or biologist.</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</p>	Conduct a survey for common nesting birds (if needed) at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies (typically, up to 3 weeks before treatment); if an active nest is observed, implement avoidance strategies prior to and during treatment projects	Project Proponent	Project Proponent

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

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<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 (referred to by CAL FIRE as a Completion Report).</p> <p>The following avoidance strategies may also be considered together with or in lieu of other actions for implementation by a project proponent to avoid disturbance to raptor nests:</p> <ul style="list-style-type: none"> ► Monitor Active Raptor Nest During Treatment. A qualified RPF, biologist, or biological technician will monitor an active raptor nest during treatment activities to identify signs of agitation, nest defense, or other behaviors that signal disturbance of the active nest is likely (e.g., standing up from a brooding position, flying off the nest). If breeding raptors are showing signs of nest disturbance, one of the other avoidance strategies (establish buffer, modify treatment or defer treatment) will be implemented or a pause in the treatment activity will occur until the disturbance behavior ceases. ► Retention of Raptor Nest Trees. Trees with visible raptor nests, whether occupied or not, will be retained. <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>			
Geology, Soils, Paleontology, and Mineral Resource Standard Project Requirements			
<p>SPR GEO-1 Suspend Disturbance during Heavy Precipitation: The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the</p>	<p>During treatment projects if there is a "chance" (30 percent or more) of rain within the next 24 hours</p>	<p>Project Proponent</p>	<p>Project Proponent</p>

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types, including treatment maintenance.			
SPR GEO-2 Limit High Ground Pressure Vehicles: The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. If use of heavy equipment is required in saturated areas, other measures such as operating on organic debris, using low ground pressure vehicles, or operating on frozen soils/snow covered soils will be implemented to minimize soil compaction. Existing compacted road surfaces are exempted as they are already compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	During treatment projects if there is a "chance" (30 percent or more) of rain within the next 24 hours	Project Proponent	Project Proponent
SPR GEO-3 Stabilize Disturbed Soil Areas: The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. If mechanical, prescribed herbivory, or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, animal hooves, or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.	During mechanical, prescribed herbivory, and prescribed burn activities that result in exposure of bare soil over 50 percent or more of the treatment area	Project Proponent	Project Proponent
SPR GEO-4 Erosion Monitoring: The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. If erosion control measures are not properly implemented, they will be remediated prior to the first rainfall event per SPR GEO-3 and GEO-8. Additionally, the project proponent will inspect for evidence of erosion after the first large storm or rainfall event (i.e., ≥ 1.5 inches in 24 hours) as soon as is feasible after the event. Any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours per the methods stated in SPRs GEO-3 and GEO-8. This SPR applies only to	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	Project Proponent	Project Proponent

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mechanical, prescribed herbivory, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	large storm or rainfall event (i.e., \geq 1.5 inches in 24 hours) as soon as is feasible after the event; any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours		
SPR GEO-5 Drain Stormwater via Water Breaks: The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(c) of the California Forest Practice Rules (February 2019 version). Where waterbreaks cannot effectively disperse surface runoff, including where waterbreaks cause surface run-off to be concentrated on downslopes, other erosion controls will be installed as needed to maintain site productivity by minimizing soil loss. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types, including treatment maintenance.	During mechanical, manual, and prescribed burn treatment activities	Project Proponent	Project Proponent
SPR GEO-6 Minimize Burn Pile Size: The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. In addition, burn piles will not occupy more than 15 percent of the total treatment area (Busse et al. 2014). The project proponent will not locate burn piles in a Watercourse and Lake Protection Zone as defined in SPR HYD-4. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	During mechanical, manual, and prescribed burn treatment activities	Project Proponent	Project Proponent
SPR GEO-7 Minimize Erosion: To minimize erosion, the project proponent will: (1) Prohibit use of heavy equipment where any of the following conditions are present: (i) Slopes steeper than 65 percent. (ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme. (iii) Slopes steeper than 50 percent that lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake. (2) On slopes between 50 percent and 65 percent where the erosion hazard rating is moderate, and all slope percentages are for average slope steepness based on sample areas that are 20 acres, or less, heavy equipment will be limited to: (i) Existing tractor roads that do not require reconstruction, or (ii) New tractor roads flagged by the project proponent prior to the treatment activity. (3) Prescribed herbivory treatments will not be used in areas with over 50 percent slope. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	During treatment projects	Project Proponent	Project Proponent

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SPR GEO-8 Steep Slopes: The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, of other issue related to unstable soils and identity measures (e.g., those in SPR GEO-7) that will be implemented by the project proponent such that substantial erosion or loss of topsoil would not occur. This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.	Prior to and during treatment projects with slopes greater than 50 percent	Project Proponent	Project Proponent
Greenhouse Gas Emission Standard Project Requirements			
SPR GHG-1 Contribute to the AB 1504 Carbon Inventory Process: The project proponent of treatment projects subject to the AB 1504 process will provide all necessary data about the treatment that is needed by the U.S. Forest Service and FRAP to fulfill requirements of the AB 1504 carbon inventory, and to aid in the ongoing research about the long-term net change in carbon sequestration resulting from treatment activity. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	During treatment projects subject to the AB 1504 process	Project Proponent	Project Proponent and U.S. Forest Service
Hazardous Materials and Public Health and Safety Standard Project Requirements			
SPR HAZ-1 Maintain All Equipment: The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the project proponent will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Inspect all equipment for leaks prior to treatment projects; 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 projects	Project Proponent	Project Proponent
SPR HAZ-2 Require Spark Arrestors: The project proponent will require mechanized hand tools to have federal- or state-approved spark arrestors. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	During manual treatment activities	Project Proponent	Project Proponent
SPR HAZ-3 Require Fire Extinguishers: The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with	During manual treatment activities	Project Proponent	Project Proponent

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one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.			
SPR HAZ-4 Prohibit Smoking in Vegetated Areas: The project proponent will require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	During treatment projects	Project Proponent	Project Proponent
<p>SPR HAZ-5 Spill Prevention and Response Plan: The project proponent or licensed Pest Control Advisor (PCA) will prepare a Spill Prevention and Response Plan (SPRP) prior to beginning any herbicide treatment activities to provide protection to onsite workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. The SPRP will include (but not be limited to):</p> <ul style="list-style-type: none"> ▶ a map that delineates staging areas, and storage, loading, and mixing areas for herbicides; ▶ a list of items required in an onsite spill kit that will be maintained throughout the life of the activity; ▶ procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment. <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	Prepare SPRP prior to beginning any herbicide treatment activities; implement measures during herbicide treatment activities	Project Proponent	Project Proponent
<p>SPR HAZ-6 Comply with Herbicide Application Regulations: The project proponent will coordinate pesticide use with the applicable County Agricultural Commissioner(s), and all required licenses and permits will be obtained prior to herbicide application. The project proponent will prepare all herbicide applications to do the following:</p> <ul style="list-style-type: none"> ▶ Be implemented consistent with recommendations prepared annually by a licensed PCA. ▶ Comply with all appropriate laws and regulations pertaining to the use of pesticides and safety standards for employees and the public, as governed by the EPA, DPR, and applicable local jurisdictions. ▶ Adhere to label directions for application rates and methods, storage, transportation, mixing, container disposal, and weather limitations to application such as wind speed, humidity, temperature, and precipitation. ▶ Be applied by an applicator appropriately licensed by the State. <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	Prior to treatment projects	Project Proponent	Project Proponent and applicable County Agricultural Commissioner(s)

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<p>SPR HAZ-7 Triple Rinse Herbicide Containers: The project proponent will triple rinse all herbicide and adjuvant containers with clean water at an approved site, and dispose of rinsate by placing it in the batch tank for application per 3 CCR Section 6684. The project proponent will puncture used containers on the top and bottom to render them unusable, unless said containers are part of a manufacturer's container recycling program, in which case the manufacturer's instructions will be followed. Disposal of non-recyclable containers will be at legal dumpsites. Equipment will not be cleaned, and personnel will not be washed in a manner that would allow contaminated water to directly enter any body of water within the treatment area or adjacent watersheds. Disposal of all herbicides will follow label requirements and waste disposal regulations. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	During herbicide treatment activities	Project Proponent	Project Proponent
<p>SPR HAZ-8 Minimize Herbicide Drift to Public Areas: The project proponent will employ the following herbicide application parameters during herbicide application to minimize drift into public areas:</p> <ul style="list-style-type: none"> ▶ application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative); ▶ spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift; ▶ low nozzle pressures (30-70 pounds per square inch) will be utilized to minimize drift; and ▶ spray nozzles will be kept within 24 inches of vegetation during spraying. <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	During herbicide treatment activities	Project Proponent	Project Proponent
<p>SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas: For herbicide applications occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet, the project proponent will post signs at each end of herbicide treatment areas and any intersecting trails notifying the public of the use of herbicides. The signs will include the signal word (i.e., Danger, Warning or Caution), product name, and manufacturer; active ingredient; EPA registration number; target pest; treatment location; date and time of application; restricted entry interval, if applicable per the label requirements; date which notification sign may be removed; and a contact person with a telephone number. Signs will be posted prior to the start of treatment and notification will remain in place for at least 72 hours after treatment ceases. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	During herbicide treatment activities occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet	Project Proponent	Project Proponent

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Hydrology and Water Quality Standard Project Requirements			
SPR HYD-1 Comply with Water Quality Regulations: Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. 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.	During treatment projects	Project Proponent	Project Proponent
SPR HYD-2 Avoid Construction of New Roads: The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Prior to treatment projects	Project Proponent	Project Proponent
SPR HYD-3 Water Quality Protections for Prescribed Herbivory: The project proponent will include the following water quality protections for all prescribed herbivory treatments: <ul style="list-style-type: none"> ▶ Environmentally sensitive areas such as waterbodies, wetlands, or riparian areas will be identified in the treatment prescription and excluded from prescribed herbivory project areas using temporary fencing or active herding. A buffer of approximately 50 feet will be maintained between sensitive and actively grazed areas. ▶ Water will be provided for grazing animals in the form of an on-site stock pond or a portable water source located outside of environmentally sensitive areas. ▶ Treatment prescriptions will be designed to protect soil stability. Grazing animals will be herded out of an area if accelerated soil erosion is observed. 	Prior to prescribed herbivory treatment activities	Project Proponent	Project Proponent

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This SPR applies to prescribed herbivory treatment activities and all treatment types, including treatment maintenance.			
SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones: The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) on either side of watercourses as defined in the table below, which is based on 14 CCR Section 916 .5 of the California Forest Practice Rules (February 2019 version). WLPZ's are classified based on the uses of the stream and the presence of aquatic life. Wider WLPZs are required for steep slopes.	Establish WLPZs during design of treatment projects; implement WLPZ protections during treatment projects	Project Proponent	Project Proponent

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

Water Class	Class I	Class II	Class III	Class IV
Water Class Characteristics or Key Indicator Beneficial Use	1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or 2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.	1) Fish always or seasonally present offsite within 1000 feet downstream and/or 2) Aquatic habitat for nonfish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.	No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-water flow conditions after completion of timber operations.	Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.
WLPZ Width (ft) – Distance from top of bank to the edge of WLPZ				
< 30 % Slope	75	50	Sufficient to prevent the degradation of downstream beneficial uses of water. Determined on a site-specific basis.	
30-50 % Slope	100	75		
>50 % Slope	150	100		

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

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<p>The following WLPZ protections will be applied for all treatments:</p> <ul style="list-style-type: none"> ▶ Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed area to act as a filter strip for raindrop energy dissipation and for wildlife habitat. If this percentage is reduced a qualified RPF will provide the project proponent with a site- and/or treatment activity-specific explanation for the percent surface cover reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced percent as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). This requirement is based on 14 CCR Section 916.4 [936.4, 956.4] Subsection (b)(6) (February 2019 version) and 14 CCR Section 916.5 (February 2019 version). ▶ Equipment, including tractors and vehicles, must not be driven in wet areas or WLPZs, except over existing roads or watercourse crossings where vehicle tires or tracks remain dry. ▶ Equipment used in vegetation removal operations will not be serviced in WLPZs, within wet meadows or other wet areas, or in locations that would allow grease, oil, or fuel to pass into lakes, watercourses, or wet areas. ▶ WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately. ▶ Burn piles will be located outside of WLPZs. ▶ No fire ignition (nor use of associated accelerants) will occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs. ▶ Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Treatment shall occur prior to October 15th and disturbances that are created after October 15th shall be treated within 10 days. Stabilization measures shall be selected that will prevent significant movement of soil into water bodies and may include but are not limited to mulching, rip-rap, grass seeding, or chemical soil stabilizers. ▶ Where mineral soil has been exposed by project operations on approaches to watercourse crossings of Class I, II, or III within a WLPZ, the disturbed area shall be stabilized to the extent necessary to prevent the discharge of soil into watercourses or lakes in amounts that would adversely affect the quality and beneficial uses of the watercourse. ▶ Where necessary to protect beneficial uses of water from project operations, protection measures such as seeding, mulching, or replanting shall be used to retain and improve the natural ability of the ground cover within the WLPZ to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes. 			

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<p>► 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.</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>			
<p>SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides: The project proponent will implement the following measures when applying herbicides:</p> <ul style="list-style-type: none"> ► Locate herbicide mixing sites in areas devoid of vegetation and where there is no potential of a spill reaching non-target vegetation or a waterway. ► Use only herbicides labeled for use in aquatic environments when working in riparian habitats or other areas where there is a possibility the herbicide could come into direct contact with water. Only hand application of herbicides will be allowed in riparian habitats and only during low-flow periods or when seasonal streams are dry. ► No terrestrial or aquatic herbicides will be applied within WLPZs of Class I and II watercourses, if feasible. If this is not feasible, hand application of herbicides labeled for use in aquatic environments may be used within the WLPZ provided that the project proponent notifies the applicable regional water quality control board no fewer than 15 days prior to herbicide application. The feasibility of avoiding herbicide application within WLPZ of Class I and II watercourses will be determined by the project proponent and may be based on whether doing so will preclude achieving CalVTP program objectives, including, but not limited to, protection of vulnerable communities. The reasons for infeasibility will be documented in the PSA. ► No herbicides will be applied within a 50-foot buffer of ESA or CESA listed plant species or within 50 feet of dry vernal pools. ► For spray applications in and adjacent to habitats suitable for special-status species, use herbicides containing dye (registered for aquatic use by DPR, if warranted) to prevent overspray. ► Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative). ► No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities. <p>This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	During herbicide treatment activities	Project Proponent	Project Proponent

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SPR HYD-6 Protect Existing Drainage Systems: If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing activities. If a drainage structure or infiltration system is inadvertently disturbed or modified during project activities, the project proponent will coordinate with owner of the system or feature to repair any damage and restore pre-project drainage conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Mark existing stormwater drainage infrastructure prior to ground disturbing activities; if a drainage structure or infiltration system is inadvertently disturbed or modified during treatment, coordinate with owner to repair damage and restore pre-project drainage conditions	Project Proponent	Project Proponent
Noise Standard Project Requirements			
SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours: The project proponent will require that operation of heavy equipment associated with treatment activities (heavy off-road equipment, tools, and delivery of equipment and materials) will occur during daytime hours if such noise would be audible to receptors (e.g., residential land uses, schools, hospitals, places of worship). Cities and counties in the treatable landscape typically restrict construction-noise (which would apply to vegetation treatment noise) to particular daytime hours. If the project proponent is subject to local noise ordinance, it will adhere to those to the extent the project is subject to them. If the applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating activity can occur noise-generating vegetation treatment activity will be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday and federal holidays. If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	During treatment projects	Project Proponent	Project Proponent
SPR NOI-2 Equipment Maintenance: The project proponent will require that all powered treatment equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types, including treatment maintenance.	During treatment projects	Project Proponent	Project Proponent
SPR NOI-3 Engine Shroud Closure: The project proponent will require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	During treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses: The project proponent will locate treatment activities, equipment, and equipment staging areas away from nearby noise-sensitive land uses (e.g., residential land uses, schools, hospitals, places of worship), to the extent feasible, to minimize noise exposure. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	During treatment projects	Project Proponent	Project Proponent
SPR NOI-5 Restrict Equipment Idle Time: The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	During treatment projects	Project Proponent	Project Proponent
SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors: For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. Notification will include anticipated dates and hours during which treatment activities are anticipated to occur and contact information, including a daytime telephone number, of the project representative. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	Prior to mechanical treatment activities within 1,500 feet of noise-sensitive receptors	Project Proponent	Project Proponent
Recreation Standard Project Requirements			
SPR REC-1 Notify Recreational Users of Temporary Closures. If a treatment activity would require temporary closure of a public recreation area or facility, the project proponent will coordinate with the owner/manager of that recreation area or facility. If temporary closure of a recreation area or facility is required, the project proponent will work with the owner/manager to post notifications of the closure at least 2 weeks prior to the commencement of the treatment activities. Additionally, notification of the treatment activity will be provided to the Administrative Officer (or equivalent official responsible for distribution of public information) of the county(ies) in which the affected recreation area or facility is located. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Approximately 2 weeks prior to treatment projects requiring temporary closure of public recreation areas or facilities	Project Proponent	Project Proponent and 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
Transportation Standard Project Requirements			
SPR TRAN-1 Implement Traffic Control during Treatments: Prior to initiating vegetation treatment activities the project proponent will work with the agency(ies) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed. A TMP will be needed if traffic generated by the project would result in obstructions, hazards, or delays exceeding applicable jurisdictional standards along access routes for individual vegetation treatments. If needed, a TMP will be prepared to provide measures	If needed, prepare TMP prior to treatment projects and implement during project treatments	Project Proponent	Project Proponent and agency(ies) with jurisdiction over affected roadways

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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>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>			
Public Services and Utilities Standard Project Requirements			
<p>SPR UTIL-1: Solid Organic Waste Disposition Plan. For projects requiring the disposal of material outside of the treatment area, the project proponent will prepare an Organic Waste Disposition Plan prior to initiating treatment activities. The Solid Organic Waste Disposition Plan will include the amount (e.g., tons) of solid organic waste to be managed onsite (i.e., scattering of wood materials, generating unburned piles, and pile burning) and transported offsite for processing (i.e., biomass power plant, wood product processing facility, composting). If the project proponent intends to transport solid organic waste offsite, the Solid Organic Waste Disposition Plan will clearly identify the location and capacity of the intended processing facility, consistent with local and state regulations to demonstrate that adequate capacity exists to accept the treated materials. This SPR applies only to mechanical and manual treatment activities and all treatment types, including treatment maintenance.</p>	<p>Prepare an Organic Waste Disposition Plan prior to mechanical or manual treatment activities; implement plan during mechanical or manual treatment activities</p>	<p>Project Proponent</p>	<p>Project Proponent</p>

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
MITIGATION MEASURES			
Aesthetics			
<p>Mitigation Measure AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks</p> <p>The project proponent will conduct a visual reconnaissance of the treatment area prior to implementing non-shaded fuel breaks to observe the surrounding landscape and determine if public viewing locations, including scenic vistas, public trails, and state scenic highways, have views of the proposed treatment area. If none are identified, the non-shaded fuel break may be implemented without additional visual mitigation.</p> <p>If the project proponent identifies public viewing points, including heavily used scenic vistas, public trails, recreation areas, and state scenic highways with lengthy views (i.e., longer than a few seconds) of a proposed non-shaded fuel break treatment area, the project proponent will, prior to implementation, attempt to identify any feasible change in location of the fuel break to reduce its visibility from public viewpoints. If no feasible location changes exist that would reduce impacts to public viewers and achieve the intended wildfire risk reduction objectives of the proposed non-shaded fuel break, the project proponent will implement, where feasible, a shaded fuel break rather than a non-shaded fuel break, if the shaded fuel break would achieve the intended wildfire risk reduction objectives. With the shaded fuel break, the project proponent will thin and feather adjacent vegetation to break up the linear edges of the fuel break and strategically preserve vegetation at the edge of the fuel break, as feasible, to help screen public views and minimize the contrast between the fuel break and surrounding vegetation.</p>	Prior to and during non-shaded fuel break treatment projects	Project Proponent	Project Proponent
Air Quality			
<p>Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques</p> <p>Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. It is acknowledged that due to cost, availability, and the limits of current technology, there may be circumstances where implementation of certain emission reduction techniques will not be feasible. The project proponent will document the emission reduction techniques that will be applied and will explain the reasons other techniques that could reduce emissions are infeasible.</p> <p>Techniques for reducing emissions may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> ► Diesel-powered off-road equipment used in construction will meet EPA's Tier 4 emission standards as defined in 40 CFR 1039 and comply with the exhaust emission test procedures and provisions of 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. 	During treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Prior to implementation of treatment activities, the project proponent will demonstrate the ability to supply the compliant equipment. A copy of each unit's certified tier specification or model year specification and operating permit (if applicable) will be available upon request at the time of mobilization of each unit of equipment.</p> <ul style="list-style-type: none"> ▶ Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following criteria: <ul style="list-style-type: none"> ▪ meet California's Low Carbon Fuel Standards and be certified by CARB Executive Officer; ▪ be hydrogenation-derived (reaction with hydrogen at high temperatures) from 100 percent biomass material (i.e., non-petroleum sources), such as animal fats and vegetables; ▪ contain no fatty acids or functionalized fatty acid esters; and ▪ have a chemical structure that is identical to petroleum-based diesel and complies with American Society for Testing and Materials D975 requirements for diesel fuels to ensure compatibility with all existing diesel engines. ▶ Electric- and gasoline-powered equipment will be substituted for diesel-powered equipment. ▶ Workers will be encouraged to carpool to work sites, and/or use public transportation for their commutes. ▶ Off-road equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NO_x and PM. 			
Archaeological, Historical, and Tribal Cultural Resources			
<p>Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources</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</p>	During ground-disturbing activities	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
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.			
Biological Resources			
<p>Mitigation Measure BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA</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 application. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform the determination of buffer width. If a no-disturbance buffer is reduced below 50 feet from a listed plant, a qualified RPF or botanist will provide the project proponent with a site-and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report) with a science-based justification for the deviation. No fire ignition (and associated use of accelerants) will occur within 50 feet of listed plants.</p> <p>For species listed under ESA or CESA, if the project proponent cannot avoid loss by implementing no-disturbance buffers, the project proponent will implement Mitigation Measure BIO-1c.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or botanist, in consultation with CDFW and USFWS, as appropriate depending</p>	Prior to treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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>Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA</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"> ► Physically avoid the area occupied by the special-status plants by establishing a no-disturbance buffer around the area occupied by species and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The no-disturbance buffers will generally be a minimum of 50 feet from special-status plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid loss of or damaging to special-status plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate size and shape of the buffer zone will be determined by a qualified RPF or botanist and will depend on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform an appropriate buffer size and shape. ► Treatments may be conducted within this buffer if the potentially affected special-status plant species is a geophytic, stump-sprouting, or annual species, and the treatment can be conducted outside of the growing season (e.g., after it has completed its annual life cycle) or during the dormant season using only treatment activities that would not damage the stump, root system or other underground parts of special-status plants or destroy the seedbank. 	Prior to treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> ▶ Treatments will be designed to maintain the function of special-status plant habitat. For example, for a fuel break proposed in treatment areas occupied by special-status plants, if the removal of shade cover would degrade the special-status plant habitat despite the requirement to physically or seasonally avoid the special-status plant itself, habitat function would be diminished and the treatment would need to be modified or precluded from implementation. ▶ No fire ignition (and associated use of accelerants) will occur within the special-status plant buffer. <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>Mitigation Measure BIO-1c: Compensate for Unavoidable Loss of Special-Status Plants</p> <p>If significant impacts on listed or non-listed special-status plants cannot feasibly be avoided as specified under the circumstances described under Mitigation Measures BIO-1a and 1b, the project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant impacts that require compensatory mitigation and describes the compensatory mitigation strategy being implemented and how unavoidable losses of special-status plants will be compensated. The project proponent</p>	Prior to treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. If the special-status plant taxa are listed under ESA or CESA, the plan will be submitted to CDFW and/or USFWS (as appropriate) for review and comment.</p> <p>The first priority for compensatory mitigation will be preserving and enhancing existing populations outside of the treatment area in perpetuity, or if that is not an option because existing populations that can be preserved in perpetuity are not available, one of the following mitigation options will be implemented by the project proponent instead:</p> <ul style="list-style-type: none"> ▶ creating populations on mitigation sites outside of the treatment area through seed collection and dispersal (annual species) or transplantation (perennial species); ▶ purchasing mitigation credits from a CDFW- or USFWS-approved conservation or mitigation bank in sufficient quantities to offset the loss of occupied habitat; and ▶ if the affected special-status plants are not listed under ESA or CESA, compensatory mitigation may include restoring or enhancing degraded habitats so that they are made suitable to support special-status plant species in the future. <p>If relocation efforts are part of the Compensatory Mitigation Plan, the plan will include details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, success criteria, and remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements. The following performance standards will be applied for relocation:</p> <ul style="list-style-type: none"> ▶ the extent of occupied area will be substantially similar to the affected occupied habitat and will be suitable for self-producing populations. Re-located/re-established populations will be considered suitable for self-producing when: ▶ habitat conditions allow for plants to reestablish annually for a minimum of 5 years with no human intervention, such as supplemental seeding; and ▶ reestablished habitats contain an occupied area comparable to existing occupied habitat areas in similar habitat types in the region. <p>If preservation of existing populations or creation of new populations is part of the mitigation plan, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands and actions (e.g., the number and type of credits, location of mitigation bank or easement, restoration or enhancement actions), parties responsible for the long-term management of the land, and the legal and funding mechanisms (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</p>			

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity.</p> <p>If mitigation includes dedication of conservation easements, purchase of mitigation credits, or other offsite conservation measures, the details of these measures will be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, funding assurances, and success criteria such as those listed above and other details, as appropriate to target the preservation of long term viable populations.</p> <p>If mitigation includes restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored habitat.</p> <p>If the loss of occupied habitat cannot be offset (e.g., if preservation of existing populations or creation of new populations through relocation efforts are not available for a certain species), and as a result treatment activities would substantially reduce the number or restrict the range of listed plant species, then the treatment will not qualify as within the scope of this PEIR.</p> <p>Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit for state-listed plants), if these requirements are equally or more effective than the mitigation identified above.</p>			
<p>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)</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"> 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 	Prior to and during treatment projects	Project Proponent	Project Proponent, CDFW, and/or USFWS/NOAA Fisheries

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <ul style="list-style-type: none"> ▶ For species listed under ESA or CESA, if the project proponent cannot avoid mortality, injury or disturbance by implementing one of the two options listed above, the project proponent will implement Mitigation Measure BIO-2c. ▶ Injury or mortality of California Fully Protected Species is prohibited pursuant to Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code and will be avoided. <p><u>Maintain Habitat Function</u></p> <ul style="list-style-type: none"> ▶ The project proponent will design treatment activities to maintain the habitat function, by implementing the following: <ul style="list-style-type: none"> ▪ While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; dens; tree snags; large raptor nests [including inactive nests]; downed woody debris; food sources). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science. ▪ If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that listed or fully protected wildlife with specific requirements for high canopy cover (e.g., Humboldt marten, fisher, spotted owl, coastal California gnatcatcher, riparian woodrat) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted [e.g., 50 percent for coastal California gnatcatcher]) such that habitat function is maintained. ▶ A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. Because this measure pertains to species listed under CESA or ESA or are fully protected, the qualified RPF or biologist 			

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>will consult with CDFW and/or USFWS/NOAA Fisheries regarding the determination that habitat function is maintained. If consultation determines that the treatment will not maintain habitat function for the special-status species, the project proponent will implement Mitigation Measure BIO-2c.</p>			
<p>Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)</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"> ▶ The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals: <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, buffers will generally be a minimum of 100 feet, unless site conditions indicate a smaller buffer would be sufficient for protection or a larger buffer would be needed. Factors to be considered in determining buffer size will include, but not be limited to, the species' tolerance to disturbance; the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; baseline levels of noise and human activity; and treatment activity. Buffer size may be adjusted if the qualified RPF or biologist determines that such an adjustment would not be likely to adversely affect (i.e., cause mortality, injury, or disturbance to) the species within the nest, den, burrow, or other occupied site. If a no-disturbance buffer is reduced below 100 feet from an occupied site, a qualified RPF or biologist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).</p> <ul style="list-style-type: none"> ▪ 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 	<p>Prior to and during treatment projects</p>	<p>Project Proponent</p>	<p>Project Proponent, CDFW, and/or USFWS</p>

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <ul style="list-style-type: none"> 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. <p><u>Maintain Habitat Function</u></p> <ul style="list-style-type: none"> For all treatment activities, the project proponent will design treatment activities to maintain the habitat function by implementing the following: <ul style="list-style-type: none"> While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; tree snags; large raptor nests [including inactive nests]; downed woody debris). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science. If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that special-status wildlife with specific requirements for high canopy cover (e.g., northern goshawk, Sierra Nevada snowshoe hare) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted) such that the habitat function is maintained. 			

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>► 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.</p> <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 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>Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)</p> <p>If the provisions of Mitigation Measure BIO-2a, BIO-2b, BIO-2d, BIO-2e, BIO-2f, or BIO-2g cannot be implemented and the project proponent determines that additional mitigation is necessary to reduce significant impacts, the project proponent will compensate for such impacts to species or habitat by acquiring and/or protecting land that provides (or will provide in the case of restoration) habitat function for affected</p>	Prior to treatment projects	Project Proponent	Project Proponent, CDFW, and/or any other applicable responsible agency

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>species that is at least equivalent to the habitat function removed or degraded as a result of the treatment.</p> <p>Compensation may include:</p> <ol style="list-style-type: none"> 1. Preserving existing habitat outside of the treatment area in perpetuity; this may entail purchasing mitigation credits and/or lands from a CDFW- or USFWS-approved entity in sufficient quantity to offset the residual significant impacts, generally at a ratio of 1:1 for habitat; and 2. Restoring or enhancing existing habitat within the treatment area or outside of the treatment area (including decommissioning roads, adding perching structures, removing existing perching structures, or removing existing movement barriers or other existing features that are adversely affecting the species). <p>The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and:</p> <ol style="list-style-type: none"> 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 mechanisms for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity. 2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored habitat. <p>Review requirements are as follows:</p> <ul style="list-style-type: none"> ▶ 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. ▶ For species listed under ESA or CESA or a California Fully Protected Species, the project proponent will submit the mitigation plan to CDFW and/or USFWS/NOAA Fisheries for review and comment. 			

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>► For other special-status wildlife species the project proponent may consult with CDFW and/or USFWS regarding the availability and applicability of compensatory mitigation and other related technical information.</p> <p>Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., incidental take permit), if these requirements are equally or more effective than the mitigation identified above.</p>			
<p>Mitigation Measure BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)</p> <p>If elderberry shrubs within the documented range of valley elderberry longhorn beetle are identified during review and surveys for SPR BIO-1, and valley elderberry longhorn beetle or likely occupied suitable elderberry habitat (e.g., within riparian, within historic riparian, containing exit holes) is confirmed to be present during protocol-level surveys following the protocol outlined in USFWS <i>Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle</i> (USFWS 2017) per SPR BIO-10, the following protective measures will be implemented to avoid and minimize impacts to valley elderberry longhorn beetle:</p> <ul style="list-style-type: none"> ► If elderberry shrubs are 165 feet or more from the treatment area, and treatment activities would not encroach within this distance, direct or indirect impacts are not expected and further mitigation is not required. ► If elderberry shrubs are located within 165 feet of the treatment area, the following measures will be implemented: <ul style="list-style-type: none"> ■ A minimum avoidance area of at least 20 feet from the dripline of each elderberry plant will be fenced or flagged and maintained to avoid direct impacts (e.g., damage to root system) that could damage or kill the plant, with the exception of the following activities: <ul style="list-style-type: none"> ■ Manual trimming of elderberry shrubs will only occur between November and February and will avoid removal of any branches or stems that are greater than or equal to 1 inch in diameter to avoid and minimize adverse effects on valley elderberry longhorn beetle. ■ Manual or mechanical vegetation treatment within the drip-line of any elderberry shrub will be limited to the season when adults are not active (August - February), will be limited to methods that do not cause ground disturbance, and will avoid damaging the elderberry. ■ A qualified RPF, biologist, or biological technician familiar with valley elderberry longhorn beetle and its life history will monitor the work area to verify the avoidance and minimization measures are implemented. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in potential adverse effects to valley elderberry longhorn beetle. 	Prior to and during treatment project	Project Proponent	Project Proponent, CDFW, and/or any other applicable responsible agency

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance of VELB or degradation of occupied habitat such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c.</p>			
<p>Mitigation Measure BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities)</p> <p>If federally listed butterflies are identified as occurring or having potential to occur during review and surveys for SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, then the following measures will be implemented:</p> <ul style="list-style-type: none"> ▶ Treatment areas within the range of these species will be surveyed for the host plant for each species (Table 3.6-34). ▶ Host plants for federally listed butterflies within the occupied habitat will be marked with high-visibility flagging, fencing, or stakes, and no treatment activities will occur within 10 feet of these plants. ▶ Because prescribed herbivory could result in the indiscriminate removal of the host plants for federally listed butterflies, this treatment type will not be used within occupied habitat of any federally listed butterfly species, unless it is known that the host plant is unpalatable to the herbivore. ▶ Treatment areas that are not occupied but are within the range of the federally listed butterfly will be divided into as many treatment units as feasible such that the entirety of the habitat is not treated within the same year. ▶ Treatments will be conducted in a patchy pattern to the extent feasible in areas that are not occupied but are within the range of the federally listed butterfly, such that the entirety of the habitat is not burned or removed and untreated portions of suitable habitat are retained. <p>If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance of federally listed butterflies or degradation of occupied habitat (host plants) such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c.</p> <p>CESA and ESA Listed Species. A qualified RPF or biologist will determine if, after implementation of any feasible impact avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed butterflies or degradation of occupied habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c.</p>	<p>Prior to and during treatment projects</p>	<p>Project Proponent</p>	<p>Project Proponent, CDFW, and/or any other applicable responsible agency</p>

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

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

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>Other Special-status Species. A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA, because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status butterflies would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status butterflies or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status butterfly species would benefit from treatment in the occupied habitat area even though some may be killed, injured or disturbed during treatment activities. For a treatment to be considered beneficial to special-status butterfly species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources). If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.</p>			
<p>Mitigation Measure BIO-2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities)</p> <p>If treatment activities would occur within the limited range of any state or federally listed beetle, fly, grasshopper, or snail, and these species are identified as occurring or having potential to occur due to the presence of potentially suitable habitat during review and surveys for SPR BIO-1 and surveys for SPR BIO-10, then the following measures will be implemented:</p> <ul style="list-style-type: none"> ▶ To avoid and minimize impacts to Mount Hermon June beetle and Zayante band-winged grasshopper, treatment activities will not occur within "Sandhills" habitat in Santa Cruz County, the only suitable habitat for these species. ▶ To avoid and minimize impacts to Casey's June beetle, Delhi Sands flower-loving fly (<i>Rhaphiomidas terminates abdominalis</i>), Delta green ground beetle (<i>Elaphrus viridis</i>), Morro shoulderband snail, Ohlone tiger beetle (<i>Cicindela ohlone</i>), and Trinity bristle snail, treatment activities will not occur within habitat in the range of these species that is deemed suitable by a qualified RPF or biologist with familiarity of the species. 	Prior to and during treatment projects	Project Proponent	Project Proponent, CDFW, and/or any other applicable responsible agency

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

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status bumble bees would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status bumble bees or degradation of occupied (or assumed to be occupied) habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status bumble bee species would benefit from treatment in the occupied (or assumed to be occupied) habitat area even though some of the non-listed special-status bumble bees may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to special-status bumble bee species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation will be required.</p>			
<p>Mitigation Measure BIO-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory)</p> <p>The project proponent will implement the following measure if treatment activities are planned within the range of desert bighorn sheep, peninsular bighorn sheep, Sierra Nevada bighorn sheep, or pronghorn:</p> <ul style="list-style-type: none"> ▶ Prescribed herbivory activities will be prohibited within a 14-mile buffer around suitable habitat for any species of bighorn sheep within the range of these species consistent with the more stringent recommendations in the Recovery Plan for Sierra Nevada bighorn sheep (USFWS 2007). ▶ Prescribed herbivory activities will be avoided within the range of pronghorn where feasible (where this range does not overlap with the range of any species of bighorn sheep). 	During prescribed herbivory activities	Project Proponent	Project Proponent
<p>Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</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>	Prior to and during treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> ▶ 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 http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined. ▶ Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. Treatments will be designed to replicate the fire regime attributes for the affected sensitive natural community or oak woodland type including seasonality, fire return interval, fire size, spatial complexity, fireline intensity, severity, and fire type as described in <i>Fire in California's Ecosystems</i> (Van Wagtendonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval (i.e., time since last burn is less than the average time required for that vegetation type to recover from fire) or within Condition Class 1. ▶ To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled). ▶ To the extent feasible, fuel breaks will not remove more than 20 percent of the native vegetation relative cover from a stand of sensitive natural community vegetation in sensitive natural communities with a rarity rank of S3 (vulnerable) or in oak woodlands. In forest and woodland sensitive natural communities with a rarity rank of S3, and in oak woodlands, only shaded fuel breaks will be installed, and they will not be installed in more than 20 percent of the stand of sensitive natural community or oak woodland vegetation (i.e., if the sensitive natural community covers 100 acres, no more than 20 acres will be converted to create the fuel break). ▶ Use prescribed burning as the primary treatment activity in sensitive natural communities that are fire dependent (e.g., closed-cone forest and woodland alliances, chaparral alliances characterized by fire-stimulated, obligate seeders), to the extent feasible and appropriate based on the fire regime attributes as described in <i>Fire in California's Ecosystems</i> (Van Wagtendonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). ▶ Time prescribed herbivory to occur when non-target vegetation is not susceptible to damage (e.g. non-target vegetation is dormant or has completed its reproductive cycle for the year). For example, use herbivores to control invasive plants growing in sensitive habitats or sensitive natural communities when sensitive vegetation is 			

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <p>The feasibility of implementing the avoidance measures will be determined by the project proponent based on whether implementation of this mitigation measure will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. If the avoidance measures are determined by the project proponent to be infeasible, the project proponent will document the reasons implementation of the avoidance strategies are infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).</p> <p>A qualified RPF or botanist with knowledge of the affected sensitive natural community will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat functions of the sensitive natural community or oak woodland. If the project proponent determines the impact on sensitive natural communities or oak woodlands would be less than significant, no further mitigation will be required. If the project proponent determines that the loss or degradation of sensitive natural communities or oak woodlands would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-3b will be implemented.</p> <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>			

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands</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"> ▶ Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by: <ul style="list-style-type: none"> ▪ restoring sensitive natural community or oak woodland functions and acreage within the treatment area; ▪ restoring degraded sensitive natural communities or oak woodlands outside of the treatment area at a sufficient ratio to offset the loss of acreage and habitat function; or ▪ preserving existing sensitive natural communities or oak woodlands of equal or better value to the sensitive natural community lost through a conservation easement at a sufficient ratio to offset the loss of acreage and habitat function. ▶ The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: <ol style="list-style-type: none"> 1. For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity. 2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat. <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>	Prior to treatment projects	Project Proponent	Project Proponent, CDFW, and/or any other applicable responsible agency

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat</p> <p>If, after implementation of SPR BIO-4, impacts to riparian habitat remain significant under CEQA, the project proponent will implement the following:</p> <ul style="list-style-type: none"> ▶ Compensate for unavoidable losses of riparian habitat acreage and function by: <ul style="list-style-type: none"> ▪ restoring riparian habitat functions and acreage within the treatment area; ▪ restoring degraded riparian habitat outside of the treatment area; ▪ purchasing riparian habitat credits at a CDFW-approved mitigation bank; or ▪ preserving existing riparian habitat of equal or better value to the riparian habitat lost through a conservation easement at a sufficient ratio to offset the loss of riparian habitat function and value. ▶ The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on riparian habitat that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: <ol style="list-style-type: none"> 1. For preserving existing riparian habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity. 2. For restoring or enhancing riparian habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat. <p>The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.</p>	Prior to treatment projects	Project Proponent	Project Proponent/CDFW

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands</p> <p>Impacts to wetlands will be avoided using the following measures:</p> <ul style="list-style-type: none"> ▶ The qualified RPF or biologist will delineate the boundaries of federally protected wetlands according to methods established in the USACE wetlands delineation manual (Environmental Laboratory 1987) and the appropriate regional supplement for the ecoregion in which the treatment is being implemented. ▶ The qualified RPF or biologist will delineate the boundaries of wetlands that may not meet the definition of waters of the United States, but would qualify as waters of the state, according to the state wetland procedures (California Water Boards 2019 or current procedures). ▶ A qualified RPF or biologist will establish a buffer around wetlands and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The buffer will be a minimum width of 25 feet but may be larger if deemed necessary. The appropriate size and shape of the buffer zone will be determined in coordination with the qualified RPF or biologist and will depend on the type of wetland present (e.g., seasonal wetland, wet meadow, freshwater marsh, vernal pool), the timing of treatment (e.g., wet or dry time of year), whether any special-status species may occupy the wetland and the species' vulnerability to the treatment activities, environmental conditions and terrain, and the treatment activity being implemented. ▶ A qualified RPF or biological technician will periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided. ▶ Within this buffer, herbicide application is prohibited. ▶ Within this buffer, soil disturbance is prohibited. Accordingly, the following activities are not allowed within the buffer zone: mechanical treatments, prescribed herbivory, equipment and vehicle access or staging. ▶ Only prescribed (broadcast) burning may be implemented in wetland habitats if it is determined by a qualified RPF or biologist that: <ul style="list-style-type: none"> ▪ No special-status species are present in the wetland habitat ▪ The wetland habitat function would be maintained. ▪ The prescribed burn is within the normal fire return interval for the wetland vegetation types present ▪ Fire containment lines and pile burning are prohibited within the buffer ▪ No fire ignition (and associated use of accelerants) will occur within the wetland buffer 	Prior to and during treatment projects	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>Mitigation Measure BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites</p> <p>The project proponent will implement the following measures while working in treatment areas that contain nursery sites identified in surveys conducted pursuant to SPR BIO-10:</p> <ul style="list-style-type: none"> ► Retain Known Nursery Sites. A qualified RPF or biologist will identify the important habitat features of the wildlife nursery and, prior to treatment activities, will mark these features for avoidance and retention during treatment. ► Establish Avoidance Buffers. The project proponent will establish a non-disturbance buffer around the nursery site if activities are required while the nursery site is active/occupied. The appropriate size and shape of the buffer will be determined by a qualified RPF or biologist, based on potential effects of project-related habitat disturbance, noise, visual disturbance, and other factors. No treatment activity will commence within the buffer area until a qualified RPF or biologist confirms that the nursery site is no longer active/occupied. Monitoring of the effectiveness of the non-disturbance buffer around the nursery site by a qualified RPF, biologist, or biological technician during and after treatment activities will be required. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in potential adverse effects to special-status species. 	Prior to and during treatment projects	Project Proponent	Project Proponent
Greenhouse Gas Emissions			
<p>Mitigation Measure GHG-2. Implement GHG Emission Reduction Techniques During Prescribed Burns</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"> ► reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned; ► reduce the total area burned through mosaic burning; ► burn when fuels have a higher fuel moisture content; ► reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and ► schedule burns before new fuels appear. 	Prior to and during prescribed burn activities	Project Proponent	Project Proponent

Standard Project Requirements and Mitigation Measures	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>			
Hazardous Materials, Public Health and Safety			
<p>Mitigation Measure HAZ-3: Identify and Avoid Known Hazardous Waste Sites</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 (https://www.envirostor.dts.ca.gov/public/) and consult DTSC's Cortese List to identify any known contamination sites within the project site. If a proposed mechanical treatment or prescribed burn is located on a site included on the DTSC Cortese List as containing potential soil contamination that has not been cleaned up and deemed closed by DTSC, the area will be marked and no prescribed burning or soil disturbing treatment activities will occur within 100 feet of the site boundaries. If it is determined through coordination with landowners or after review of the Cortese List that no potential or known contamination is located on a project site, the project may proceed as planned.</p>	Prior to treatment projects	Project Proponent	Project Proponent

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ATTACHMENT C.2

PSA Template

Appendix PD-3

Project-Specific Analysis

PD-3: PROJECT-SPECIFIC ANALYSIS

PD-3.1: INTRODUCTION

The California Vegetation Treatment Program (CalVTP) directs implementation of vegetation treatments within the California Department of Forestry and Fire Protection's (CAL FIRE's) State Responsibility Area (SRA) to serve as one component of the state's range of actions to reduce wildfire risk, reduce fire suppression efforts and costs, and protect natural resources as well as other assets from wildfire. The Program Environmental Impact Report (PEIR) for the CalVTP evaluates the environmental impacts of the CalVTP. The CalVTP is described in Chapter 2, "Program Description" of the PEIR. The PEIR has been prepared under the direction of CEQA lead agency, California Board of Forestry and Fire Protection (Board), in accordance with the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.) and the State CEQA Guidelines. The document functions as a Program EIR in accordance with State CEQA Guidelines Section 15168 for streamlining of CEQA review of later activities consistent with the CalVTP.

Using the Project-specific Analysis (PSA) in reliance on the PEIR, CAL FIRE or other project proponents will evaluate each vegetation treatment project intended to implement the CalVTP as a later activity addressed by the PEIR to determine whether the later activity qualifies as within the scope of this PEIR or requires additional environmental documentation or its own independent environmental review. Such evaluations will ascertain whether a later vegetation treatment project is consistent with the description of activities contained in the CalVTP and whether the effects on the environment were covered in the PEIR. Also, a project proponent will evaluate whether the later vegetation treatment project would (1) cause any new impact, (2) cause any substantially more severe significant impact than was addressed in the PEIR, or (3) reveal a mitigation measure or alternative that is substantially different from those in the PEIR or found infeasible in the PEIR, but that is now is feasible, and that the project proponent declines to implement. If none of those outcomes are determined, and the effects on the environment were covered in the PEIR, the impacts of the later vegetation treatment project can be found to be within the scope of this PEIR, and no additional environmental documentation would be required (State CEQA Guidelines Section 15168(c)[1], [2] and [4]). The determination that a project is within the scope of the PEIR is a factual determination that should be supported by substantial evidence. The substantial evidence underpinning the finding is developed using the PSA checklist provided in this section. If a project is within the scope of this PEIR, the project proponent may act on the project using the PSA and PEIR without public circulation of any additional environmental document. If the project is approved, the project proponent would file a Notice of Determination.

Under this CEQA compliance approach, a project proponent must incorporate from the PEIR into the later vegetation treatment project all standard project requirements (SPRs) relevant to the proposed project and all feasible mitigation measures in response to significant impacts caused by the later project. A "within the scope" finding for later vegetation treatment projects would facilitate an increase in the pace and scale of project approvals in a manner that includes environmental protections.

If a later vegetation treatment project would have impacts that were not covered by the PEIR (and therefore would not qualify for a within the scope finding), then additional documentation may need to be prepared that accompanies the PEIR to demonstrate the project's CEQA compliance (State CEQA Guidelines Section 15168(c)(1)). If additional documentation is needed, it may be a Negative Declaration, Mitigated Negative Declaration, or an EIR, depending on the environmental impact differences encountered. In this situation, the PSA serves the same function as an initial study to identify which impacts were not covered by (and are therefore not within the scope of) the PEIR and, therefore, must be addressed in a Negative Declaration, Mitigated Negative Declaration, or an EIR, as well as documenting those impacts that are within the scope of the PEIR. Refer to Section PD-3.2.4 (under Checklist Answers) for additional explanation regarding the function of the PSA checklist.

PD-3.1.1: Project Proponents – Lead and Responsible Agency Roles

CAL FIRE is in charge of preventing and extinguishing wildfires within the SRA (PRC Sections 4113 and 4125). The treatable landscape within the SRA primarily encompasses private land (approximately 92 percent) on which CAL FIRE or counties under contract with CAL FIRE would implement vegetation treatments in coordination with the landowner. Additionally, there are many local, regional, and state agencies with land ownership or land management roles in the remainder of the treatable landscape (i.e., on public land) that will seek to implement vegetation treatments consistent with the CalVTP to reduce wildfire risks.

For the purposes of this PEIR and PSA, a project proponent is a public agency that provides funding for vegetation treatment or has land ownership, land management, or other regulatory responsibility in the treatable landscape and is seeking to fund, authorize, or implement vegetation treatments consistent with the CalVTP. If through the PSA a project proponent determines that a proposed project is within the scope of the CalVTP PEIR, then the project proponent would act as a responsible agency pursuant to CEQA. A regulatory agency seeking to use the CalVTP PEIR to issue any secondary approval or permit for vegetation treatments would also be a responsible agency. If the PSA determines that one or more impacts of a proposed later vegetation treatment project is not within the scope of the CalVTP PEIR, then the project proponent may serve as a lead agency in the preparation of additional environmental documentation that accompanies the PEIR for CEQA compliance.

PD-3.1.2: Treatments Addressed in the PEIR

Proposed treatment projects qualifying as within the scope of the PEIR must be consistent with the treatments covered in the CalVTP, which are summarized in this section, and the geographic extent of the CalVTP, which is encompassed in the boundaries of the treatable landscape. Refer to PEIR Chapter 2, “Program Description” for a detailed description of the CalVTP.

TREATMENT TYPES

The CalVTP treatment types are:

- ▶ **Wildland-Urban Interface Fuel Reduction:** Located in WUI-designated areas, fuel reduction would generally consist of strategic removal of vegetation to prevent or slow the spread of non-wind driven wildfire between structures and wildlands, and vice versa.
- ▶ **Fuel Breaks:** In strategic locations, fuel breaks create zones of vegetation removal and ongoing maintenance, often in a linear layout, that support fire suppression by providing responders with a staging area or access to a remote landscape for fire control actions. While fuel breaks can passively interrupt the path of a fire or halt or slow its progress, this is not the primary goal of constructing fuel breaks.
- ▶ **Ecological Restoration:** Generally, outside of the WUI in areas that have departed from the natural fire regime as a result of fire exclusion, ecological restoration would focus on restoring ecosystem processes, conditions, and resiliency by moderating uncharacteristic wildland fuel conditions to reflect historic vegetative composition, structure, and habitat values.

TREATMENT ACTIVITIES

The WUI fuel reduction, fuel break, and ecological restoration treatment types would be implemented using various treatment “activities” that may be applied singularly or in combination. The CalVTP treatment activities are:

- ▶ **Prescribed Burning:** Includes pile burning (prescribed burning of piles of vegetative material to reduce fuel and/or remove biomass following treatment) and broadcast burning (prescribed burning to reduce fuels over a larger area or restore fire resiliency in target fire-adapted plant communities; would be conducted under specific conditions related to fuels, weather, and other variables).

- ▶ **Mechanical Treatment:** Use of motorized equipment to cut, uproot, crush/compact, or chop existing vegetation.
- ▶ **Manual Treatment:** Use of hand tools and hand-operated power tools to cut, clear, or prune herbaceous or woody species.
- ▶ **Prescribed Herbivory:** Use of domestic livestock to reduce a target plant population thereby reducing fire fuels or competition of desired plant species.
- ▶ **Herbicides:** Chemical application designed to inhibit growth of target plant species.

TREATABLE LANDSCAPE

Approximately 20.3 million acres within the 31 million-acre SRA were identified that may be appropriate for vegetation treatments. This area is called the “treatable landscape.” CAL FIRE’s Fire and Resource Assessment Program (FRAP) modeled the areas where each of the three proposed treatment types could be implemented within the treatable landscape. Multiple treatment types can be implemented where modeled treatment areas for treatment types overlap. Qualifying treatments under the CalVTP would occur within the 20.3 million acres of treatable landscape. The boundaries of the treatable landscape are available on the Board’s website.

PD-3.2: EVALUATION OF ENVIRONMENTAL IMPACTS

The PSA provided herein is to be used to determine whether later vegetation treatment projects in the treatable landscape have been covered in the PEIR to allow for approval without further environmental review and documentation (beyond what is needed to complete the PSA), or whether additional CEQA documentation is required (i.e., a Negative Declaration, Mitigated Negative Declaration or EIR). Environmental effects are not necessarily limited to those identified in the PSA checklist, which encompass all effects disclosed in the PEIR. For this reason, the checklist includes a row for “Other Impacts” under each resource area.

The determination as to whether an ND, MND, or EIR is required for impacts that are not within the scope of the PEIR is subject to the “fair argument” standard, which requires preparation of an EIR when there is a fair argument, based on substantial evidence in the record, that the proposed treatment project may have a significant effect on the environment.

PD-3.2.1: Determining Whether a Proposed Treatment is Within the Scope of the PEIR

The purpose of the PSA is to guide CAL FIRE and other project proponents in their determination of whether a proposed vegetation treatment project is within the scope of the CalVTP PEIR. A proposed vegetation treatment project is within the scope of the PEIR when it meets all of the following qualifications:

- ▶ **Treatment Methods.** The proposed treatment methods are consistent with the treatment types and activities described in Chapter 2, “Program Description” of the PEIR.
- ▶ **Geographic Area.** The proposed treatment site is within the geographic limits of the CalVTP’s treatable landscape.
- ▶ **Environmental Impacts.** The environmental effects of the proposed treatment have been covered in the PEIR and none of the criteria for preparation of subsequent CEQA documentation are met (State CEQA Guidelines Sections 15168(c)(2), 15162).

PD-3.2.2: Documenting Whether Impacts of a Proposed Treatment Projects are Within the Scope of the PEIR

For the PSA to adequately document the impacts that are within the scope of this PEIR and do not require additional CEQA review and documentation, the PSA must identify the following:

- ▶ **Relevant PEIR analysis.** Identify the specific sections, impact numbers, and page numbers from this PEIR that contain information relevant to the proposed treatment project.
- ▶ **Additional Studies Prepared and References Cited.** Attach to the PSA site-specific studies, reports, and survey results used in support of the within-the-scope finding or impact significance determination, if less severe than that identified in the PEIR. Include copies of references cited in the PSA, which will be made available to the public by the project proponent upon request.
- ▶ **Standard Project Requirements.** Identify each standard project requirement (SPR) that is relevant to the treatment, which will demonstrate that the SPR will be integrated into treatment design. Some SPRs allow for deviation from requirements (e.g., minimum buffer distances), identification of parameters (e.g., tree size for retention), and determinations of feasibility with the provision of a site- and/or treatment activity-specific explanation for the planned deviation, identified parameter, or feasibility determination in the PSA.
- ▶ **Environmental Impacts.** Identify which impacts in the PEIR would occur from implementation of the proposed vegetation treatment project. Because the intent of the PEIR is to disclose potentially significant impacts that are reasonably foreseeable to occur from any of the treatments within the extent of the treatable landscape, it is expected that, due to site-specific conditions, proposed vegetation treatment projects may result in impacts less severe than those identified in the PEIR. A project proponent may rely on the impact significance determination in the PEIR, and for significant impacts, apply the relevant mitigation measures. Alternatively, if an impact identified as significant in the PEIR would be less than significant for the later treatment project, the project proponent may demonstrate with substantial evidence in the PSA that the project impact is less than significant and mitigation measure(s) are not needed. Similarly, potentially significant environmental effects identified in the PEIR may be minimized or found to be less than significant without mitigation in the future due to technological advances, further research, or industry response (e.g., air quality, greenhouse gas emissions, utilities and service systems); these effects and the reasons they are less severe than those identified in the PEIR will be documented in the PSA.
- ▶ **Mitigation Measures.** Identify each mitigation measure from the PEIR that is relevant to the proposed treatment project. In the PSA, explain any components of the mitigation measures that are not applicable to the treatment, and for any significance determination that is different than the PEIR, describe how each measure will address site-specific conditions and reduce the impact of the proposed vegetation treatment project. Some mitigation measures allow for deviation from requirements (e.g., minimum buffer distances), identification of parameters (e.g., tree size for retention), and determinations of feasibility with the provision of a site- and/or treatment activity-specific explanation for the planned deviation, identified parameter, or feasibility determination in the PSA.

PD-3.2.3: Providing Substantial Evidence

The impact determinations and within-the-scope findings in the PSA, as well as any explanation for planned deviations, identified parameters, or feasibility determinations associated with SPR and mitigation measures, must be based on substantial evidence (defined in the CEQA Guidelines as “facts, reasonable assumptions predicted upon facts, and expert opinion supported by facts”). Therefore, the PSA will include analytical discussions of the conclusions reached. Portions of the PEIR relied on for conclusions should be identified by section number and page number. Ancillary information (e.g., site-specific surveys) not included in the PEIR but relied on for conclusions or required by

PEIR measures will be attached to the PSA. A list of references cited in the PSA will be included with the PSA and copies of such references made available to the public by the proponent agency upon request.

PD-3.2.4: Project-Specific Analysis

STANDARD PROJECT REQUIREMENTS, MITIGATION MEASURES, AND MONITORING AND REPORTING

The analysis must consider the measures identified in the PEIR that will avoid, reduce, or otherwise mitigate potential impacts of the project. These measures take the form of SPRs and mitigation measures. Some SPRs and mitigation measures apply to all projects, while others only apply to projects that include specific treatment types, treatment activities, or locations. Attachment A to this checklist provides a comprehensive list of SPRs and mitigation measures applicable to each project type. The project proponent should complete Attachment A and verify that all applicable SPRs and mitigation measures will be implemented, the timing of implementation, and identify the entity responsible for implementing and verifying or enforcing each measure. In effect, a completed Attachment A to the PSA will function as the Mitigation Monitoring and Reporting Program for the vegetation treatment project.

RESOURCE AREAS

The environmental resource areas in the PSA checklist are the same as those analyzed in Chapter 3, “Environmental Setting, Impacts, and Mitigation Measures”, of the PEIR. The project proponent will review the environmental analysis in the PEIR for each corresponding resource area in the PSA checklist. The project proponent will consider whether required SPRs and mitigation measures would be effective in avoiding, reducing, or mitigating environmental impacts of the project considering the proposed activities and site-specific characteristics. SPRs are intended to be integrated into treatment design and implementation; therefore, project proponents should determine if it is necessary to implement the SPR during preparation of the PSA, prior to treatment, or during treatment implementation. For example, implementation of SPR BIO-1 is intended to be carried out during PSA preparation; it will identify potentially affected biological resources and assess whether they can be avoided, which will determine whether other SPRs and mitigation measures must be implemented prior to or during treatments.

Written explanations supporting all conclusions should be provided in the discussion following the checklist questions for each resource area.

CHECKLIST ANSWERS

After verifying that the proposed treatment activities, treatment types, and geographic location of the treatment project are consistent with the PEIR, the primary functions of the checklist are to determine:

- ▶ whether any of the significant impacts of the later treatment project would be substantially more severe than those covered in the PEIR;
- ▶ whether the later treatment project would result in any new impacts that were not covered in the PEIR; and
- ▶ the type of CEQA document, if any, that is appropriate to examine impacts that are not within the scope of the PEIR.

Accordingly, the checklist questions presented for each resource area identify, for each impact addressed in the PEIR, whether the impact applies to the treatment project and if so, identify the SPRs and mitigation measures that are applicable to the treatment project. The checklist is also intended to identify whether the impact significance determination for the treatment project is different than the impact significance determination in the PEIR; if it is different, the checklist will identify whether the difference constitutes a substantially more severe significant impact and is therefore not within the scope of the PEIR. If it is determined that a substantially more severe significant impact

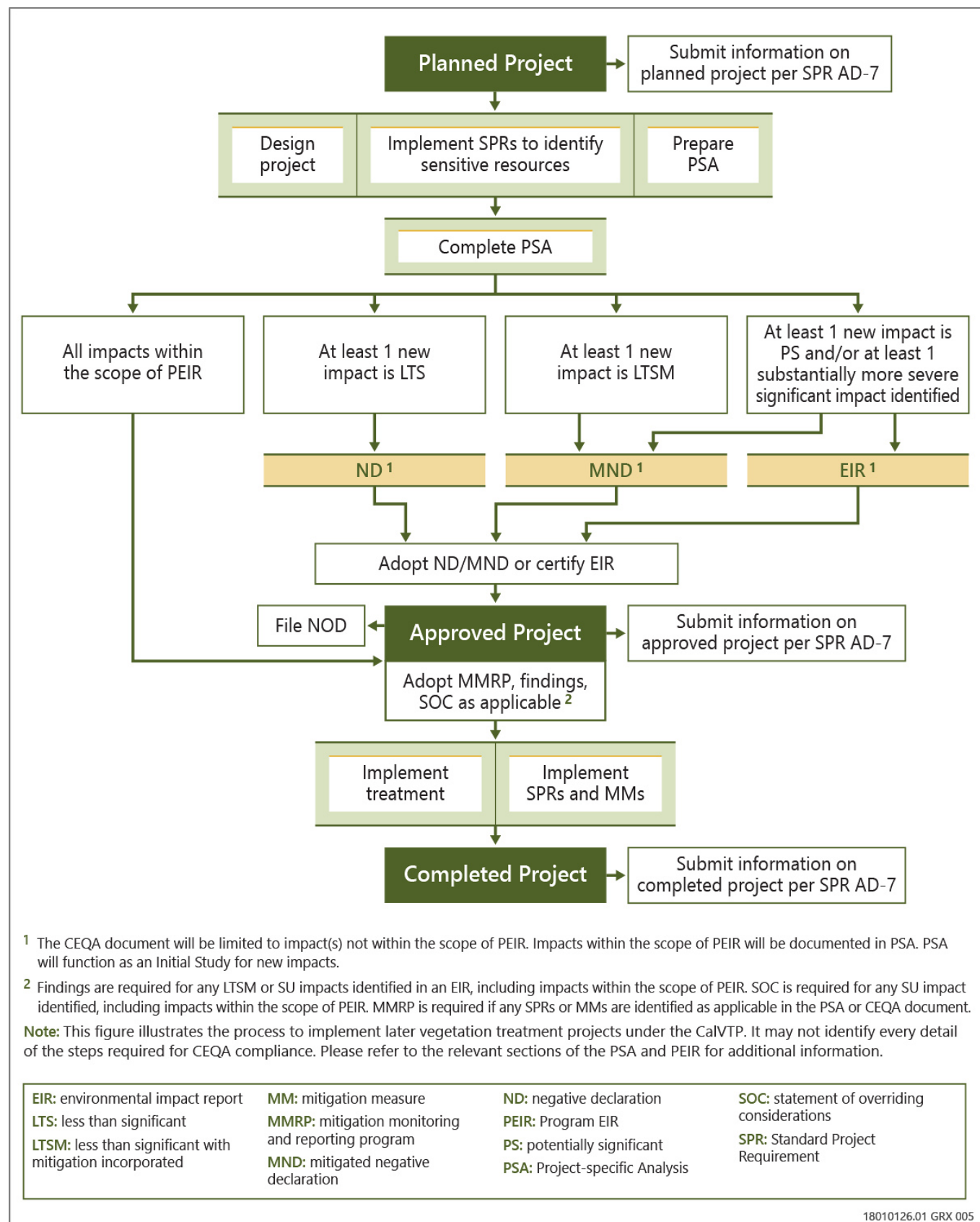
that cannot be mitigated down to the same level as, or lower level than, identified in the PEIR would result from a later treatment project, an EIR must be prepared, unless one or more mitigation measures incorporated into the project would mitigate the effects to a point where clearly no significant effect on the environment would occur, in which case an MND would be appropriate. The MND or EIR may be limited to examining the impacts that are not within the scope of the PEIR.

"New" impacts are effects on the environment that were not addressed in the CalVTP PEIR.

For each new impact listed in the checklist, the project proponent should indicate whether the impact would be one of the following:

- ▶ **New Impact that is Less Than Significant:** The project would result in a new adverse impact that is not analyzed in the CalVTP PEIR; however, the impact would not be significant. In this case, the impact is not "within the scope" of the CalVTP PEIR and preparation of a Negative Declaration could be prepared. Pursuant to CEQA Guidelines Section 15168(d), a subsequent negative declaration could be prepared to document the new impact and substantial evidence supporting the less-than-significant conclusion, along with the PSA checklist documenting the rest of the "within-the-scope" impacts.
- ▶ **New Impact that is Less Than Significant with Mitigation Incorporated:** The project would result in a new significant impact that is not analyzed in the CalVTP PEIR, but due to the project proponent's willingness to incorporate new mitigation into the proposed project, the impact is clearly less than significant with feasible mitigation. In this case, the impact is not "within the scope" of the CalVTP PEIR and a Mitigated Negative Declaration could be prepared, consistent with CEQA Guidelines Section 15168(d), which allows for use of a subsequent negative declaration to document the new impact and substantial evidence supporting the less-than-significant conclusion, along with the PSA checklist documenting the rest of the "within-the-scope" impacts.
- ▶ **New Impact that is Potentially Significant:** The project would result in a new significant impact that is not analyzed in the CalVTP PEIR (which would be subject to the "fair argument" standard as a new impact), the impact cannot be clearly mitigated to less than significant. In this circumstance, the impact is not "within the scope" of the CalVTP PEIR and preparation of an Environmental Impact Report (EIR) is required. The EIR will cover the new potentially significant or significant impact(s) and need not further evaluate significant impacts already covered in the PEIR, which are documented in the PSA.

In summary, when additional environmental documentation is needed to augment the PEIR for CEQA compliance, the PSA checklist and accompanying analysis would serve the same function as an initial study that defines the topics to be addressed in the EIR, MND, or ND to cover the impacts that are not within the scope of the PEIR, as directed by State CEQA Guidelines Section 15168(d)(1). Pursuant to State CEQA Guidelines Section 15168(d), a later ND could be prepared, if the new impact would be less than significant, or MND, if the new impact or substantially more severe significant impact could be clearly mitigated to less than significant. The analysis of any new impact to support adoption of an ND or MND, along with the analysis of impacts that are within the scope, would be documented in the PSA checklist. If a later EIR is prepared, it could be limited in its scope to the new significant impact(s) or substantially more severe significant impact(s), with the remainder of the impacts that are within the scope of the PEIR being documented in the PSA checklist. Refer to the CalVTP PSA Process flowchart presented in Figure 1.



Source: Ascent Environmental Inc. 2019

Figure 1 CalVTP PSA Process

AGENCY-SPECIFIC CEQA IMPLEMENTATION PROCEDURES

This PSA may be used by CAL FIRE, another public agency funded by grants from CAL FIRE or other state agencies, or a public agency with land ownership, land management, or other regulatory responsibilities in the treatable landscape that is proposing to implement, fund, or issue any approval for vegetation treatments consistent with the CalVTP PEIR. Each project proponent should follow their agency's CEQA implementation procedures, including filing of a Notice of Determination through the State Clearinghouse and/or applicable County Clerk's office.

PROJECT-SPECIFIC CEQA FINDINGS AND OVERRIDING CONSIDERATIONS

When a responsible agency approves a vegetation treatment project using a within the scope finding for all environmental impacts, it must still adopt CEQA findings pursuant to Section 15091 of the State CEQA Guidelines, and if needed, a statement of overriding considerations, pursuant to Section 15093 of the State CEQA Guidelines. Although each responsible agency must adopt its own findings (see CEQA Guidelines section 15096(h)), such agencies have the option of reusing, incorporating, or adapting all or part of the findings adopted by the Board for the CalVTP PEIR to meet the agency's own requirements to the extent the findings are applicable to the proposed vegetation treatment project. A findings template intended to assist responsible agencies to formulate their own findings is attached to this PSA as Attachment B.

REPORTING REQUIREMENTS

Planned Projects

To assist with tracking actions under the CalVTP, project proponents will submit information to CAL FIRE on planned projects when beginning preparation of this PSA. The submittal will include the following:

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

Approved Projects

To assist with tracking, reporting, and adaptively managing actions under the CalVTP, project proponents will submit this completed PSA and associated geospatial data to CAL FIRE at the time a Notice of Determination is filed. The submittal will include the following:

- ▶ A completed PSA Environmental Checklist;
- ▶ A completed Mitigation Monitoring and Reporting Program (using Attachment A to the Environmental Checklist);
- ▶ GIS data that include:
 - a polygon(s) of the project area, showing the extent of each treatment type included in the project (ecological restoration, fuel break, WUI fuel reduction)

Completed Projects

To assist with tracking, reporting, and adaptively managing actions under the CalVTP, project proponents will submit the following information to CAL FIRE after implementation of the treatment:

- ▶ GIS data that include a polygon(s) of the treated area, showing the extent of each treatment type implemented (ecological restoration, fuel break, WUI fuel reduction)
- ▶ A post-project implementation report (referred to by CAL FIRE as a Completion Report) that includes

- Size of treated area (typically acres);
- Treatment types and activities;
- Dates of work;
- A list of the SPRs and mitigation measures that were implemented
- Any explanations regarding implementation if required by SPRs and mitigation measures (e.g., explanation for feasibility determination required by SPR BIO-12; explanation for reduction of a no-disturbance buffer below the general minimum size described in Mitigation Measures BIO-1a and BIO-2b).

ENVIRONMENTAL CHECKLIST

VEGETATION TREATMENT PROJECT INFORMATION

1. Project Title:
2. Project Proponent Name and Address:
3. Contact Person Information and Phone Number: *[provide phone number and email]*
4. Project Location: *[include county and coordinates; also include cross streets or other major landmark as useful to identify treatment location]*
5. Total Area to be Treated (acres)
6. **Description of Project:** (Describe the whole action involved, including any phasing of initial treatments as well as planned treatment maintenance, including equipment to be used and planned duration of treatments. Provide cross reference to specific subsections and page numbers from Chapter 2 of the PEIR to demonstrate that treatments are consistent with those analyzed in the PEIR. Attach additional sheets if necessary.)
 - a. **Initial Treatment**
[insert description here]

Treatment Types *[see description in CalVTP PEIR Section 2.5.1, check every applicable category; provide detail in description of Initial Treatment]*

- ☐ Wildland-Urban Interface Fuel Reduction
- ☐ Fuel Break
- ☐ Ecological Restoration

Treatment Activities *[see description in CalVTP PEIR Section 2.5.2, check every applicable category; include number of acres subject to each treatment activity, provide detail in description of Initial Treatment]*

- ☐ Prescribed Burning (Broadcast), _____ acres
- ☐ Prescribed Burning (Pile Burning)
- ☐ Mechanical Treatment, _____ acres
- ☐ Manual Treatment, _____ acres
- ☐ Prescribed Herbivory, _____ acres
- ☐ Herbicide Application, _____ acres

Fuel Type [see description in CalVTP PEIR Section 2.4.1, check every applicable category; provide detail in description of Initial Treatment]

- ☐ Grass Fuel Type
- ☐ Shrub Fuel Type
- ☐ Tree Fuel Type

b. Treatment Maintenance

[Insert description here; identify planned maintenance intervals, including the site conditions that are reasonably expected to be present in the future in response to the initial treatment, and vegetation conditions that would trigger the need for maintenance.]

Treatment Types [see description in CalVTP PEIR Section 2.5.1, check every applicable category; provide detail in description of Treatment Maintenance]

- ☐ Wildland-Urban Interface Fuel Reduction
- ☐ Fuel Break
- ☐ Ecological Restoration

Treatment Activities [see description in CalVTP PEIR Section 2.5.2, check every applicable category; include number of acres subject to each treatment activity, provide detail in description of Treatment Maintenance]

- ☐ Prescribed Burning (Broadcast), _____ acres
- ☐ Prescribed Burning (Pile Burning)
- ☐ Mechanical Treatment, _____ acres
- ☐ Manual Treatment, _____ acres
- ☐ Prescribed Herbivory, _____ acres
- ☐ Herbicide Application, _____ acres

Fuel Type [see description in CalVTP PEIR Section 2.4.1, check every applicable category; provide detail in description of Treatment Maintenance]

- ☐ Grass Fuel Type
- ☐ Shrub Fuel Type
- ☐ Tree Fuel Type

Use of the PSA for Treatment Maintenance

Prior to implementing a maintenance treatment, the project proponent will verify that the expected site conditions as described in the PSA are present in the treatment area. As time passes, the continued relevance of the PSA will be considered by the project proponent in light of potentially changed conditions or circumstances. Where the project proponent determines the PSA is no longer sufficiently relevant, the project proponent will determine whether a new PSA or other environmental analysis is warranted.

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

7. Regional Setting and Surrounding Land Uses: (Briefly describe the project's surroundings)

[insert text here]

8. Other Public Agencies Whose Approval is Required: (e.g., permits)

[insert text here; note status of any required approvals (permits)]

Coastal Act Compliance

☐ The proposed project is NOT within the Coastal Zone

☐ The proposed project is within the Coastal Zone (*check one of the following boxes*)

☐ A coastal development permit been applied for or obtained from the local Coastal Commission district office or local government with a certified Local Coastal Plan, as applicable

☐ The local Coastal Commission district office or local government with a certified Local Coastal Plan (in consultation with the local Coastal Commission district office) has determined that a coastal development permit is not required

9. Native American Consultation. *For treatment projects that are within the scope of the CalVTP PEIR, AB 52 consultation for AB 52 compliance has been completed. The Board of Forestry and Fire Protection conducted consultation pursuant to Public Resources Code section 21080.3.1 during preparation of the PEIR. For treatment projects with impacts not within the scope of the PEIR, pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, project proponents preparing a new negative declaration, mitigated negative declaration, or EIR must notify any California Native American tribe who has submitted written request for notification of a project in the area of the treatment site. Upon written request for consultation by a tribe, the project proponent must begin consultation before the release of the environmental document and must follow the requirements of the cited PRC sections.*
[insert text here]

DETERMINATION (To be completed by the project proponent)

On the basis of this PSA and the substantial evidence supporting it:

- ☐ I find that all of the effects of the proposed project (a) have been covered in the CalVTP PEIR, and (b) all applicable Standard Project Requirements and mitigation measures identified in the CalVTP PEIR will be implemented. The proposed project is, therefore, **WITHIN THE SCOPE** of the CalVTP PEIR. **NO ADDITIONAL CEQA DOCUMENTATION** is required.
- ☐ I find that the proposed project will have effects that were not covered in the CalVTP PEIR. These effects are less than significant without any mitigation beyond what is already required pursuant to the CalVTP PEIR. A **NEGATIVE DECLARATION** will be prepared.
- ☐ I find that the proposed project will have effects that were not covered in the CalVTP PEIR or will have effects that are substantially more severe than those covered in the CalVTP PEIR. Although these effects may be significant in the absence of additional mitigation beyond the CalVTP PEIR's measures, revisions to the proposed project or additional mitigation measures have been agreed to by the project proponent that would avoid or reduce the effects so that clearly no significant effects would occur. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- ☐ I find that the proposed project will have significant environmental effects that are (a) new and were not covered in the CalVTP PEIR and/or (b) substantially more severe than those covered in the CalVTP PEIR. Because one or more effects may be significant and cannot be clearly mitigated to less than significant, an **ENVIRONMENTAL IMPACT REPORT** will be prepared.

Signature

Date

Printed Name

Title

Agency

EVALUATION OF ENVIRONMENTAL IMPACTS

1. Refer to the applicable resource analysis section in the CalVTP PEIR for relevant information on each environmental topic.
2. A brief explanation is required for each impact, including impacts that have been identified in the PEIR as well as any "new impacts".
3. The discussion of each impact identified in the PEIR that is also applicable to the proposed treatment project should generally include the following information:
 - ▶ Briefly describe the impact of the proposed vegetation treatment project.
 - ▶ Summarize the impact as it was presented in the PEIR, including a statement that the impact is covered in PEIR.
 - ▶ Provide evidence that (explain why) the project impact is covered in PEIR, considering whether the proposed treatment is consistent with the treatment types and activities addressed in the PEIR as well as the associated intensity (i.e., duration).
 - ▶ Identify SPRs and MMs applicable to the treatment project.
 - ▶ (If applicable) Explain which components of the MM or SPR would be applied. This circumstance exists if the MM or SPR allows for deviation from requirements (e.g., minimum buffer distances), identification of parameters (e.g., tree size for retention), and determinations of feasibility. A site- and/or treatment activity-specific explanation for the planned deviation, identified parameter, or feasibility determination must be provided in the PSA.
 - ▶ (If applicable) Explain why the impact significance in the PSA is different than that found in the PEIR; substantiate the different (new) significance conclusion.
 - ▶ (If applicable) Explain why MM or SPRs identified for this impact in PEIR do not apply to this project. This circumstance may exist where a PS impact was identified in the PEIR, but the impact severity would be less for the treatment project or the MM does not otherwise apply.
4. If the project proponent has determined that a new impact would occur, then the checklist answers for the new impact must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant without the need for mitigation.
5. "Potentially Significant" is appropriate if there is substantial evidence that a new impact may be significant. If there are one or more "Potentially Significant" new impacts identified, or if any impact would constitute a substantially more severe significant impact than was covered in the PEIR, an EIR is required unless one or more mitigation measures incorporated into the project would mitigate the effects to a point where clearly no significant effect on the environment would occur, in which case an MND would be appropriate. AND could be prepared, if the new impact would be less than significant, or MND, if the new impact could be clearly mitigated to less than significant. The analysis of any new impact to support adoption of an ND or MND, along with the analysis of impacts that are within the scope, would be documented in the PSA checklist. If a later EIR is prepared, it could be limited in its scope to the new significant impact(s) or substantially more severe significant impact(s), with the remainder of the impacts that are within the scope of the PEIR being documented in the PSA checklist and attached to the EIR as an appendix. When preparing any environmental document, the environmental analysis should incorporate by reference pertinent portions of the analysis from the CalVTP PEIR and focus the environmental analysis solely on issues that were not addressed in the CalVTP PEIR.
6. Project proponents should incorporate into the PSA checklist references to information sources for potential impacts. Include a list of references cited in the PSA and make copies of such references available to the public upon request.

PD-3.3: AESTHETICS AND VISUAL RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact AES-1: Result in Short-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from Treatment Activities	LTS	Impact AES-1, pp. 3.2-16 – 3.2-19						
Impact AES-2: Result in Long-Term, Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from WUI Fuel Reduction, Ecological Restoration, or Shaded Fuel Break Treatment Types	LTS	Impact AES-2, pp. 3.2-20 – 3.2-25						
Impact AES-3: Result in Long-Term Substantial Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway from the Non-Shaded Fuel Break Treatment Type	SU	Impact AES-3, pp. 3.2-25 – 3.2-27						

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Aesthetic and Visual Resource Impacts: Would the treatment result in other impacts to aesthetics and visual resources that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Impact AES-1

Impact AES-2

Impact AES-3

New Aesthetic and Visual Resource Impacts

PD-3.4: AGRICULTURE AND FORESTRY RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact AG-1: Directly Result in the Loss of Forest Land or Conversion of Forest Land to a Non-Forest Use or Involve Other Changes in the Existing Environment Which, Due to Their Location or Nature, Could Result in Conversion of Forest Land to Non-Forest Use	LTS	Impact AG-1, pp. 3.3-7 – 3.3-8						

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Agriculture and Forestry Resource Impacts: Would the treatment result in other impacts to agriculture and forestry resources that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, complete row(s) below and discussion	
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant	
[Identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Discussion

Impact AG-1

New Agriculture and Forestry Resource Impacts

PD-3.5: AIR QUALITY

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities that would exceed CAAQS or NAAQS	SU	Table 3.4-1; Impact AQ-1, pp. 3.4-26 – 3.4-32; Appendix AQ-1						
Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk	LTS	Table 3.4-6; Impact AQ-2 pp. 3.4-33 – 3.4-34; Appendix AQ-1						
Impact AQ-3: Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk	LTS	Section 3.4.2; Impact AQ-3, pp. 3.4-34 – 3.4-35						
Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk	SU	Section 3.4.2; Impact AQ-4, pp. 3.4-35 – 3.4-37						
Impact AQ-5: Expose People to Objectionable Odors from Diesel Exhaust	LTS	Impact AQ-5, pp. 3.4-37 – 3.4-38						
Impact AQ-6: Expose People to Objectionable Odors from Smoke During Prescribed Burning	SU	Section 2.5.2; Impact AQ-6; pp. 3.4-38						

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Air Quality Impacts: Would the treatment result in other impacts to air quality that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, complete row(s) below and discussion	
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant	
[identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Discussion

Impact AQ-1

Impact AQ-2

Impact AQ-3

Impact AQ-4

Impact AQ-5

Impact AQ-6

New Air Quality Impacts

PD-3.6: ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact CUL-1: Cause a Substantial Adverse Change in the Significance of Built Historical Resources	LTS	Impact CUL-1, pp. 3.5-14 – 3.5-15						
Impact CUL-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Subsurface Historical Resources	SU	Impact CUL-2, pp. 3.5-15 – 3.5-16						
Impact CUL-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource	LTS	Impact CUL-3, p. 3.5-17						
Impact CUL-4: Disturb Human Remains	LTS	Impact CUL-4, p. 3.5-18						

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Archaeological, Historical, and Tribal Cultural Resource Impacts: Would the treatment result in other impacts to archaeological, historical, and tribal cultural resources that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Impact CUL-1

Impact CUL-2

Impact CUL-3

Impact CUL-4

New Archaeological, Historical, and Tribal Cultural Resource Impacts

PD-3.7: BIOLOGICAL RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications	LTS	Impact BIO-1, pp 3.6-131–3.6.138						
Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	LTS (all wildlife species except bumble bees) S&U (bumble bees)	Impact BIO-2, pp 3.6-138–3.6-184						
Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation that Leads to Loss of Habitat Function	LTS	Impact BIO-3, pp 3.6-186–3.6-191						
Impact BIO-4: Substantially Affect State or Federally Protected Wetlands	LTS	Impact BIO-4, pp 3.6-191–3.6-192						
Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries	LTS	Impact BIO-5, pp 3.6-192–3.6-196						
Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife	LTS	Impact BIO-6, pp 3.6-197–3.6-198						
Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources	No Impact	Impact BIO-7, pp 3.6-198–3.6-199						
Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan	No Impact	Impact BIO-8, pp 3.6-199–3.6-200						

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Biological Resources Impacts: Would the treatment result in other impacts to biological resources that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, complete row(s) below and discussion	
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant	
[identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Discussion

Impact BIO-1

Impact BIO-2

Impact BIO-3

Impact BIO-4

Impact BIO-5

Impact BIO-6

Impact BIO-7

Impact BIO-8

New Biological Resource Impacts

PD-3.8: GEOLOGY, SOILS, PALEONTOLOGY, AND MINERAL RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact GEO-1: Result in Substantial Erosion or Loss of Topsoil	LTS	Impact GEO-1, pp. 3.7-26 – 3.7-29						
Impact GEO-2: Increase Risk of Landslide	LTS	Impact GEO-2, pp. 3.7-29 – 3.7-30						

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Geology, Soils, Paleontology, and Mineral Resource Impacts: Would the treatment result in other impacts to geology, soils, paleontology, and mineral resources that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Impact GEO-1

Impact GEO-2

New Geology, Soils, Paleontology, and Mineral Resource Impacts

PD-3.9: GREENHOUSE GAS EMISSIONS

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact GHG-1: Conflict with Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of GHGs	LTS	Impact GHG-1, pp. 3.8-10 – 3.8-11						
Impact GHG-2: Generate GHG Emissions through Treatment Activities	PSU	Impact GHG-2, pp. 3.8-11 – 3.8-17						

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New GHG Emissions Impacts: Would the treatment result in other impacts to GHG emissions that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, complete row(s) below and discussion	
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant	
[identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Discussion

Impact GHG-1

Impact GHG-2

New Impacts Related to GHG Emissions

PD-3.10: ENERGY RESOURCES

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact ENG-1: Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy	LTS	Impact ENG-1, pp. 3.9-7 – 3.9-8						

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Energy Resource Impacts: Would the treatment result in other impacts to energy resources that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, complete row(s) below and discussion		
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant		
[Identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Discussion

Impact ENG-1

New Energy Resource Impacts

PD-3.11: HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact HAZ-1: Create a Significant Health Hazard from the Use of Hazardous Materials	LTS	Impact HAZ-1, pp. 3.10-14 – 3.10-15						
Impact HAZ-2: Create a Significant Health Hazard from the Use of Herbicides	LTS	Impact HAZ-2, pp. 3.10-15 – 3.10-18						
Impact HAZ-3: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites	PS	Impact HAZ-3, pp. 3.10-18 – 3.10-19						

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Hazardous Materials, Public Health and Safety Impacts: Would the treatment result in other impacts related to hazardous materials, public health and safety that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, complete row(s) below and discussion	
		Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[Identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Impact HAZ-1

Impact HAZ-2

Impact HAZ-3

New Hazardous Materials, Public Health and Safety Impacts

PD-3.12: HYDROLOGY AND WATER QUALITY

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact HYD-1: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Prescribed Burning	LTS	Impact HYD-1, pp. 3.11-25 – 3.11-27						
Impact HYD-2: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Implementation of Manual or Mechanical Treatment Activities	LTS	Impact HYD-2, pp. 3.11-27 – 3.11-29						
Impact HYD-3: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through Prescribed Herbivory	LTS	Impact HYD-3, p. 3.11-29						
Impact HYD-4: Violate Water Quality Standards or Waste Discharge Requirements, Substantially Degrade Surface or Ground Water Quality, or Conflict with or Obstruct the Implementation of a Water Quality Control Plan Through the Ground Application of Herbicides	LTS	Impact HYD-4, pp. 3.11-30 – 3.11-31						
Impact HYD-5: Substantially Alter the Existing Drainage	LTS	Impact HYD-5, p. 3.11-31						

Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Pattern of a Treatment Site or Area								

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Hydrology and Water Quality Impacts: Would the treatment result in other impacts to hydrology and water quality that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes		<input type="checkbox"/> No		If yes, complete row(s) below and discussion	
					Potentially Significant	Less Than Significant with Mitigation Incorporated
	[identify new impact here, if applicable; add rows as needed]				<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Impact HYD-1

Impact HYD-2

Impact HYD-3

Impact HYD-4

Impact HYD-5

New Hydrology and Water Quality Impacts

PD-3.13: LAND USE AND PLANNING, POPULATION AND HOUSING

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact LU-1: Cause a Significant Environmental Impact Due to a Conflict with a Land Use Plan, Policy, or Regulation	LTS	Impact LU-1, pp. 3.12-13 – 3.12-14						
Impact LU-2: Induce Substantial Unplanned Population Growth	LTS	Impact LU-2, pp. 3.12-14 – 3.12-15						

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Land Use and Planning, Population and Housing Impacts: Would the treatment result in other impacts to land use and planning, population and housing that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Impact LU-1

Impact LU-2

New Land Use and Planning, Population and Housing Impacts

PD-3.14: NOISE

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact NOI-1: Result in a Substantial Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation	LTS	Impact NOI-1, pp. 3.13-9 – 3.13-12; Appendix NOI-1						
Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated SENL's During Treatment Activities	LTS	Impact NOI-2, p. 3.13-12						

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Noise Impacts: Would the treatment result in other noise-related impacts that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, complete row(s) below and discussion	
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant	
[Identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Discussion

Impact NOI-1

Impact NOI-2

New Noise Impacts

PD-3.15: RECREATION

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact REC-1: Directly or Indirectly Disrupt Recreational Activities within Designated Recreation Areas	LTS	Impact REC-1 pp. 3.14-6 – 3.14-7						

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Recreation Impacts: Would the treatment result in other impacts to recreation that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[Identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Impact REC-1

New Recreation Impacts

PD-3.16: TRANSPORTATION

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact TRAN-1: Result in Temporary Traffic Operations Impacts by Conflicting with a Program, Plan, Ordinance, or Policy Addressing Roadway Facilities or Prolonged Road Closures	LTS	Section 3.15.2; Impact TRAN-1 pp. 3.15-9 – 3.15-10						
Impact TRAN-2: Substantially Increase Hazards due to a Design Feature or Incompatible Uses	LTS	Impact TRAN-2 pp. 3.15-10 – 3.15-11						
Impact TRAN-3: Result in a Net Increase in VMT for the Proposed CalVTP	PSU	Impact TRAN-3 pp. 3.15-11 – 3.15-13						

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Transportation Impacts: Would the treatment result in other impacts to transportation that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, complete row(s) below and discussion	
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant	
[identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Discussion

Impact TRAN-1

Impact TRAN-2

Impact TRAN-3

New Transportation Impacts

PD-3.17: PUBLIC SERVICES, UTILITIES AND SERVICE SYSTEMS

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs	LTS	Section 3.16.1 pp. 3.16-2 – 3.16-3; Impact UTIL-1 p. 3.16-9						
Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity	PSU	Section 3.16.1 pp. 3.16-3 – 3.16-5; Impact UTIL-2 pp. 3.16-10 – 3.16-12						
Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste	LTS	Section 3.16.2 pp. 3.16-6 – 3.16-7; Impact UTIL-2 p. 3.16-12						

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Public Services, Utilities and Service System Impacts: Would the treatment result in other impacts to public services, utilities and service systems that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, complete row(s) below and discussion
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant
[identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

Impact UTIL-1

Impact UTIL-2

Impact UTIL-3

New Impacts to Public Services, Utilities and Service Systems

PD-3.18: WILDFIRE

Impact in the PEIR			Project-Specific Checklist					
Environmental Impact Covered In the PEIR	Identify Impact Significance in the PEIR	Identify Location of Impact Analysis in the PEIR	Does the Impact Apply to the Treatment Project?	List SPRs Applicable to the Treatment Project ¹	List MMs Applicable to the Treatment Project ¹	Identify Impact Significance for Treatment Project	Would this be a Substantially More Severe Significant Impact than Identified in the PEIR?	Is this Impact Within the Scope of the PEIR?
Would the project:								
Impact WIL-1: Substantially Exacerbate Fire Risk and Expose People to Uncontrolled Spread of a Wildfire	LTS	Section 3.17.1; Impact WIL-1 pp. 3.17-14 – 3.17-15						
Impact WIL-2: Expose People or Structures to Substantial Risks Related to Post-Fire Flooding or Landslides	LTS	Section 3.17.1; Impact WIL-2 pp. 3.17-15 – 3.17-16						

¹NA: not applicable; there are no SPRs and/or MMs identified in the PEIR for this impact. None: there are SPRs and/or MMs identified in the PEIR for this impact, but none are applicable to the treatment project.

New Wildfire Impacts: Would the treatment result in other impacts related to wildfire that are not evaluated in the CalVTP PEIR?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, complete row(s) below and discussion	
	Potentially Significant	Less Than Significant with Mitigation Incorporated	Less than Significant	
[identify new impact here, if applicable; add rows as needed]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Discussion

Impact WIL-1

Impact WIL-2

New Impacts to Wildfire

ATTACHMENT A - STANDARD PROJECT REQUIREMENTS AND MITIGATION MEASURES CHECKLIST

Instructions: Review the standard project requirements and mitigation measures and verify that those that are applicable will be implemented. Provide information for each column as follows:

- ▶ **Applicable (Yes/No).** Document whether the SPR or mitigation measure is applicable to the initial treatment and/or treatment maintenance (Yes or No), and whether it is applicable to initial treatment and/or treatment maintenance. The applicability should be substantiated in the Environmental Checklist Discussion.
- ▶ **Timing.** This column identifies the time frame in which the SPR or mitigation measure will be implemented (e.g., prior to treatment, during treatment, etc.).
- ▶ **Implementing Entity.** The implementing entity is the agency or organization responsible for carrying out the requirement. This could include the project proponent's project manager, a technical specialist (e.g., archeologist or biologist), a vegetation management contractor, a partner agency or organization, or other entities that are primarily responsible for carrying out each project requirement.
- ▶ **Verifying/Monitoring Entity.** The verifying/monitoring entity is the agency or organization responsible for ensuring that the requirement is implemented. The verifying/monitoring entity may be different from the implementing entity.

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Administrative Standard Project Requirements				
SPR AD-1 Project Proponent Coordination: For treatments coordinated with CAL FIRE, CAL FIRE will meet with the project proponent to discuss all natural and environmental resources that must be protected using SPRs and any applicable mitigation measures; identify any sensitive resources onsite; and discuss resource protection measures. For any prescribed burn treatments, CAL FIRE will also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR AD-2 Delineate Protected Resources: The project proponent will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area and with highly-visible flagging or clear, existing landscape demarcations (e.g., edge of a roadway) prior to beginning any treatment to avoid disturbing the resource. "Protected Resources" refers to environmentally sensitive places within or adjacent to the treatment areas that would be avoided or protected to the extent feasible during planned treatment activities to sustain their natural qualities and processes. This work will be performed by a qualified person, as defined for the specific resource (e.g., qualified Registered Professional Forester or biologist). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR AD-3 Consistency with Local Plans, Policies, and Ordinances: The project proponent will design and implement the treatment in a manner that is consistent with applicable local plans (e.g., general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR AD-4 Public Notifications for Prescribed Burning: At least days prior to the commencement of prescribed burning operations, the project proponent will: 1) post signs along the closest public roadway to the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or smoke concerns; 2) publish a public interest notification in a local newspapers or other widely distributed media source describing the activity, timing, and contact information; 3) send the local county supervisor and county administrative officer (or equivalent official responsible for distribution of public information) a notification letter describing the activity, its necessity, timing, and measures being taken to protect the environment and prevent prescribed burn escape. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>SPR AD-5 Maintain Site Cleanliness: If trash receptacles are used on-site, the project proponent will use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>SPR AD-6 Public Notifications for Treatment Projects. One to three days prior to the commencement of a treatment activity, the project proponent will post signs in a conspicuous location near the treatment area describing the activity and timing, and requesting persons in the area to contact a designated representative of the project proponent (contact information will be provided with the notice) if they have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects. For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, the project proponent will provide the information listed below to the Board or CAL FIRE during the proposed, approved, and completed stages of the project. The Board or CAL FIRE will make this information available to the public via an online database or other mechanism.</p> <p>Information on proposed projects (PSA in progress):</p> <ul style="list-style-type: none"> ▶ GIS data that include project location (as a point); ▶ project size (typically acres); ▶ treatment types and activities; and ▶ contact information for a representative of the project proponent. <p>The project proponent will provide information on the proposed project to the Board or CAL FIRE as early as feasible in the planning phase. The project proponent will provide this information to the Board or CAL FIRE with sufficient lead time to allow those agencies to make the information available to the public no later than two weeks prior to project approval. The project proponent may also make information available to the public via other mechanisms (e.g., the proponent's own website).</p> <p>Information on approved projects (PSA complete):</p> <ul style="list-style-type: none"> ▶ A completed PSA Environmental Checklist; ▶ A completed Mitigation Monitoring and Reporting Program (using Attachment A to the Environmental Checklist); 	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>► GIS data that include a polygon(s) of the project area, showing the extent of each treatment type included in the project (ecological restoration, fuel break, WUI fuel reduction).</p> <p>Information on completed projects:</p> <p>► GIS data that include a polygon(s) of the treated area, showing the extent of each treatment type implemented (ecological restoration, fuel break, WUI fuel reduction)</p> <p>► A post-project implementation report (referred to by CAL FIRE as a Completion Report) that includes</p> <ul style="list-style-type: none"> ▪ Size of treated area (typically acres); ▪ Treatment types and activities; ▪ Dates of work; ▪ A list of the SPRs and mitigation measures that were implemented ▪ Any explanations regarding implementation if required by SPRs and mitigation measures (e.g., explanation for feasibility determination required by SPR BIO-12; explanation for reduction of a no-disturbance buffer below the general minimum size described in Mitigation Measures BIO-1a and BIO-2b). <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>				
<p>SPR AD-8 Request Access for Post-Treatment Assessment. For CAL FIRE projects, during contract development, CAL FIRE will include access to the treated area over a prescribed period (usually up to three years) to assess treatment effectiveness in achieving desired fuel conditions and other CalVTP objectives as well as any necessary maintenance, as a contract term for consideration by the landowner. For public landowners, access to the treated area over a prescribed period will be a requirement of the executed contract. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>SPR AD-9: Obtain a Coastal Development Permit for Proposed Treatment Within the Coastal Zone Where Required. When planning a treatment project within the Coastal Zone, the project proponent will contact the local Coastal Commission district office, or applicable local government to determine if the project area is within the jurisdiction of the Coastal Commission, a local government with a certified Local Coastal Program (LCP), or both. All treatment projects in the Coastal Zone will be reviewed by the local Coastal Commission district office or local government with a certified LCP (in consultation with the local Coastal Commission district office regarding whether a</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>Coastal Development Permit (CDP) is required). If a CDP is required, the treatment project will be designed to meet the following conditions:</p> <ul style="list-style-type: none"> i. The treatment project will be designed in compliance with applicable provisions of the Coastal Act that provide substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the original jurisdiction of the Commission or an area of a local coastal government without a certified LCP; and ii. The treatment project will be designed in compliance with the applicable provisions of the certified LCP, specifically the substantive performance standards for the protection of potentially affected coastal resources, if the treatment activity will occur within the jurisdiction of a local coastal government with a certified LCP. <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>				
Aesthetic and Visual Resource Standard Project Requirements				
<p>SPR AES-1 Vegetation Thinning and Edge Feathering: The project proponent will thin and feather adjacent vegetation to break up or screen linear edges of the clearing and mimic forms of natural clearings as reasonable or appropriate for vegetation conditions. In general, thinning and feathering in irregular patches of varying densities, as well as a gradation of tall to short vegetation at the clearing edge, will achieve a natural transitional appearance. The contrast of a distinct clearing edge will be faded into this transitional band. This SPR only applies to mechanical and manual treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>SPR AES-2 Avoid Staging within Viewsheds: The project proponent will store all treatment-related materials, including vehicles, vegetation treatment debris, and equipment, outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. The project proponent will also locate materials staging and storage areas outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>SPR AES-3 Provide Vegetation Screening: The project proponent will preserve sufficient vegetation within, at the edge of, or adjacent to treatment areas to screen views from public trails, parks, recreation areas, and roadways as reasonable or appropriate for vegetation conditions. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
Air Quality Standard Project Requirements				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
SPR AQ-1 Comply with Air Quality Regulations: The project proponent will comply with the applicable air quality requirements of air districts within whose jurisdiction the project is located. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR AQ-2 Submit Smoke Management Plan: The project proponent will submit a smoke management plan for all prescribed burns to the applicable air district, in accordance with 17 CCR Section 80160. Pursuant to this regulation a smoke management plan will not be required for burns less than 10 acres that also will not be conducted near smoke sensitive areas, unless otherwise directed by the air district. Burning will only be conducted in compliance with the burn authorization program of the applicable air district(s) having jurisdiction over the treatment area. Example of a smoke management plan is in Appendix PD-2. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR AQ-3 Create Burn Plan: The project proponent will create a burn plan using the CAL FIRE burn plan template for all prescribed burns. The burn plan will include a fire behavior model output of First Order Fire Effects Model and BEHAVE or other fire behavior modeling simulation and that is performed by a qualified fire behavior technical specialist that predicts fire behavior, calculates consumption of fuels, tree mortality, predicted emissions, greenhouse gas emissions, and soil heating. The project proponent will minimize soil burn severity from broadcast burning to reduce the potential for runoff and soil erosion. The burn plan will be created with input from a qualified technician or certified State burn boss. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR AQ-4 Minimize Dust: To minimize dust during treatment activities, the project proponent will implement the following measures: <ul style="list-style-type: none"> ▶ Limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board (CARB) Fugitive Dust protocol. ▶ If road use creates excessive dust, the project proponent will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board (SWRCB). The project proponent will not over-water exposed areas such that the water results in runoff. 	Initial Treatment: Treatment Maintenance:			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>The type of dust suppression method will be selected by the project proponent based on soil, traffic, site-specific conditions, and air quality regulations.</p> <ul style="list-style-type: none"> ▶ Remove visible dust, silt, or mud tracked-out on to public paved roadways where sufficient water supplies and access to water is available. The project proponent will remove dust, silt, and mud from vehicles at the conclusion of each workday, or at a minimum of every 24 hours for continuous treatment activities, in accordance with Vehicle Code Section 23113. ▶ Suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may "cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property," per Health and Safety Code Section 41700. <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<p>SPR AQ-5 Avoid Naturally Occurring Asbestos: The project proponent will avoid ground-disturbing treatment activities in areas identified as likely to contain naturally occurring asbestos (NOA) per maps and guidance published by the California Geological Survey, unless an Asbestos Dust Control Plan (17 CCR Section 93105) is prepared and approved by the air district(s) with jurisdiction over the treatment area. Any NOA-related guidance provided by the applicable air district will be followed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>SPR AQ-6: Prescribed Burn Safety Procedures. Prescribed burns planned and managed by non-CAL FIRE crews will follow all safety procedures required of CAL FIRE crew, including the implementation of an approved Incident Action Plan (IAP). The IAP will include the burn dates; burn hours; weather limitations; the specific burn prescription; a communications plan; a medical plan; a traffic plan; and special instructions such as minimizing smoke impacts to specific local roadways. The IAP will also assign responsibilities for coordination with the appropriate air district, such as conducting onsite briefings, posting notifications, weather monitoring during burning, and other burn related preparations. This SPR applies only to prescribed burning treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements				
<p>SPR CUL-1 Conduct Record Search: An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures. Instead of conducting a new search, the project proponent may use recent record searches</p>	<p>Initial Treatment:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
containing the treatment area requested by a landowner or other public agency in accordance applicable agency guidance. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Treatment Maintenance:			
<p>SPR CUL-2 Contact Geographically Affiliated Native American Tribes: The project proponent will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List. Using the appropriate Native Americans Contact List, the project proponent will notify the California Native American Tribes in the counties where the treatment activity is located. The notification will contain the following:</p> <ul style="list-style-type: none"> ▶ A written description of the treatment location and boundaries. ▶ Brief narrative of the treatment objectives. ▶ A description of the activities used (e.g., prescribed burning, mastication) and associated acreages. ▶ A map of the treatment area at a sufficient scale to indicate the spatial extent of activities. ▶ A request for information regarding potential impacts to cultural resources from the proposed treatment. ▶ A detailed description of the depth of excavation, if ground disturbance is expected. <p>In addition, the project proponent will contact the NAHC for a review of their Sacred Lands File. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>SPR-CUL-3 Pre-field Research: The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. The purpose of this research is to properly inform survey design, based on the types of resources likely to be encountered within the treatment area, and to be prepared to interpret, record, and evaluate these findings within the context of local history and prehistory. The qualified archaeologist and/or archaeologically-trained resource professional will review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the area being studied, and conduct other tasks to maximize the effectiveness of the survey. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>SPR CUL-4 Archaeological Surveys: The project proponent will coordinate with an archaeologically-trained resource professional and/or qualified archaeologist to conduct a site-specific survey of the treatment area. The survey methodology (e.g., pedestrian survey, subsurface investigation) depends on whether the area has a low, moderate, or high sensitivity for resources, which is based on whether the records search, pre-field research, and/or Native American consultation identifies archaeological or historical resources near or within the treatment area. A survey report will be completed for every cultural resource</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
survey completed. The specific requirements will comply with the applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR CUL-5 Treatment of Archaeological Resources: If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. The project proponent, in consultation with culturally affiliated tribe(s), will develop effective protection measures for important cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. These protection measures will be written in clear, enforceable language, and will be included in the survey report in accordance with applicable state or local agency procedures. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR CUL-6 Treatment of Tribal Cultural Resources: The project proponent, in consultation with the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. The project proponent will provide the tribe(s) the opportunity to submit comments and participate in consultation to resolve issues of concern. The project proponent will defer implementing the treatment until the tribe approves protection measures, or if agreement cannot be reached after a good-faith effort, the proponent determines that any or all feasible measures have been implemented, where feasible, and the resource is either avoided or protected. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR CUL-7 Avoid Built Historical Resources: If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, the project proponent will avoid these resources. Within a buffer of 100 feet of the built historical resource, there will be no prescribed burning or mechanical treatment activities. Buffers less than 100 feet for built historical resources will only be used after consultation with and receipt of written approval from a qualified archaeologist. If the records search does not identify known historical resources in the treatment area, but structures (i.e., buildings, bridges, roadways) over 50 years old that have not been evaluated for historic	Initial Treatment: Treatment Maintenance:			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
significance are present in the treatment area, they will similarly be avoided. This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
SPR CUL-8 Cultural Resource Training: The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
Biological Resources Standard Project Requirements				
SPR BIO-1: Review and Survey Project-Specific Biological Resources. The project proponent will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to treatment, no more than one year prior to the submittal of the PSA, and no more than one year between completion of the PSA and implementation of the treatment project. The data reviewed will include the biological resources setting, species and sensitive natural communities tables, and habitat information in this PEIR for the ecoregion(s) where the treatment will occur. It will also include review of the best available, current data for the area, including vegetation mapping data, species distribution/range information, CNDDB, California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, relevant BIOS queries, and relevant general and regional plans. Reconnaissance-level biological surveys will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of a project site. The qualified surveyor will 1.) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural community, wetlands, or wildlife nursery site or habitat (including bird nests), and 2.) assess the suitability of habitat for special-status plant and animal species. The surveyor will also record any incidental wildlife observations. For each treatment project, habitat assessments will be completed at a time of year that is appropriate for identifying habitat and no more than one year prior to the submittal of the PSA, unless it can be demonstrated in the PSA that habitat assessments older than one year remain valid (e.g., site conditions are unchanged and no treatment activity has occurred since the assessment). If more than one year passes between completion of the PSA and initiation of the treatment project, the project proponent will verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, the project proponent, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment:	Initial Treatment: Treatment Maintenance:			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>1. Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided. If, based on the data review and reconnaissance-level survey, the qualified RPF or biologist determines that suitable habitat for sensitive biological resources is present but adverse effects on the suitable habitat can clearly be avoided through one of the following methods, the avoidance mechanism will be implemented prior to initiating treatment and will remain in effect throughout the treatment:</p> <ul style="list-style-type: none"> a. by physically avoiding the suitable habitat, or b. by conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites). <p>Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified RPF or biologist.</p> <p>2. Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided. Further review and surveys will be conducted to determine presence/absence of sensitive biological resources that may be affected, as described in the SPRs below. Further review may include contacting USFWS, NOAA Fisheries, CDFW, CNPS, or local resource agencies as necessary to determine the potential for special-status species or other sensitive biological resources to be affected by the treatment activity. Focused or protocol-level surveys will be conducted as necessary to determine presence/absence. If protocol surveys are conducted, survey procedures will adhere to methodologies approved by resource agencies and the scientific community, such as those that are available on the CDFW webpage at: https://www.wildlife.ca.gov/Conservation/Survey-Protocols. Specific survey requirements are addressed for each resource type in relevant SPRs (e.g., additional survey requirements are presented for special-status plants in SPR BIO-7).</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>SPR BIO-2: Require Biological Resource Training for Workers. The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
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.				
Sensitive Natural Communities and Other Sensitive Habitats				
<p>SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats. If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided, the project proponent will:</p> <ul style="list-style-type: none"> ▶ 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 http://vegetation.cnps.org/), or referring to relevant reports (e.g., reports found on the VegCAMP website). ▶ map and digitally record, using a Global Positioning System (GPS), the limits of any potential sensitive habitat and sensitive natural community identified in the treatment area. <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function. Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions by implementing the following within riparian habitats:</p> <ul style="list-style-type: none"> ▶ 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. 	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> ▶ Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species. ▶ Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements. ▶ Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service). ▶ Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided. ▶ Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints. ▶ Only hand application of herbicides approved for use in aquatic environments will be allowed and only during low-flow periods or when seasonal streams are dry. ▶ The project proponent will notify CDFW when required by California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. 				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <p>► In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment goals objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable than those expected to result from application of the above measures. Deviation from the above design specifications, different protection measures and design standards will only be approved when the treatment plan incorporates an evaluation of beneficial functions of the riparian habitat and with written concurrence from CDFW.</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<p>SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub. The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. An ecological definition of type conversion is used in the CalVTP PEIR for assessment of environmental effects: a change from a vegetation type dominated by native shrub species that are characteristic of chaparral and coastal sage scrub vegetation alliances to a vegetation type characterized predominantly by weedy herbaceous cover or annual grasslands. For the PEIR, type conversion is considered in terms of habitat function, which is defined here as the arrangement and capability of habitat features to provide refuge, food source, and reproduction habitat to plants and animals, and thereby contribute to the conservation of biological and genetic diversity and evolutionary processes (de Groot et al. 2002). Some modification of habitat characteristics may occur provided habitat function is maintained (i.e., the location, essential habitat features, and species supported are not substantially changed). During the reconnaissance-level survey required in SPR BIO-1, a qualified RPF or biologist will identify chaparral and coastal sage scrub vegetation to the alliance level and determine the condition class and fire return interval departure of the chaparral and/or coastal sage scrub present in each treatment area. For all treatment types in chaparral and coastal sage scrub, the project proponent, in consultation with a qualified RPF or qualified biologist will:</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> ▶ Develop a treatment design that avoids environmental effects of type conversion in chaparral and coastal sage scrub vegetation alliances, which will include evaluating and determining the appropriate spatial scale at which the proponent would consider type conversion, and substantiating its appropriateness. The project proponent will demonstrate with substantial evidence that the habitat function of chaparral and coastal sage scrub would be at least maintained within the identified spatial scale at which type conversion is evaluated for the specific treatment project. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, spatial needs of sensitive species, presence of sufficient seed plants and nurse plants, light availability, and edge effects may inform the determination of an appropriate spatial scale. ▶ The treatment design will maintain a minimum percent cover of mature native shrubs within the treatment area to maintain habitat function; the appropriate percent cover will be identified by the project proponent in the development of treatment design and be specific to the vegetation alliances that are present in the identified spatial scale used to evaluate type conversion. Mature native shrubs that are retained will be distributed contiguously or in patches within the stand. If the stand consists of multiple age classes, patches representing a range of middle to old age classes will be retained to maintain and improve heterogeneity, to the extent needed to avoid type conversion. <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"> ▶ For ecological restoration treatment types, complete removal of the mature shrub layer will not occur in native chaparral and coastal sage scrub vegetation types. ▶ Ecological restoration treatments will not be implemented in vegetation types that are within their natural fire return interval (i.e., time since last burn is less than the average time listed as the fire return interval range in Table 3.6-1) unless the project proponent demonstrates with substantial evidence that the habitat function of chaparral and coastal sage scrub would be improved. ▶ A minimum of 35 percent relative cover of existing shrubs and associated native vegetation will be retained at existing densities in patches distributed in a mosaic pattern within the treated area or the shrub canopy will be thinned by no more than 20 percent from baseline density (i.e., if baseline shrub canopy density is 60 percent, post treatment shrub canopy density will be no less than 40 percent). A different percent relative cover can be retained if the project proponent demonstrates with substantial evidence that alternative treatment design measures would result in effects on the habitat function of chaparral and coastal sage scrub that are equal or 				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <p>► 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.</p> <p>These SPR requirements apply to all treatment activities and only the ecosystem restoration treatment type, including treatment maintenance.</p> <p>A determination of compliance with the SB 1260 prohibition of type conversion in chaparral and coastal sage scrub is a statutory issue separate from CEQA compliance that may involve factors additional to the ecological definition and habitat functions presented in the PEIR, such as geographic context. It is beyond the legal scope of the PEIR to define SB 1260 type conversion and statutory compliance. The project proponent, acting as lead agency for the proposed later treatment project, will be responsible for defining type conversion in the context of the project and making the finding that type conversion 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>SPR BIO-6: Prevent Spread of Plant Pathogens. When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., lone chaparral, blue oak woodland), the project proponent will implement the following best management practices to prevent the spread of <i>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"> ► clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving at a treatment site and when leaving a contaminated site, or a site in a county where contamination is a risk; ► include training on <i>Phytophthora</i> diseases and other plant pathogens in the worker awareness training; ► minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment; ► minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination; 	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> ► clean soil and debris from equipment and sanitize hand tools, buckets, gloves, and footwear when moving from high risk to low risk areas or between widely separated portions of a treatment area; and ► follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration sites or with rare plants and sensitive habitat (Working Group for <i>Phytoptheras</i> in Native Habitats 2016). <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
Special-Status Plants				
<p>SPR BIO-7: Survey for Special-Status Plants. If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW's "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities."</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"> ► If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys. ► If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment. 	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
This SPR applies to all treatment activities and treatment types, including treatment maintenance.				
Environmentally Sensitive Habitat Areas				
<p>SPR BIO-8: Identify and Avoid or Minimize Impacts in Coastal Zone ESHAs. When planning a treatment project within the Coastal Zone, the project proponent will, in consultation with the Coastal Commission or a local government with a certified Local Coastal Program (LCP) (as applicable), identify the habitat types and species present to determine if the area qualifies as an Environmentally Sensitive Habitat Area (ESHA). If the area is an ESHA, the treatment project may be allowed pursuant to this PEIR, if it meets the following conditions. If a project requires a CDP by the Coastal Commission or a local government with a certified LCP (as applicable), the CDP approval may require modification to these conditions to further avoid and minimize impacts:</p> <ul style="list-style-type: none"> ▶ The treatment will be designed, in compliance with the Coastal Act or LCP if a site is within a certified LCP area, to protect the habitat function of the affected ESHA, protect habitat values, and prevent loss or type conversion of habitat and vegetation types that define the ESHA, or loss of special-status species that inhabit the ESHA. ▶ Treatment actions will be limited to eradication or control of invasive plants, removal of uncharacteristic fuel loads (e.g., removing dead, diseased, 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 vegetation types present in the ESHA. ▶ A qualified biologist or RPF familiar with the ecology of the treatment area will monitor all treatment activities in ESHAs. ▶ Appropriate no-disturbance buffers will be developed in compliance with the Coastal Act or relevant LCP policies for treatment activities in the vicinity of ESHAs to avoid adverse direct and indirect effects to ESHAs. <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
Invasive Plants and Wildlife				
<p>SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife. The project proponent will take the following actions to prevent the spread of invasive plants, noxious weeds, and invasive wildlife (e.g., New Zealand mudsnail):</p> <ul style="list-style-type: none"> ▶ 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; 	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> ▶ for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species; ▶ inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas; ▶ stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area; ▶ identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles; ▶ treat invasive plant biomass onsite to eliminate seeds and propagules and prevent reestablishment or dispose of invasive plant biomass offsite at an appropriate waste collection facility (if not kept on site); transport invasive plant materials in a closed container or bag to prevent the spread of propagules during transport; and ▶ implement Fire and Fuel Management BMPs outlined in the "Preventing the Spread of Invasive Plants: Best Management Practices for Land Managers" (Cal-IPC 2012, or current version). <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
Wildlife				
<p>SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites. If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries, monarch overwintering sites) with potential to be directly or indirectly affected by a</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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>SPR BIO-11. Install Wildlife-Friendly Fencing (Prescribed Herbivory). If temporary fencing is required for prescribed herbivory treatment, a wildlife-friendly fencing design will be used. The project proponent will require a qualified RPF or biologist to review and approve the design before installation to minimize the risk of wildlife entanglement. The fencing design will meet the following standards:</p> <ul style="list-style-type: none"> ▶ Minimize the chance of wildlife entanglement by avoiding barbed wire, loose or broken wires, or any material that could impale or snag a leaping animal; and, if feasible, keeping electric netting-type fencing electrified at all times or laid down while not in use. ▶ Charge temporary electric fencing with intermittent pulse energizers; continuous output fence chargers will not be permitted. ▶ Allow wildlife to jump over easily without injury by installing fencing that can flex as animals pass over it and installing the top wire low enough (no more than approximately 40 inches high on flat ground) to allow adult ungulates to jump over it. The determination of appropriate fence height will consider slope, as steep slopes are more difficult for wildlife to pass. ▶ Be highly visible to birds and mammals by using high-visibility tape or wire, flagging, or other markers. <p>This SPR applies only to prescribed herbivory and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>SPR BIO-12. Protect Common Nesting Birds, Including Raptors. The project proponent will schedule treatment activities to avoid the active nesting season of common native bird species, including raptors, that could be present within or adjacent to the treatment site, if feasible. Common native birds are species not otherwise treated as special status</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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"> ► Establish Buffer. The project proponent will establish a temporary, species-appropriate buffer around the nest sufficient to reasonably expect that breeding would not be disrupted. Treatment activities will be implemented outside of the buffer. The buffer location will be determined by a qualified RPF or biologist. Factors to be considered for determining buffer location will include: presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and expected treatment activities. Nests of common birds within the buffer need not be monitored during treatment. However, buffers will be maintained until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician. 				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>► Modify Treatment. The project proponent will modify the treatment in the vicinity of an active nest to avoid disturbance of active nests (e.g., by implementing manual treatment methods, rather than mechanical treatment methods). Treatment modifications will be determined by the project proponent in coordination with the qualified RPF or biologist.</p> <p>► Defer Treatment. The project proponent will defer the timing of treatment in the portion(s) of the treatment site that could disturb the active nest. If this avoidance strategy is implemented, treatment activity will not commence until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician.</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 (referred to by CAL FIRE as a Completion Report).</p> <p>The following avoidance strategies may also be considered together with or in lieu of other actions for implementation by a project proponent to avoid disturbance to raptor nests:</p> <p>► Monitor Active Raptor Nest During Treatment. A qualified RPF, biologist, or biological technician will monitor an active raptor nest during treatment activities to identify signs of agitation, nest defense, or other behaviors that signal disturbance of the active nest is likely (e.g., standing up from a brooding position, flying off the nest). If breeding raptors are showing signs of nest disturbance, one of the other avoidance strategies (establish buffer, modify treatment or defer treatment) will be implemented or a pause in the treatment activity will occur until the disturbance behavior ceases.</p> <p>► Retention of Raptor Nest Trees. 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>				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Geology, Soils, and Mineral Resource Standard Project Requirements				
SPR GEO-1 Suspend Disturbance during Heavy Precipitation: The project proponent will suspend mechanical, prescribed herbivory, and herbicide treatments if the National Weather Service forecast is a "chance" (30 percent or more) of rain within the next 24 hours. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR GEO-2 Limit High Ground Pressure Vehicles: The project proponent will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. If use of heavy equipment is required in saturated areas, other measures such as operating on organic debris, using low ground pressure vehicles, or operating on frozen soils/snow covered soils will be implemented to minimize soil compaction. Existing compacted road surfaces are exempted as they are already compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.				
SPR GEO-3 Stabilize Disturbed Soil Areas: The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. If mechanical, prescribed herbivory, or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, animal hooves, or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of	Initial Treatment: Treatment Maintenance:			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.				
SPR GEO-4 Erosion Monitoring: The project proponent will inspect treatment areas for the proper implementation of erosion control SPRs and mitigations prior to the rainy season. If erosion control measures are not properly implemented, they will be remediated prior to the first rainfall event per SPR GEO-3 and GEO-8. Additionally, the project proponent will inspect for evidence of erosion after the first large storm or rainfall event (i.e., ≥ 1.5 inches in 24 hours) as soon as is feasible after the event. Any area of erosion that will result in substantial sediment discharge will be remediated within 48 hours per the methods stated in SPRs GEO-3 and GEO-8. This SPR applies only to mechanical, prescribed herbivory, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR GEO-5 Drain Stormwater via Water Breaks: The project proponent will drain compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(c) of the California Forest Practice Rules (February 2019 version). Where waterbreaks cannot effectively disperse surface runoff, including where waterbreaks cause surface run-off to be concentrated on downslopes, other erosion controls will be installed as needed to maintain site productivity by minimizing soil loss. This SPR applies only to mechanical, manual, and prescribed burn treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR GEO-6 Minimize Burn Pile Size: The project proponent will not create burn piles that exceed 20 feet in length, width, or diameter, except when on landings, road surfaces, or on contour to minimize the spatial extent of soil damage. In addition, burn piles will not occupy more than 15 percent of the total treatment area (Busse et al. 2014). The project proponent will not locate burn piles in a Watercourse and Lake Protection Zone as defined in SPR HYD-4. This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR GEO-7 Minimize Erosion: To minimize erosion, the project proponent will: (1) Prohibit use of heavy equipment where any of the following conditions are present: (i) Slopes steeper than 65 percent. (ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme. (iii) Slopes steeper than 50 percent that lead without flattening to sufficiently dissipate water flow and trap sediment before it reaches a watercourse or lake.	Initial Treatment: Treatment Maintenance:			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<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"> (i) Existing tractor roads that do not require reconstruction, or (ii) New tractor roads flagged by the project proponent prior to the treatment activity. <p>(3) Prescribed herbivory treatments will not be used in areas with over 50 percent slope. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>				
<p>SPR GEO-8 Steep Slopes: The project proponent will require a Registered Professional Forester (RPF) or licensed geologist to evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, of other issue related to unstable soils and 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>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
Greenhouse Gas Emissions Standard Project Requirements				
<p>SPR GHG-1 Contribute to the AB 1504 Carbon Inventory Process: The project proponent of treatment projects subject to the AB 1504 process will provide all necessary data about the treatment that is needed by the U.S. Forest Service and FRAP to fulfill requirements of the AB 1504 carbon inventory, and to aid in the ongoing research about the long-term net change in carbon sequestration resulting from treatment activity. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
Hazardous Material and Public Health and Safety Standard Project Requirements				
<p>SPR HAZ-1 Maintain All Equipment: The project proponent will maintain all diesel- and gasoline-powered equipment per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, the project proponent will inspect all equipment for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
SPR HAZ-2 Require Spark Arrestors: The project proponent will require mechanized hand tools to have federal- or state-approved spark arrestors. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR HAZ-3 Require Fire Extinguishers: The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR HAZ-4 Prohibit Smoking in Vegetated Areas: The project proponent will require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR HAZ-5 Spill Prevention and Response Plan: The project proponent or licensed Pest Control Advisor (PCA) will prepare a Spill Prevention and Response Plan (SPRP) prior to beginning any herbicide treatment activities to provide protection to onsite workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. The SPRP will include (but not be limited to): <ul style="list-style-type: none"> ▶ a map that delineates staging areas, and storage, loading, and mixing areas for herbicides; ▶ a list of items required in an onsite spill kit that will be maintained throughout the life of the activity; ▶ procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR HAZ-6 Comply with Herbicide Application Regulations: The project proponent will coordinate pesticide use with the applicable County Agricultural Commissioner(s), and all required licenses and permits will be obtained prior to herbicide application. The project proponent will prepare all herbicide applications to do the following: <ul style="list-style-type: none"> ▶ Be implemented consistent with recommendations prepared annually by a licensed PCA. ▶ Comply with all appropriate laws and regulations pertaining to the use of pesticides and safety standards for employees and the public, as governed by the EPA, DPR, and applicable local jurisdictions. 	Initial Treatment: Treatment Maintenance:			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> ▶ Adhere to label directions for application rates and methods, storage, transportation, mixing, container disposal, and weather limitations to application such as wind speed, humidity, temperature, and precipitation. ▶ Be applied by an applicator appropriately licensed by the State. <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>				
<p>SPR HAZ-7 Triple Rinse Herbicide Containers: The project proponent will triple rinse all herbicide and adjuvant containers with clean water at an approved site, and dispose of rinsate by placing it in the batch tank for application per 3 CCR Section 6684. The project proponent will puncture used containers on the top and bottom to render them unusable, unless said containers are part of a manufacturer's container recycling program, in which case the manufacturer's instructions will be followed. Disposal of non-recyclable containers will be at legal dumpsites. Equipment will not be cleaned, and personnel will not be washed in a manner that would allow contaminated water to directly enter any body of water within the treatment area or adjacent watersheds. Disposal of all herbicides will follow label requirements and waste disposal regulations. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>SPR HAZ-8 Minimize Herbicide Drift to Public Areas: The project proponent will employ the following herbicide application parameters during herbicide application to minimize drift into public areas:</p> <ul style="list-style-type: none"> ▶ application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative); ▶ spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift; ▶ low nozzle pressures (30-70 pounds per square inch) will be utilized to minimize drift; and ▶ spray nozzles will be kept within 24 inches of vegetation during spraying. <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas: For herbicide applications occurring within or adjacent to public recreation areas, residential areas, schools, or any other public areas within 500 feet, the project proponent will post signs at each end of herbicide treatment areas and any intersecting trails notifying the public of the use of herbicides. The signs will include the signal word (i.e., Danger, Warning or Caution), product name, and manufacturer; active ingredient; EPA registration number; target pest; treatment location; date and time of application; restricted entry interval, if</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
applicable per the label requirements; date which notification sign may be removed; and a contact person with a telephone number. Signs will be posted prior to the start of treatment and notification will remain in place for at least 72 hours after treatment ceases. This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.				
Hydrology and Water Quality Standard Project Requirements				
SPR HYD-1 Comply with Water Quality Regulations: Project proponents must also conduct proposed vegetation treatments in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. 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.	Initial Treatment: Treatment Maintenance:			
SPR HYD-2 Avoid Construction of New Roads: The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR HYD-3 Water Quality Protections for Prescribed Herbivory: The project proponent will include the following water quality protections for all prescribed herbivory treatments: <ul style="list-style-type: none"> ► Environmentally sensitive areas such as waterbodies, wetlands, or riparian areas will be identified in the treatment prescription and excluded from prescribed herbivory project areas using temporary fencing or active herding. A buffer of approximately 50 feet will be maintained between sensitive and actively grazed areas. 	Initial Treatment: Treatment Maintenance:			

Standard Project Requirements				Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
>50 % Slope	150	100	degradation of downstream beneficial uses of water. Determined 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"> ▶ Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed area to act as a filter strip for raindrop energy dissipation and for wildlife habitat. If this percentage is reduced a qualified RPF will provide the project proponent with a site- and/or treatment activity-specific explanation for the percent surface cover reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced percent as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). This requirement is based on 14 CCR Section 916.4 [936.4, 956.4] Subsection (b)(6) (February 2019 version) and 14 CCR Section 916.5 (February 2019 version). ▶ Equipment, including tractors and vehicles, must not be driven in wet areas or WLPZs, except over existing roads or watercourse crossings where vehicle tires or tracks remain dry. ▶ Equipment used in vegetation removal operations will not be serviced in WLPZs, within wet meadows or other wet areas, or in locations that would allow grease, oil, or fuel to pass into lakes, watercourses, or wet areas. ▶ WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately. ▶ Burn piles will be located outside of WLPZs. ▶ No fire ignition (nor use of associated accelerants) will occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs. ▶ Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Treatment shall occur prior to October 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 							

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Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> ▶ For spray applications in and adjacent to habitats suitable for special-status species, use herbicides containing dye (registered for aquatic use by DPR, if warranted) to prevent overspray. ▶ Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative); ▶ No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities. <p>This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.</p>				
<p>SPR HYD-6 Protect Existing Drainage Systems: If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing activities. If a drainage structure or infiltration system is inadvertently disturbed or modified during project activities, the project proponent will coordinate with owner of the system or feature to repair any damage and restore pre-project drainage conditions. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
Noise Standard Project Requirements				
<p>SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours: The project proponent will require that operation of heavy equipment associated with treatment activities (heavy off-road equipment, tools, and delivery of equipment and materials) will occur during daytime hours if such noise would be audible to receptors (e.g., residential land uses, schools, hospitals, places of worship). Cities and counties in the treatable landscape typically restrict construction-noise (which would apply to vegetation treatment noise) to particular daytime hours. If the project proponent is subject to local noise ordinance, it will adhere to those to the extent the project is subject to them. If the applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating activity can occur noise-generating vegetation treatment activity will be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday and federal holidays. If the project proponent is not subject to local ordinances (e.g., CAL FIRE), it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>SPR NOI-2 Equipment Maintenance: The project proponent will require that all powered treatment equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be</p>	<p>Initial Treatment:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types, including treatment maintenance.	Treatment Maintenance:			
SPR NOI-3 Engine Shroud Closure: The project proponent will require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR NOI-4 Locate Staging Areas Away from Noise-Sensitive Land Uses: The project proponent will locate treatment activities, equipment, and equipment staging areas away from nearby noise-sensitive land uses (e.g., residential land uses, schools, hospitals, places of worship), to the extent feasible, to minimize noise exposure. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR NOI-5 Restrict Equipment Idle Time: The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors: For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. Notification will include anticipated dates and hours during which treatment activities are anticipated to occur and contact information, including a daytime telephone number, of the project representative. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
Recreation Standard Project Requirements				
SPR REC-1 Notify Recreational Users of Temporary Closures. If a treatment activity would require temporary closure of a public recreation area or facility, the project proponent will coordinate with the owner/manager of that recreation area or facility. If temporary closure of a recreation area or facility is required, the project proponent will work with the owner/manager to post notifications of the closure at least 2 weeks prior to the commencement of the treatment activities. Additionally, notification of the treatment activity will be provided to the Administrative Officer (or equivalent official responsible for distribution of public information) of the county(ies) in which the affected recreation area or facility is located. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	Initial Treatment: Treatment Maintenance:			
Transportation Standard Project Requirements				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>SPR TRAN-1 Implement Traffic Control during Treatments: Prior to initiating vegetation treatment activities the project proponent will work with the agency(ies) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed. A TMP will be needed if traffic generated by the project would result in obstructions, hazards, or delays exceeding applicable jurisdictional standards along access routes for individual vegetation treatments. If needed, a TMP will be prepared to provide measures to reduce potential traffic obstructions, hazards, and service level degradation along affected roadway facilities. The scope of the TMP will depend on the type, intensity, and duration of the specific treatment activities under the CalVTP. Measures included in the TMP could include (but are not be limited to) construction signage to provide motorists with notification and information when approaching or traveling along the affected roadway facilities, flaggers for lane closures to provide temporary traffic control along affected roadway facilities, treatment schedule restrictions to avoid seasons or time periods of peak vehicle traffic, haul-trip, delivery, and/or commute time restrictions that would be implemented to avoid peak traffic days and times along affected roadway facilities. If the TMP identifies impacts on transportation facilities outside of the jurisdiction of the project proponent, the TMP will be submitted to the agency with jurisdiction over the affected roadways prior to commencement of vegetation treatment projects. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p> <p>Smoke generated during prescribed burn operations could potentially affect driver visibility and traffic operations along nearby roadways. Direct smoke impacts to roadway visibility and indirect impacts related to driver distraction will be considered during the planning phase of burning operations. Smoke impacts and smoke management practices specific to traffic operations during prescribed fire operations will be identified and addressed within the TMP. The TMP will include measures to monitor smoke dispersion onto public roadways, and traffic control operations will be initiated in the event burning operations could affect traffic safety along any roadways. This SPR applies only to prescribed burn treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p> <p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
Public Services and Utilities Standard Project Requirements				
<p>SPR UTIL-1: Solid Organic Waste Disposition Plan. 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</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
facility, composting). If the project proponent intends to transport solid organic waste offsite, the Solid Organic Waste Disposition Plan will clearly identify the location and capacity of the intended processing facility, consistent with local and state regulations to demonstrate that adequate capacity exists to accept the treated materials. This SPR applies only to mechanical and manual treatment activities and all treatment types, including treatment maintenance.				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
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Aesthetics and Visual Resources

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

Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment. It is acknowledged that due to cost, availability, and the limits of current technology, there may be circumstances where	Initial Treatment: Treatment Maintenance:			
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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.				
Biological Resources				
Mitigation Measure BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA If listed plants are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will avoid and protect these species by establishing a no-disturbance buffer around the area occupied by listed plants and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway), exceptions to this requirement are listed later in this measure. The no-disturbance buffers will generally be a minimum of 50 feet from listed plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid killing or damaging listed plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate buffer size will be determined based on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. For example, paint-on or wicking application of herbicides to invasive plants may be implemented within 50 feet of listed plant species without posing a risk, especially if the listed plants are dormant at the time of application. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants 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	Initial Treatment: Treatment Maintenance:			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>report (referred to by CAL FIRE as a Completion Report) with a science-based justification for the deviation. No fire ignition (nor use of associated 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>Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA</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"> ► 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 	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <ul style="list-style-type: none"> ▶ Treatments may be conducted within this buffer if the potentially affected special-status plant species is a geophytic, stump-sprouting, or annual species, and the treatment can be conducted outside of the growing season (e.g., after it has completed its annual life cycle) or during the dormant season using only treatment activities that would not damage the stump, root system or other underground parts of special-status plants or destroy the seedbank. ▶ Treatments will be designed to maintain the function of special-status plant habitat. For example, for a fuel break proposed in treatment areas occupied by special-status plants, if the removal of shade cover would degrade the special-status plant habitat despite the requirement to physically or seasonally avoid the special-status plant itself, habitat function would be diminished and the treatment would need to be modified or precluded from implementation. ▶ No fire ignition (nor use of associated accelerants) will occur within the special-status plant buffer. <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</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
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>Mitigation Measure BIO-1c: Compensate for Unavoidable Loss of Special-Status Plants</p> <p>If significant impacts on listed or non-listed special-status plants cannot feasibly be avoided as specified under the circumstances described under Mitigation Measures BIO-1a and 1b, the project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant impacts that require compensatory mitigation and describes the compensatory mitigation strategy being implemented and how unavoidable losses of special-status plants will be compensated. The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. If the special-status plant taxa are listed under ESA or CESA, the plan will be submitted to CDFW and/or USFWS (as appropriate) for review and comment.</p> <p>The first priority for compensatory mitigation will be preserving and enhancing existing populations outside of the treatment area in perpetuity, or if that is not an option because existing populations that can be preserved in perpetuity are not available, one of the following mitigation options will be implemented by the project proponent instead:</p> <ul style="list-style-type: none"> ▶ creating populations on mitigation sites outside of the treatment area through seed collection and dispersal (annual species) or transplantation (perennial species); ▶ purchasing mitigation credits from a CDFW- or USFWS-approved conservation or mitigation bank in sufficient quantities to offset the loss of occupied habitat; and ▶ if the affected special-status plants are not listed under ESA or CESA, compensatory mitigation may include restoring or enhancing degraded habitats so that they are made suitable to support special-status plant species in the future. <p>If relocation efforts are part of the Compensatory Mitigation Plan, the plan will include details on the methods to be used, including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, success criteria, and remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements. The following performance standards will be applied for relocation:</p> <ul style="list-style-type: none"> ▶ the extent of occupied area will be substantially similar to the affected occupied habitat and will be suitable for self-producing populations. Re-located/re-established populations will be considered suitable for self-producing when: ▶ habitat conditions allow for plants to reestablish annually for a minimum of 5 years with no human intervention, such as supplemental seeding; and 	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

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

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> ▪ If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that listed or fully protected wildlife with specific requirements for high canopy cover (e.g., Humboldt marten, fisher, spotted owl, coastal California gnatcatcher, riparian woodrat) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted [e.g., 50 percent for coastal California gnatcatcher]) such that habitat function is maintained. ▶ A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. Because this measure pertains to species listed under CESA or ESA or are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS/NOAA Fisheries regarding the determination that habitat function is maintained. If consultation determines that the treatment will not maintain habitat function for the special-status species, the project proponent will implement Mitigation Measure BIO-2c. 				
<p>Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)</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"> ▶ The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals: <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, 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</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>qualified RPF or biologist determines that such an adjustment would not be likely to adversely affect (i.e., cause mortality, injury, or disturbance to) the species within the nest, den, burrow, or other occupied site. If a no-disturbance buffer is reduced below 100 feet from an occupied site, a qualified RPF or biologist will provide the project proponent with a site- and/or treatment activity-specific explanation for the buffer reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced buffer as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).</p> <ul style="list-style-type: none"> ▶ No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury or disturbance to special-status species. ▶ For prescribed burning, the project proponent will implement the treatment outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, the qualified RPF or biologist will determine the period of time within which prescribed burning could occur that 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. <p><u>Maintain Habitat Function</u></p> <ul style="list-style-type: none"> ▶ For all treatment activities, the project proponent will design treatment activities to maintain the habitat function by implementing the following: <ul style="list-style-type: none"> ▪ 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 				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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.</p> <ul style="list-style-type: none"> ▪ If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that special-status wildlife with specific requirements for high canopy cover (e.g., northern goshawk, Sierra Nevada snowshoe hare) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted) such that the habitat function is maintained. ► A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding habitat function. <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 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</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
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>Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)</p> <p>If the provisions of Mitigation Measure BIO-2a, BIO-2b, BIO-2d, BIO-2e, BIO-2f, or BIO-2g cannot be implemented and the project proponent determines that additional mitigation is necessary to reduce significant impacts, the project proponent will compensate for such impacts to species or habitat by acquiring and/or protecting land that provides (or will provide in the case of restoration) habitat function for affected species that is at least equivalent to the habitat function removed or degraded as a result of the treatment.</p> <p>Compensation may include:</p> <ol style="list-style-type: none"> 1. Preserving existing habitat outside of the treatment area in perpetuity; this may entail purchasing mitigation credits and/or lands from a CDFW- or USFWS-approved entity in sufficient quantity to offset the residual significant impacts, generally at a ratio of 1:1 for habitat; and 2. Restoring or enhancing existing habitat within the treatment area or outside of the treatment area (including decommissioning roads, adding perching structures, removing existing perching structures, or removing existing movement barriers or other existing features that are adversely affecting the species). <p>The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and:</p> <ol style="list-style-type: none"> 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 mechanisms for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity. 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 	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

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Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>the entirety of the habitat is not burned or removed and untreated portions of suitable habitat are retained.</p> <p>If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance of federally listed butterflies or degradation of occupied habitat (host plants) such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c.</p> <p>CESA and ESA Listed Species. A qualified RPF or biologist will determine if, after implementation of any feasible impact avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed butterflies or degradation of occupied habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c.</p> <p>Other Special-status Species. A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA, because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status butterflies would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status butterflies or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented. The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status butterfly species would benefit from treatment in the occupied habitat area even though some may be killed, injured or disturbed during treatment activities. For a treatment to be considered beneficial to special-status butterfly species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources). If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.</p>				

Mitigation Measures		Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Table 3.6-34 Special-status Butterflies and Associated Host Plants					
Butterfly Species	Host Plants				
bay checkerspot butterfly	dwarf plantain (<i>Plantago virginica</i>), purple owl's clover (<i>Castilleja exserta</i>)				
Behren's silverspot butterfly	blue violet (<i>Viola adunca</i>)				
callippe silverspot butterfly	California golden violet (<i>Viola pedunculata</i>)				
Carson wandering skipper	salt grass (<i>Distichlis spicata</i>)				
El Segundo blue butterfly	seacliff buckwheat (<i>Eriogonum parvifolium</i>)				
Hermes copper butterfly	spiny redberry (<i>Rhamnus crocea</i>)				
Kern primrose sphinx moth	plains evening-primrose (<i>Camissonia contorta</i>), field primrose (<i>Camissonia campestris</i>)				
Laguna Mountains skipper	Cleveland's horkelia (<i>Horkelia clevelandii</i>), sticky cinquefoil (<i>Drymocallis glandulosa</i>)				
Lange's metalmark butterfly	naked-stemmed buckwheat (<i>Eriogonum nudum</i>)				
lotis blue butterfly	seaside bird's foot trefoil (<i>Hosackia gracilis</i>)				
Mission blue butterfly	lupine (<i>Lupinus</i> spp.)				
Myrtle's silverspot butterfly	blue violet				
Oregon silverspot butterfly	blue violet				
Palos Verdes blue butterfly	Santa Barbara milkvetch (<i>Astragalus trichopodus</i>), common deerweed (<i>Acmispon glaber</i>)				
San Bruno elfin butterfly	broadleaf stonecrop (<i>Sedum spathulifolium</i>), manzanita (<i>Arctostaphylos</i> spp.), huckleberry (<i>Vaccinium</i> spp.)				
Smith's blue butterfly	seacliff buckwheat, seaside buckwheat (<i>Eriogonum latifolium</i>)				
Quino checkerspot butterfly	dwarf plantain, purple owl's clover				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>Mitigation Measure BIO-2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities)</p> <p>If treatment activities would occur within the limited range of any state or federally listed beetle, fly, grasshopper, or snail, and these species are identified as occurring or having potential to occur due to the presence of potentially suitable habitat during review and surveys for SPR BIO-1 and surveys for SPR BIO-10, then the following measures will be implemented:</p> <ul style="list-style-type: none"> ▶ To avoid and minimize impacts to Mount Hermon June beetle and Zayante band-winged grasshopper, treatment activities will not occur within "Sandhills" habitat in Santa Cruz County, the only suitable habitat for these species. ▶ To avoid and minimize impacts to Casey's June beetle, Delhi Sands flower-loving fly (<i>Rhaphiomidas terminates abdominalis</i>), Delta green ground beetle (<i>Elaphrus viridis</i>), Morro shoulderband snail, Ohlone tiger beetle (<i>Cicindela ohlone</i>), and Trinity bristle snail, treatment activities will not occur within habitat in the range of these species that is deemed suitable by a qualified RPF or biologist with familiarity of the species. <p>If the project proponent cannot implement the measures above to avoid mortality, injury or disturbance to listed beetles, flies, grasshoppers, and snails, or degradation of suitable habitat such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities)</p> <p>If special-status bumble bees are identified as occurring during review and surveys under SPR BIO-1 and confirmed during protocol-level surveys per SPR BIO-10, or if suitable habitat for special-status bumble bees is identified during review and surveys under SPR BIO-1 (e.g., wet meadow, forest meadow, riparian, grassland, or coastal scrub habitat containing sufficient floral resources within the range of the species), then the project proponent will implement the following measures, as feasible:</p> <ul style="list-style-type: none"> ▶ Prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season. ▶ Treatment areas in occupied or suitable habitat will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year; the objective of this measure is to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area. ▶ Treatments will be conducted in a patchy pattern to the extent feasible in occupied or suitable habitat, such that the entirety of the habitat is not burned or removed and untreated portions of occupied or suitable habitat are retained (e.g., fire breaks will be aligned to allow for areas of unburned floral resources for special-status bumble bees within the treatment area). 	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>► Herbicides will not be applied to flowering native plants within occupied or suitable habitat to the extent feasible during the flight season (March through September).</p> <p>CESA and ESA Listed Species. A qualified RPF or biologist will determine if, after implementation of feasible avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance to the species, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, or disturbance of listed bumble bees (in the event the Candidate listing is confirmed) or degradation of occupied (or assumed to be occupied) habitat such that its function would not be maintained would occur, the project proponent will implement Mitigation Measure BIO-2c.</p> <p>Other Special-status Species. A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status bumble bees would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status bumble bees or degradation of occupied (or assumed to be occupied) habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status bumble bee species would benefit from treatment in the occupied (or assumed to be occupied) habitat area even though some of the non-listed special-status bumble bees may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to special-status bumble bee species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources), and the substantial evidence will be included in the PSA. If it is determined that treatment activities would be beneficial to special-status bumble bees, no compensatory mitigation will be required.</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>Mitigation Measure BIO-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory)</p> <p>The project proponent will implement the following measure if treatment activities are planned within the range of desert bighorn sheep, peninsular bighorn sheep, Sierra Nevada bighorn sheep, or pronghorn:</p> <ul style="list-style-type: none"> ▶ Prescribed herbivory activities will be prohibited within a 14-mile buffer around suitable habitat for any species of bighorn sheep within the range of these species consistent with the more stringent recommendations in the Recovery Plan for Sierra Nevada bighorn sheep (USFWS 2007). ▶ Prescribed herbivory activities will be avoided within the range of pronghorn where feasible (where this range does not overlap with the range of any species of bighorn sheep). 	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<p>Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</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"> ▶ 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 http://vegetation.cnps.org/) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined. ▶ Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. Treatments will be designed to replicate the fire regime attributes for the affected sensitive natural community or oak woodland type including seasonality, fire return interval, fire size, spatial complexity, fireline intensity, severity, and fire type as described in <i>Fire in California's Ecosystems</i> (Van Wagtendonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval (i.e., time since last burn is less than the average time required for that vegetation type to recover from fire) or within Condition Class 1. ▶ To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled). 	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> ▶ To the extent feasible, fuel breaks will not remove more than 20 percent of the native vegetation relative cover from a stand of sensitive natural community vegetation in sensitive natural communities with a rarity rank of S3 (vulnerable) or in oak woodlands. In forest and woodland sensitive natural communities with a rarity rank of S3, and in oak woodlands, only shaded fuel breaks will be installed, and they will not be installed in more than 20 percent of the stand of sensitive natural community or oak woodland vegetation (i.e., if the sensitive natural community covers 100 acres, no more than 20 acres will be converted to create the fuel break). ▶ Use prescribed burning as the primary treatment activity in sensitive natural communities that are fire dependent (e.g., closed-cone forest and woodland alliances, chaparral alliances characterized by fire-stimulated, obligate seeders), to the extent feasible and appropriate based on the fire regime attributes as described in <i>Fire in California's Ecosystems</i> (Van Wagtendonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/). ▶ Time prescribed herbivory to occur when non-target vegetation is not susceptible to damage (e.g. non-target vegetation is dormant or has completed its reproductive cycle for the year). For example, use herbivores to control invasive plants growing in sensitive habitats or sensitive natural communities when sensitive vegetation is dormant but invasive plants are growing. Timing of herbivory to avoid non-target vegetation will be determined by a qualified botanist, RPF, or biologist based on the specific vegetation alliance being treated, the life forms and life conditions of its characteristic plant species, and the sensitivity of the non-target vegetation to the effects of herbivory. <p>The feasibility of implementing the avoidance measures will be determined by the project proponent based on whether implementation of this mitigation measure will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. If the avoidance measures are determined by the project proponent to be infeasible, the project proponent will document the reasons implementation of the avoidance strategies are infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report).</p> <p>A qualified RPF or botanist with knowledge of the affected sensitive natural community will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual</p>				

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Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and:</p> <ol style="list-style-type: none"> 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. 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>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>Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat</p> <p>If, after implementation of SPR BIO-4, impacts to riparian habitat remain significant under CEQA, the project proponent will implement the following:</p> <ul style="list-style-type: none"> Compensate for unavoidable losses of riparian habitat acreage and function by: <ul style="list-style-type: none"> restoring riparian habitat functions and acreage within the treatment area; restoring degraded riparian habitat outside of the treatment area; purchasing riparian habitat credits at a CDFW-approved mitigation bank; or preserving existing riparian habitat of equal or better value to the riparian habitat lost through a conservation easement at a sufficient ratio to offset the loss of riparian habitat function and value. The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on riparian habitat that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: <ol style="list-style-type: none"> For preserving existing riparian habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation 	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity.</p> <p>2. For restoring or enhancing riparian habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.</p> <p>The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan. Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project proponent (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.</p>				
<p>Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands</p> <p>Impacts to wetlands will be avoided using the following measures:</p> <ul style="list-style-type: none"> ▶ The qualified RPF or biologist will delineate the boundaries of federally protected wetlands according to methods established in the USACE wetlands delineation manual (Environmental Laboratory 1987) and the appropriate regional supplement for the ecoregion in which the treatment is being implemented. ▶ The qualified RPF or biologist will delineate the boundaries of wetlands that may not meet the definition of waters of the United States, but would qualify as waters of the state, according to the state wetland procedures (California Water Boards 2019 or current procedures). 	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
<ul style="list-style-type: none"> ▶ 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 	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>species' vulnerability to the treatment activities, environmental conditions and terrain, and the treatment activity being implemented.</p> <ul style="list-style-type: none"> ▶ A qualified RPF or biological technician will periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided. ▶ Within this buffer, herbicide application is prohibited. ▶ Within this buffer, soil disturbance is prohibited. Accordingly, the following activities are not allowed within the buffer zone: mechanical treatments, prescribed herbivory, equipment and vehicle access or staging. ▶ Only prescribed (broadcast) burning may be implemented in wetland habitats if it is determined by a qualified RPF or biologist that: <ul style="list-style-type: none"> ▪ No special-status species are present in the wetland habitat ▪ The wetland habitat function would be maintained. ▪ The prescribed burn is within the normal fire return interval for the wetland vegetation types present ▪ Fire containment lines and pile burning are prohibited within the buffer ▪ No fire ignition (nor use of associated accelerants) will occur within the wetland buffer 				
<p>Mitigation Measure BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites</p> <p>The project proponent will implement the following measures while working in treatment areas that contain nursery sites identified in surveys conducted pursuant to SPR BIO-10:</p> <ul style="list-style-type: none"> ▶ Retain Known Nursery Sites. A qualified RPF or biologist will identify the important habitat features of the wildlife nursery and, prior to treatment activities, will mark these features for avoidance and retention during treatment ▶ Establish Avoidance Buffers. The project proponent will establish a non-disturbance buffer around the nursery site if activities are required while the nursery site is active/occupied. The appropriate size and shape of the buffer will be determined by a qualified RPF or biologist, based on potential effects of project-related habitat disturbance, noise, visual disturbance, and other factors. No treatment activity will commence within the buffer area until a qualified RPF or biologist confirms that the nursery site is no longer active/occupied. Monitoring of the effectiveness of the non-disturbance buffer around the nursery site by a qualified RPF, biologist, or biological technician during and after treatment activities will be required. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, 	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
biologist, or biological technician will have the authority to stop any treatment activities that could result in potential adverse effects to special-status species.				
Greenhouse Gas Emissions				
<p>Mitigation Measure GHG-2. Implement GHG Emission Reduction Techniques During Prescribed Burns</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 National Wildfire Coordinating Group Smoke Management Guide for Prescribed Fire (NWCG 2018):</p> <ul style="list-style-type: none"> ▶ reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned; ▶ reduce the total area burned through mosaic burning; ▶ burn when fuels have a higher fuel moisture content; ▶ reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and ▶ schedule burns before new fuels appear. <p>As the science evolves, other feasible methods or technologies to sequester carbon could be incorporated, such as conservation burning, a technique for burning woody material that reduces the production of smoke particulates and carbon released into the atmosphere and generates more biochar. Biochar is produced from the material left over after the burn and spread with compost to increase soil organic matter and soil carbon sequestration. Technologies to reduce greenhouse gas emissions may also include portable units that perform gasification to produce electricity or pyrolysis that produces biooil that can be used as liquid fuel and/or syngas that can be used to generate electricity.</p> <p>The project proponent will document in the Burn Plan required pursuant to SPR AQ-3 which methods for reducing GHG emissions can feasibly be integrated into the treatment design.</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			
Hazardous Materials, Public Health and Safety				
<p>Mitigation Measure HAZ-3: Identify and Avoid Known Hazardous Waste Sites</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</p>	<p>Initial Treatment:</p> <p>Treatment Maintenance:</p>			

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
project proponent will conduct a DTSC EnviroStor web search (https://www.envirostor.dtsc.ca.gov/public/) and consult DTSC's Cortese List to identify any known contamination sites within the project site. If a proposed mechanical treatment or prescribed burn is located on a site included on the DTSC Cortese List as containing potential soil contamination that has not been cleaned up and deemed closed by DTSC, the area will be marked and no prescribed burning or soil disturbing treatment activities will occur within 100 feet of the site boundaries. If it is determined through coordination with landowners or after review of the Cortese List that no potential or known contamination is located on a project site, the project may proceed as planned.				

ATTACHMENT C.3

NOD CDFW Receipt



State of California - Department of Fish and Wildlife
2019 ENVIRONMENTAL FILING FEE CASH RECEIPT
DFW 753.5a (REV. 12/01/18) Previously DFG 753.5a

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Forestry and Fire Protection, Board of

LEAD AGENCY EMAIL

DATE

12/30/2019

COUNTY/STATE AGENCY OF FILING

OPR/SCH

DOCUMENT NUMBER

PROJECT TITLE

California Vegetation Treatment Program

PROJECT APPLICANT NAME

Edith Hannigan

PROJECT APPLICANT EMAIL

PHONE NUMBER

(916) 862-0120

PROJECT APPLICANT ADDRESS

PO Box 944246

CITY

Sacramento

STATE

CA

ZIP CODE

94244--2460

PROJECT APPLICANT (Check appropriate box)

☐ Local Public Agency

☐ School District

☐ Other Special District

☒ State Agency

☐ Private Entity

CHECK APPLICABLE FEES:

☒ Environmental Impact Report (EIR)

\$3,271.00

\$

3,271.00

☐ Mitigated/Negative Declaration (MND)(ND)

\$2,354.75

\$

0.00

☐ Certified Regulatory Program (CRP) document - payment due directly to CDFW

\$1,112.00

\$

0.00

☐ Exempt from fee

☐ Notice of Exemption (attach)

☐ CDFW No Effect Determination (attach)

☐ Fee previously paid (attach previously issued cash receipt copy)

☐ Water Right Application or Petition Fee (State Water Resources Control Board only)

\$850.00

\$

0.00

☐ County documentary handling fee

\$

☐ Other

\$

PAYMENT METHOD:

☐ Cash

☐ Credit

☒ Check

☐ Other

TOTAL RECEIVED \$ 3,271.00

SIGNATURE

x Justin Le

Digitally signed by Justin Le
Date: 2019.12.30 11:17:56
-08'00'

AGENCY OF FILING PRINTED NAME AND TITLE

J.Le, State Clearinghouse