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Project Specific Analysis/Addendum

# Montecito Vegetation Management Program

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**BOARD OF FORESTRY PROJECT ID: 2022-12  
OCTOBER 2022**

*Prepared for:*

**MONTECITO FIRE PROTECTION DISTRICT**

Montecito Fire Protection District  
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- A Mitigation Monitoring and Reporting Program
- B Soils Report
- C Cultural Report

- D Biotechnical Memo
- E Soils Report
- F Other Completed SPRs

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# Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
CAL FIRE	California Department of Forestry and Fire Protection
CaIVTP	California Vegetation Treatment Program
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CHRIS	California Historical Resources Information System
CNDDB	California Natural Diversity Database
GHG	greenhouse gas
MFPD	Montecito Fire Protection District
MM	mitigation measure
PEIR	Program Environmental Impact Report
PRC	California Public Resources Code
PSA	Project-Specific Analysis
RPF	registered professional forester
RWQCB	Regional Water Quality Control Board
SENL	single-event noise level
SPR	standard project requirement
VMP	Vegetation Management Program
VMT	vehicle miles traveled
WDR	waste discharge requirement
WLPZ	watercourse and lake protection zone

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# 1 Introduction

## 1.1 Project Overview

The Montecito Fire Protection District (MFPD) proposes to implement the Montecito Vegetation Management Program (VMP), which is anticipated to occur over a 10-year timeframe. The VMP consists of the removal of vegetation and dead trees with chainsaws, chipping of cut and/or dead vegetation with chippers, roadside weed abatement with weed whips, hand removal of invasive plants, and prescribed herbivory throughout the wildland urban interface and along roads in the community of Montecito (Montecito; see Figure 1, Project Location). Approximately 262 acres are proposed for mixed treatments, consisting of hand crews using chainsaws to remove excess flammable vegetative material within approximately 100 feet of an existing public road system. Approximately 883 acres are proposed for prescribed herbivory within the wildland/urban interface area to the north of Montecito. Some treatment activities overlap where both prescribed herbivory and mixed treatments are proposed, for a total treatment area of 1,144 acres. Proposed treatment activities would expand on the existing fuel treatment network in Montecito to increase fire resilience. The 2017 Thomas Fire resulted in a reduction in wildland vegetation along the northern portion of the Montecito and presents an opportunity to limit the continuity of vegetation and expand on the existing fuel treatment network while reducing potential fire intensity in the most vulnerable areas of Montecito. Additionally, the project aims to control invasive species that have grown in the area since the 2017 Thomas Fire and 2018 debris flow that affected the Montecito community. Given the physical characteristics of this area, roadside manual fuel treatments and prescribed herbivory within steeper terrain are anticipated to be the most economically and environmentally sound treatment prescriptions.

## 1.2 California Environmental Quality Act Compliance

Serving as the lead agency under the California Environmental Quality Act (CEQA; California Public Resources Code [PRC] Section 21000 et seq.), MFPD must comply with CEQA prior to implementing the proposed vegetation treatment activities. MFPD has evaluated the proposed treatments for CEQA compliance as later activities covered by the California Department of Forestry and Fire Protection (CAL FIRE) California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (PEIR), using the Project-Specific Analysis (PSA) Checklist herein. Consistent with CEQA Guidelines Section 15168(c)(2), if the potential environmental impacts of a proposed vegetation treatment project are determined to be covered by the environmental impacts analyzed in the PEIR, the project may be approved using a finding that the project is within the scope of the PEIR. Such a finding would constitute CEQA compliance under the PEIR. The PEIR identified the range of environmental impacts associated with vegetation treatment projects and required implementation of standard project requirements (SPRs) and mitigation measures (MMs) to address and minimize these impacts. In accordance with the PEIR, all relevant SPRs and MMs would be incorporated into the project. No additional CEQA review is required for a project that is consistent with the PEIR. The PEIR is available for public review at <https://bof.fire.ca.gov/projects-and-programs/calvtp/peir-certification/>.

This document serves as a PSA to evaluate whether the proposed project is within the scope of the CalVTP PEIR. Proposed treatment projects qualifying as within the scope of the PEIR must be consistent with the treatment types and treatment activities covered in the CalVTP and the geographic extent of the CalVTP treatable landscape. As further discussed in Chapter 2, Project Description, the proposed VMP has aspects that represent a change to the PEIR, and as such an Addendum to the EIR has been prepared. Consistent with CEQA Section 21166 and CEQA Guidelines

Sections 15162, 15163, 15164, and 15168, an Addendum to an EIR would be appropriate where a previously certified EIR has been prepared and some changes or revisions to the project are proposed, or the circumstances surrounding the project have changed, but none of the changes or revisions would result in new or substantially more severe significant environmental impacts (PRC Section 21166; 14 CCR 15162–15164 and 15168).

For the proposed project, the inclusion of areas outside the CalVTP treatable landscape and the inability to implement SPR GEO-7 represent a revision or change to the CalVTP. The proposed VMP treatment types and treatment activities are consistent with the CalVTP PEIR. Figures 2-A1 through 2-B3, Potential Projects, present the location and extent of proposed treatment activities. Approximately 883 acres of the proposed treatment areas are located within the CalVTP treatable landscape, while approximately 262 acres of the proposed treatment areas extend outside the CalVTP treatable landscape. However, these areas are dispersed in small sections of treatment areas (see Figure 3, CalVTP Treatable Landscape). The method by which the CalVTP treatable landscape was digitally modeled and the degree of mapping resolution resulted in some disjointed and scattered treatable landscape areas. Therefore, areas where proposed treatment activities extend outside the treatable landscape are largely due to these modeling results, and if the areas of the proposed project outside the CalVTP treatable landscape have essentially the same, or substantially similar, landscape conditions and vegetation cover as the adjacent areas within the treatable landscape, the environmental analysis in the PEIR would be applicable.

The inability to implement SPR GEO-7 relates to the use of prescribed herbivory treatments on slopes greater than 50%. Due to steep terrain that precludes access for manual or mechanical treatments, prescribed herbivory is the most feasible treatment activity in the proposed treatment areas. These areas are subject to invasive species growth, which present flammable fuels that would be reduced by implementation of the project. Proposed prescribed herbivory treatments would not denude the landscape of all vegetation, as mature shrubs and trees would be retained, and SPRs would be implemented to ensure soil stability.

The PSA Checklist (see Chapter 3, Project-Specific Analysis) includes the criteria to support an Addendum to the CalVTP PEIR for the use of prescribed herbivory on slopes greater than 50% as well as inclusion of proposed treatment areas outside the CalVTP treatable landscape. The PSA Checklist evaluates each environmental resource area in terms of whether the proposed project, including the “changed condition”, would result in significant impacts that would be substantially more severe than those covered in the PEIR and/or would result in any new impacts that were not covered in the PEIR. This document serves as both a PSA and an Addendum to the CalVTP PEIR for analysis under CEQA.

The project-specific mitigation monitoring and reporting program, which identifies the CalVTP SPRs and MMs applicable to the proposed project, is included as Attachment A. The SPRs identified in Attachment A have been incorporated into the proposed vegetation treatments as a standard part of treatment design and implementation.

Attachment B contains the project-specific CEQA findings and Statement of Overriding Considerations.



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## 2 Project Description

### 2.1 Project Location

The project site is located in Montecito, which is in the southern extent of Santa Barbara County. The Montecito Planning Area generally lies between the Pacific Ocean to the south and the foothills of the Santa Ynez Mountains to the north, with the City of Santa Barbara to the west and the unincorporated community of Summerland to the east. Mixed (manual) treatment activities are proposed along roads and prescribed herbivory treatment activities would occur within open space areas of steep terrain primarily north of Montecito, with some scattered treatment areas in hilly areas within Montecito (see Figure 1).

### 2.2 Project Characteristics

The proposed VMP treatment activities aim to reduce fuel loads to create buffers between the wildland vegetation to the north of Montecito as well as reducing fuel loads adjacent to critical roadways. These strategic treatments would help to reduce fire intensity during wildfires in areas directly adjacent to community values and in areas where firefighting resources can safely engage in suppression operations.

The proposed mixed treatments would consist of manual treatment activities (hand crews using chainsaws) and would total approximately 262 acres. Hand crews would remove dead trees, ladder fuels on mature trees, surface dead woody material, decrease the number of standing shrubs by approximately 50%, and reduce the height of annual grasses. Crews would drag the cut vegetation by hand or use a winch attached to a small tractor to pull it to a chipper stationed at an adjacent road. The vegetation would be chipped into a dump truck and the chipped material would be hauled away to the local green waste facility. The proposed mixed treatments would generally occur within 100 feet of a road system; therefore, no new roads would be constructed.

The proposed prescribed herbivory treatments would occur on approximately 883 acres of steep and rugged terrain. These areas provided for limited access by hand crews or mechanical equipment, making prescribed herbivory the only realistic vegetation management treatment activity in the proposed project areas. The prescribed herbivory treatment activities would involve the use of temporary electric fences to contain the animals. The fences would be constructed along existing road and trail systems. During project implementation, narrow (approximately 3-foot-wide) saw lines would need to be constructed to facilitate fence construction. Limited ground disturbance is expected to occur on any of the proposed projects.

Prescribed herbivory treatments would follow best practices to reduce the potential for overgrazing or the spread of invasive species. Animals would be confined within small (1-10 acre) paddocks using portable electric fencing until the agreed upon level of grazing in the paddock is completed. Prior to being brought to the site, the herd would be sequestered for at least 3 days where feed utilized does not contain unwanted seed/plant material. Grazing activities would be conducted in a manner which keeps all animals under herdsman's control and appropriately confined. Measures would be taken to ensure no grazing animals or herd control animals cause noise which disturbs adjoining neighbors, and to remove animals that cause a noise nuisance. Within each paddock, the goal would be a 75% reduction of herbaceous fuels (grasses), trampled or consumed, and a 50% reduction of palatable vegetation on the ladder fuels on all other vegetation (shrubs) up to 3.5 feet in height. Combined effects would

create a 12”-3’ spacing between 50% of the vegetation. The animals would be moved to the next paddock once desired results are achieved.

**Access**

The project parcels are located entirely on private property and accessible from public roads.

**Biomass Disposal**

Vegetation would be chipped into a dump truck and hauled off site to a local green waste facility, AgriChip, to be processed for retail landscaping woodchips and mulch.

**Proposed Treatments**

Tables 2-1 and 2-2 present details of the proposed mixed treatments and prescribed herbivory treatments.

**Table 2-1. Mixed Treatments**

Treatment Area No.	Treatment Activity	Acres	Timeframe (weeks)	Workers	Mechanical Equipment	Timing	Treatment Maintenance
MT-1	Manual	29.3	3	3	No	Spring	Yes (Annually)
MT-2	Manual	7.6	7	3	No	Spring	Yes (Annually)
MT-3	Manual	15.0	14	10	No	All Year	Yes (Annually)
MT-4	Manual	3.5	3	3	No	Spring	Yes (Annually)
MT-5	Manual	3.9	14	20	No	All Year	Yes (3 Years)
MT-6	Manual	2.3	3	3	No	All Year	Yes (Annually)
MT-7	Manual	9.3	14	20	No	All Year	Yes (3 Years)
MT-8	Manual	11.8	7	20	No	All Year	Yes (3 Years)
MT-9	Manual	17.2	14	10	No	All Year	Yes (Annually)
MT-10	Manual	5.5	10	3	No	All Year	Yes (Annually)
MT-11	Manual	6.9	7	3	No	All Year	Yes (Annually)
MT-12	Manual	8.1	7	3	No	Spring	Yes (Annually)
MT-13	Manual	28.1	7	20	No	All Year	Yes (3 Years)
MT-14	Manual	6.9	14	20	Yes: Tracked Chipper	All Year	Yes (3 Years)
MT-15	Manual	15.2	28	20	Yes: Tracked Chipper	All Year	Yes (3 Years)
MT-16	Manual	9.6	7	20	No	All Year	Yes (3 Years)

**Table 2-1. Mixed Treatments**

Treatment Area No.	Treatment Activity	Acres	Timeframe (weeks)	Workers	Mechanical Equipment	Timing	Treatment Maintenance
MT-17	Manual	9.2	10	20	Yes: Tracked Chipper	Spring	Yes (3 Years)
MT-18	Manual	30.3	10	3	No	All Year	Yes (Annually)
MT-19	Manual	4.2	7	20	No	All Year	Yes (3 Years)
MT-20	Manual	6.4	3	10	No	All year	Yes (3 Years)
MT-21	Manual	3.5	4	20	No	All Year	Yes (3 Years)
MT-22	Manual	15.6	14	20	No	All Year	Yes (3 Years)
MT-23	Manual	11.3	7	20	No	All Year	Yes (3 Years)
MT-24	Manual	11.9	14	20	No	All Year	Yes (Annually)
MT-25	Manual	15.8	7	20	No	All Year	Yes (3 Years)
MT-26	Manual	1.9	3	3	No	All Year	Yes (3 Years)
MT-27	Manual	9.0	14	20	No	All Year	Yes (3 Years)
MT-28	Manual	0.5	2	3	No	All Year	Yes (Annually)
MT-29	Manual	16.3	14	10	No	All Year	Yes (Annually)

**Table 2-2. Prescribed Herbivory Treatments**

Treatment Area No.	Treatment Activity	Acres	Timeframe (weeks)	Workers	Mechanical Equipment	Timing	Treatment Maintenance
GT-1	Prescribed Herbivory	4.9	3	4	No	All year	Yes (5 years)
GT-2	Prescribed Herbivory	6.6	3	4	No	All year	Yes (5 years)
GT-3	Prescribed Herbivory	2.6	3	4	No	All year	Yes (5 years)
GT-4	Prescribed Herbivory	19.6	8	4	No	All year	Yes (5 years)
GT-5	Prescribed Herbivory	5.0	3	4	No	All year	Yes (5 years)
GT-6	Prescribed Herbivory	4.2	3	4	No	All year	Yes (5 years)
GT-7	Prescribed Herbivory	9.0	5	4	No	All year	Yes (5 years)
GT-8	Prescribed Herbivory	15.7	7	4	No	All year	Yes (5 years)
GT-9	Prescribed Herbivory	12.5	6	4	No	All year	Yes (5 years)
GT-10	Prescribed Herbivory	8.3	4	4	No	All year	Yes (5 years)

**Table 2-2. Prescribed Herbivory Treatments**

Treatment Area No.	Treatment Activity	Acres	Timeframe (weeks)	Workers	Mechanical Equipment	Timing	Treatment Maintenance
GT-11	Prescribed Herbivory	42.7	15	4	No	All year	Yes (5 years)
GT-12	Prescribed Herbivory	82.6	20	4	No	All year	Yes (5 years)
GT-13	Prescribed Herbivory	85.8	20	4	No	All year	Yes (5 years)
GT-14	Prescribed Herbivory	18.5	9	4	No	All year	Yes (5 years)
GT-15	Prescribed Herbivory	29.1	15	4	No	All year	Yes (5 years)
GT-16	Prescribed Herbivory	3.7	3	4	No	All year	Yes (5 years)
GT-17	Prescribed Herbivory	7.6	4	4	No	All year	Yes (5 years)
GT-18	Prescribed Herbivory	12.8	6	4	No	All year	Yes (5 years)
GT-19	Prescribed Herbivory	92.9	7	4	No	All year	Yes (5 years)
GT-20	Prescribed Herbivory	270.8	50	4	No	All year	Yes (5 years)
GT-21	Prescribed Herbivory	66.4	30	4	No	All year	Yes (5 years)
GT-22	Prescribed Herbivory	78.5	20	4	No	All year	Yes (5 years)
GT-23	Prescribed Herbivory	49.3	24	4	No	All year	Yes (5 years)

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# 3 Project-Specific Analysis

## California Vegetation Treatment Program Environmental Checklist

### Project Information

1. **Project Title:** Montecito Vegetation Treatment Program, Board of Forestry Project ID - 2022-12
2. **Project Proponent Name and Address:** Montecito Fire Protection District  
595 San Ysidro Road  
Santa Barbara, California 93108
3. **Contact Person Information and Phone Number:** Nic Elmquist, 805-969-7762
4. **Project Location:** Santa Barbara County
5. **Total Area to be Treated (acres)** 1,144
6. **Description of Project:** (Describe the whole action involved, including any phasing of initial treatments as well as planned treatments, including equipment to be used and planned duration of treatments, but not limited to later phases (e.g., maintenance) of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)  
See Chapter 2, Project Description.
7. **Treatment Types** [see description in CalVTP PEIR Section 2.5.1, check every applicable category; provide detail in Description of Project]
  - Wildland-Urban Interface Fuel Reduction
  - Fuel Break
  - Ecological Restoration
8. **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 Project]
  - Prescribed (Broadcast) Burning,
  - Prescribed (Pile) Burning,
  - Mechanical Treatment,
  - Manual Treatment, 316 acres
  - Prescribed Herbivory, 938 acres
  - Herbicide Application,
9. **Fuel Type** [see description in in CalVTP PEIR Section 2.4.1, check every applicable category; provide detail in Description of Project]
  - Grass Fuel Type
  - Shrub Fuel Type
  - Tree Fuel Type
10. **Geographic Scope**
  - The treatment site is entirely within the CalVTP treatable landscape
  - The treatment site is NOT entirely within the CalVTP treatable landscape
11. **Surrounding Land Uses and Setting:** (Briefly describe the project's surroundings)

The project site is generally surrounded by open space lands within Los Padres National Forest to the north, east, and west and residential, recreational, and commercial development within the community of Montecito, primarily to the south of the project site. Some treatment areas are surrounded by development within Montecito on all sides.

12. **Other public agencies whose approval is required:** (e.g., permits)

No other public agency approvals are required for this project. The California Department of Fish and Wildlife and California Department of Conservation were consulted for input on the treatment design after a field visit.

**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

13. **Native American Consultation.** Pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, lead agencies undertaking CEQA review must, upon written request of a California Native American tribe, begin consultation before the release of an environmental impact report, negative declaration, or mitigated negative declaration. For treatment projects that require additional CEQA review and documentation, have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.? *Note: For treatment projects that are within the scope of this PEIR, AB 52 consultation has been completed. The Board of Forestry and Fire Protection and CAL FIRE completed consultation pursuant to Public Resources Code section 21080.3.1 in preparation of the PEIR.*

*Pursuant to SPR CUL-2, MFPD contacted culturally affiliated tribes via email and certified mail on August 12, 2022. One response was received to date and notification and consultation is in progress. The project is within the scope of the PEIR and does not require additional CEQA review and documentation.*

**14. Use of PSA for Treatment Maintenance:**

*[Prior to implementing a maintenance treatment, the project proponent would 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 would be considered by the project proponent in light of potentially changed conditions or circumstances. Where the project proponent determines that the PSA is no longer sufficiently relevant, the project proponent would 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 would 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 that conditions are substantially similar to those anticipated in the PSA. Updated information should be documented.]*

Prior to re-treating any area within the project boundary, MFPD will verify that site conditions described in the PSA are still relevant. The VMP is proposed to occur over a 10-year planning horizon. After 10 years, MFPD may update the VMP and this PSA to continue treatment activities in the project area.

**15. Standard Project Requirements and Mitigation Measures.** *[Refer to Attachment A to identify which SPRs and MMs apply to the project. Complete Attachment A to document the responsible party for each applicable SPR and MM. Check one box below.]*

- All applicable SPRs and MMs are feasible and will be implemented.
- There is NO new information which would render mitigation measures previously considered infeasible or not considered in the CalVTP PEIR now feasible OR such mitigation measures have been adopted. [Guidelines Sec.15162(a)(3); PRC Sec. 21166(c)].
- All applicable SPRs and Mitigation Measures are NOT feasible or will NOT be implemented (provide explanation).

Explanation:

SPR GEO-7 requires that prescribed herbivory be limited to areas with a less than 50% slope. However, the VMP proposes to implement grazing projects within steep slope areas, due to the accessibility challenges of steep slopes, which limit the feasibility of manual or mechanical treatments. To address this aspect of the project, which represents a change to the CalVTP PEIR, an Addendum to the EIR has been prepared and is wholly contained within this Addendum/PSA document.

**DETERMINATION (To be completed by the project proponent)**

On the basis of this initial evaluation:

- I find that all of the effects of the proposed project (a) have been analyzed adequately in the CalVTP PEIR, (b) have been avoided or mitigated pursuant to the CalVTP PEIR, and (c) all applicable mitigation measures and Standard Project Requirements 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 examined 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 examined in the CalVTP PEIR. Although these effects might be significant in the absence of additional mitigation beyond what is already required pursuant to the CalVTP PEIR, 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 environmental effects that were not examined in the CalVTP PEIR. Because these effects are or may be significant and cannot be clearly mitigated, an **ENVIRONMENTAL IMPACT REPORT** will be prepared.

Signature:  Date October 25, 2022

Printed Name: Kevin Taylor Title Fire Chief

Montecito Fire Protection District  
Agency



## EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for each Impact, Standard Project Requirement (SPR) and Mitigation Measure (MM) identified in the Project-Specific Analysis Checklist (PSA Checklist). The information provides clarity for review and/or provides direction to the field staff that will implement the project utilizing the checklist (persons familiar with the project and preparation of the document may be different through the life span of the document). Answers should consider whether the proposed project would result in new or more substantial environmental effects than described in the CalVTP PEIR, after incorporation of applicable SPRs and MM required by the CalVTP PEIR
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and short-term as well as long-term impacts. Refer to the applicable resource analysis section in the CalVTP PEIR for each environmental topic.
3. Once the project proponent has evaluated the environmental effect that may occur, then the checklist answers must indicate whether the impact is:  
(Definitions located in Chapter 3 – “Environmental Settings, Impacts, and Mitigation Measures, 3.1.4 – Terminology Used In the PEIR”)
  - **Less Than Significant (LTS)** - An impact either on its own or with incorporation of SPRs, does not exceed the defined thresholds of significance (no mitigation required), or that is potentially significant and can be reduced to less than significant through implementation of feasible mitigation measures.
  - **Less Than Significant with Mitigation (LTSM)** - An impact was identified within the PEIR which was viewed in totality as potentially significant and/or significantly unavoidable and the mitigation measures and SPRs and MMs provided in the PEIR will be implemented mitigating to a point of less than significance.
  - **Potentially Significant (PS)** - An impact treated as if it were a significant impact. “Potentially” is used to convey that not every qualifying treatment will result in impacts to the reasonably maximum degree that they are disclosed in this PEIR.
  - **Potentially Significant and unavoidable (PSU)** - An impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level. “Potentially” is used to convey that not every qualifying treatment will result in impacts to the reasonably maximum degree that they are disclosed in this PEIR
  - **Significantly Unavoidable (SU)** - An impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level.
  - **Not applicable (N/A)** - If the impact is evaluated to be the same or equal to the impact in the PEIR, the PEIR can be utilized without a Negative Declaration, Mitigated Negative Declaration or EIR. If there are one or more entries where the impact is evaluated to be greater than the impact in the PEIR, additional documentation is required.
4. Where a Negative Declaration, Mitigated Negative Declaration is required, the environmental review would be guided by the directions for use of the PEIR with later activities in Section 15168. Where an EIR is required, the environmental review would be guided by Sections 15162 and 15163. When preparing any environmental document, the environmental analysis may incorporate by reference the analysis from the CalVTP PEIR and focus the environmental analysis solely on issues that were not addressed in the CalVTP PEIR.

5. 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.
6. Standard Project Requirements (SPR) and Mitigations Measures (MM).
  - **Applicable (Yes/No).** Document whether the SPR or mitigation measure is applicable to the project (Yes or No). The applicability should be substantiated in the Environmental Checklist Discussion.
  - **Implementing Entity.** Most cases this will be CAL FIRE. The implementing entity is the individual or organization responsible for carrying out the requirement. This could include the project proponent's project manager, a technical specialist (e.g., archaeologist 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.** Most cases this will be CAL FIRE. The verifying/monitoring entity is the individual or organization responsible for ensuring that the requirement is implemented. The verifying/monitoring entity may be different from the implementing entity.
  - **NOTE:** the cited SPRs and MMs are summarized to manage the template size. Refer to Attachment A for the approved CalVTP requirements.

### 3.1 Aesthetics and Visual Resources

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact AES-1:</b> 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	Impact AES-1, pp. 3.2-16–3.2-19	SPR AES-2 SPR AES-3 SPR AQ-2 SPR AQ-3	LTS	Yes	SPR AES-1 SPR AES-2 SPR AES-3	LTS	☒

**Impact Discussion:** Vegetation treatment activities and maintenance activities would include manual treatments, chipping, and prescribed herbivory. The potential for the treatment activities to result in short-term degradation of visual character was examined in the CalVTP PEIR. Equipment and vehicles associated with manual and prescribed herbivory treatments could be visible to public viewers at scenic vistas, along a state scenic highway, or at other public viewing locations. The Montecito Community Plan (County of Santa Barbara 1995) contains goals related to preserving visual resources and recognizes Montecito’s scenic appeal as being related to the geographic location between the Santa Ynez Mountains and the Pacific Ocean as well as the intensity and form of development. Ornamental or native landscaping, patches of oak woodland, individual oak trees, creeks, and open spaces contribute to the scenic character of Montecito. Primary view corridors identified in the Montecito Community Plan include U.S. Highway 101, Channel Drive and Olive Mill Road, East Valley Road, and Mountain Drive. In addition to these primary view corridors, many of the major north–south roads provide views of wooded acres and the Santa Ynez Mountains. The Montecito Community Plan identifies subdivisions and construction of large estate homes as being of particular concern for altering the community’s character. Additionally, the Santa Barbara County (County) Comprehensive Plan Environmental Resources Management Element and Open Space Element (County of Santa Barbara 2009b; 2009c) identify certain landscapes and vegetation communities as valued scenic resources. However, there are no designated or protected scenic vistas or view corridors in proximity to the project site. There are no officially designated state scenic highways in Montecito, and the nearest eligible state scenic highway is U.S. Route 101, located approximately 1,200 feet south of the nearest treatment area (Caltrans 2022). Proposed project activities would occur on private property, and public views of the project site are largely limited to the adjacent road system. Due to intervening terrain, development, and vegetation, public views would be limited and brief. Additionally, the project would include implementation of roadside fuel treatments, including shaded fuel breaks where overstory vegetation would be retained, and prescribed herbivory treatments that would result in removal of invasive species and flashy fuels, while larger shrubs and trees would be retained and views would not be significantly altered. The proposed treatment activities would not block views, dominate a viewshed, degrade the visual character or quality of public views, or significantly disrupt views from a scenic vista or state scenic highway. Although equipment and vehicles may be visible from limited off-site areas, treatment activities within each treatment area would be temporary, with

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

each treatment activity lasting from 1 week to less than 3 months. With the implementation of SPR AES-1, SPR AES-2, and SPR AES-3, MFPD would retain vegetation of scenic value, avoid staging equipment within viewsheds, and retain sufficient vegetative screening. Therefore, with the implementation of SPRs, the project would result in a less than significant impact on visual resources, which is consistent with the PEIR and would not constitute a substantially more severe significant impact than was analyzed in the PEIR.

<b>Impact AES-2:</b> 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	Impact AES-2, pp. 3.2-20–3.2-25	SPR AES-1 SPR AES-3 SPR AD-4 SPR REC-1	LTS	Yes	SPR AES-1 SPR AES-2 SPR AES-3	LTS	<input checked="" type="checkbox"/>
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**Impact Discussion:** Proposed vegetation treatment would include manual treatments and prescribed herbivory. The potential for the treatment activities to result in long-term visual impacts was examined in the CalVTP PEIR. As discussed above, the project site is located on private property and available public views of the project site are limited. Further, there are no designated scenic vistas or officially designated state scenic highways with views of the project site, and views of the project site are intermittent and brief. Further, vegetation treatment activities would consist of shaded fuel breaks and prescribed herbivory treatments, which would be implemented such that the project would result in the retention of mature shrubs, resulting in a mosaic plant pattern where up to 50% of existing vegetation would be retained, as well as mature trees. Fuel reduction activities would reduce vegetation along roadsides and near development, reducing wildfire risks. Although Montecito may have available views of the project areas, due to distance, intervening terrain, and the amount of vegetation that would be retained within and surrounding the project area the project would not result in significant long-term degradation of scenic vistas, visual character, public views, or any scenic resources visible from a state scenic highway. Additionally, SPR AES-1, SPR AES-2, and SPR AES-3 would be incorporated into vegetation treatments to break up or screen linear edges of treatment areas and screen views from public viewpoints as feasible.

The retention of mature shrubs and trees would provide for vividness, intactness, and unity of views. Vegetation treatment edges would be feathered (SPR AES-1), project equipment would not be staged within viewsheds (SPR AES-2), and the project would retain vegetation at the edges of treatment areas to provide for vegetation screening (SPR AES-3). Therefore, the proposed treatment project would not result in a long-term or substantial degradation of a scenic vista, substantially damage resources in a state scenic highway, or degrade the existing visual character and quality of the

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<p>project site. The project would result in a less than significant impact on visual resources, which is consistent with the PEIR and would not constitute a substantially more severe significant impact than was analyzed in the PEIR.</p>							
<p><b>Impact AES-3:</b> 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</p>	Impact AES-3, pp 3.2-25-3.2-27	MM AES-3	SU	No	N/A	N/A	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The project does not propose to implement the Non-Shaded Fuel Break Treatment Type; this impact does not apply.</p>							
<p><b>Other Impacts on Aesthetics:</b> Would the project result in other impacts on aesthetics that are not evaluated in the CalVTP PEIR?</p>	N/A	N/A	N/A	No	N/A	No Impact	<input checked="" type="checkbox"/>
<p>The project site is partially visible from parts of Montecito and surrounding public roadways. Site-specific characteristics of the proposed treatment project are consistent with the environmental and regulatory conditions outlined in the CalVTP PEIR, Section 3.2. While the inclusion of land outside the CalVTP treatable landscape is a change to the geographic extent in the PEIR, the existing conditions in the project area relating to visual resources are essentially the same for treatment areas within the CalVTP treatable landscape and treatment areas outside the CalVTP treatable landscape. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR. Additionally, the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to aesthetics and visual resources would occur.</p>							
SPRs and MMs				Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity	
<p><b>SPR AES-1 Vegetation Thinning and Edge Feathering:</b> This SPR only applies to mechanical and manual treatment activities within all treatment types.</p>				Yes	MFPD During	MFPD	

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR AES-2 Avoid Staging within Viewsheds:</b> This SPR applies to all treatment activities and all treatment types.	Yes	MFPD During	MFPD
<b>SPR AES-3 Provide Vegetation Screening:</b> This SPR applies to all treatment activities and all treatment types.	Yes	MFPD During	MFPD
<b>MM AES-3 Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks</b>	No	N/A	N/A

### 3.2 Agriculture and Forest Resources

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact AG-1:</b> Result directly 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	Impact AG-1, pp 3.3-7-3.3-8	N/A	LTS	Yes	N/A	N/A	<input checked="" type="checkbox"/>

**Impact Discussion:** The proposed project would include shaded fuel break installations along roadsides and within dispersed areas of open space consisting of wildland vegetation using manual treatments and prescribed herbivory. The project site has a land use designation of residential, open land use, or commercial; the project site is not zoned as forestland. Chaparral, oak woodland, and riparian are the dominant vegetation types in the project area. Proposed vegetation treatments would vary across the project site. The shaded fuel breaks would be implemented using manual treatment techniques to thin existing vegetation. Hand crews would remove dead trees, ladder fuels on mature trees, and surface dead woody material; decrease the number of standing shrubs by approximately 50%; and reduce the height of annual grasses. Prescribed herbivory would reduce finer fuels, such as grasses and herbaceous fuels. Trees and mature shrubs would be retained in areas treated by prescribed herbivory. Oak trees would be retained in accordance with the County’s Oak Tree Protection Ordinance (County of Santa Barbara 2009a). Additionally, existing uses on the project site would

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance for the Treatment Project	No New Impact

remain the same after project implementation. Therefore, the project would not result in the direct loss of forest land or conversion of forest land to non-forest use. As a result, the project would have no impact on agriculture and forest resources.

<b>Other Impacts to Agriculture and Forest Resources:</b> Would the project result in other impacts to agriculture and forest resources that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	No Impact	<input checked="" type="checkbox"/>
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**Impact Discussion:** Site-specific characteristics of the proposed treatment plan are consistent with the environmental and regulatory conditions outlined in the CalVTP PEIR, Section 3.3. While the inclusion of land outside the CalVTP treatable landscape is a change to the geographic extent in the PEIR, the existing conditions in the project area relating to agriculture and forest resources are essentially the same for treatment areas within the CalVTP treatable landscape and treatment areas outside the CalVTP treatable landscape. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR, and the inclusion of land outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to agriculture and forest resources would occur.

### 3.3 Air Quality

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact AQ-1:</b> Generate emissions of criteria air pollutants and precursors	Table 3.4-1; Impact AQ-1, pp.	SPR AQ-1 through	PSU	Yes	SPR AQ-1 SPR AQ-4	PSU	<input checked="" type="checkbox"/>

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
during treatment activities that would exceed CAAQS or NAAQS	3.4-26–3.4-32; Appendix AQ-1	SPR AQ-6 MM AQ-1			MM AQ-1		

**Impact Discussion:** The project would require the use of vehicles, hand tools, and a chipper. These actions would result in the emission of criteria pollutants that could exceed the California Ambient Air Quality Standards (CAAQS), the National Ambient Air Quality Standards (NAAQS), and/or the County air quality rules and regulations (SBCAPCD 2021). Manual treatments would involve the use of chainsaws and other handheld equipment. A chipper would also be used to assist with biomass disposition. The potential for the emission of criteria pollutants from the described activities was examined in the PEIR. SPRs AQ-1 and AQ-4 would be implemented by the project proponent to reduce the level of criteria pollutants generated by treatment activities. SPRs AQ-2 and AQ-3 do not apply, because the project does not include prescribed burning. SPR AQ-5 would not apply to the project because the project site does not contain any naturally occurring asbestos (Agency for Toxic Substances and Disease Registry 2007; USGS2011). The components of MM AQ-1 that have been determined by MFPD to be feasible would be implemented to reduce emissions, including using gasoline-powered equipment, encouraging carpooling to the project site, and using the best available control technology for emission reduction of oxides of nitrogen (NO<sub>x</sub>) and particulate matter on equipment. To the extent feasible, equipment meeting Tier 4 emission standards and using renewable energy would be utilized. Although implementation of the applicable SPRs and MM AQ-1 would lower the level of impact on criteria air pollutants, as described in the PEIR, this impact would remain significant and unavoidable.

<b>Impact AQ-2:</b> Expose people to diesel particulate matter emissions and related health risk	Impact AQ-2, 3.4	SPR HAZ-1 SPR NOI-4 SPR NOI-5	LTS	Yes	SPR HAZ-1 SPR NOI-4 SPR NOI-5	LTS	☒
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**Impact Discussion:** The project would require the use of vehicles, hand tools, and a chipper, as described above, which could expose people to diesel particulate matter (DPM) emissions. However, the treatments would take place over a short duration of time, limiting the level of exposure to DPM. Further, the treatment activities would progress across the treatment sites, meaning that DPM generated by treatment activities would not take place near any single sensitive receptor for an extended period. Additionally, the MFPD is proposing manual treatments and prescribed herbivory treatments, and does not propose any mechanical treatments, which limits the DPM emissions that could result from implementation of the VMP. SPR HAZ-1 would be implemented, requiring that all diesel- and gasoline-powered equipment be properly maintained in compliance with federal and state requirements, to prevent excessive emissions of DPM. Further, SPRs NOI-4 and NOI-5 would be implemented by the project proponent, requiring staging areas to be as far as possible from human receptors and restricting the amount of time that equipment can idle. Therefore, the impact relating to DPM would be less than significant.



Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact AQ-3:</b> Expose people to fugitive dust emissions containing naturally occurring asbestos and related health risk	Impact AQ-3, 3.4	SPR AQ-4 SPR AQ-5	LTS	No	N/A	N/A	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> Ground-disturbance activities can expose receptors to fugitive dust emissions containing naturally occurring asbestos. However, the project does not include mechanical treatment or require the use of off-road vehicles, and ground disturbance is expected to be minimal. Vehicles and the chipper would be limited to staging areas on existing roads. Further, the treatment areas are not located on soil types that contain naturally occurring asbestos (Agency for Toxic Substances and Disease Registry 2007; USGS n.d., 2011). Therefore, the VMP would not expose people to fugitive dust emissions containing naturally occurring asbestos and there would be no impact related to this threshold.</p>							
<b>Impact AQ-4:</b> Expose people to toxic air contaminants emitted by prescribed burns and related health risk	Impact AQ-4, 3.4	SPR AD-4 SPR AQ-2 SPR AQ-6	PSU	No	N/A	N/A	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The project does not include activities related to prescribed burning. Therefore, the project would not expose people to toxic air contaminants through prescribed burns and related health risks and there would be no impact.</p>							
<b>Impact AQ-5:</b> Expose people to objectionable odors from diesel exhaust	Impact AQ-5, 3.4	SPR HAZ-1 SPR NOI-4 SPR NOI-5	LTS	Yes	SPR HAZ-1 SPR NOI-4 SPR NOI-5	LTS	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The treatments would require the use of vehicles, hand tools, and a chipper, as described above, which could expose people to objectionable odors from diesel exhaust. However, the levels of diesel exhaust would not be at excessive levels, nor they would they affect a substantial number of people, especially because the project does not include the use of mechanical treatment. The exposure to objectionable odors would be short term and dispersed across the project site. As described in Impact AQ-2, the emissions would be temporary and would not be generated in one location for an extended period; further, the emissions would dissipate rapidly as distance from the source increases. All diesel- and gasoline-powered equipment would be properly maintained in compliance with federal and state emission requirements, which would lower the level of emissions from diesel exhaust, per SPR HAZ-1. The project proponent would also implement SPRs NOI-4 and NOI-5. These SPRs would reduce the level of exposure to diesel exhaust by requiring staging areas to be as far from receptors as possible and restricting idling time. Therefore, this impact would be less than significant.</p>							

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact AQ-6:</b> Expose people to objectionable odors from smoke during prescribed burning	Impact AQ-6, 3.4	SPR AD-4 SPR AQ-2 SPR AQ-3 SPR AQ-6	PSU	No	N/A	N/A	<input checked="" type="checkbox"/>

**Impact Discussion:** The project does not include the prescribed burning of vegetation. Therefore, the project would not expose people to objectionable odors from the smoke and no impact would occur.

<b>Other Impacts to Air Quality:</b> Would the project result in other impacts to air quality that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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Site-specific characteristics of the proposed treatment plan are consistent with the environmental and regulatory conditions outlined in the CalVTP PEIR, Section 3.4. While the inclusion of land outside the CalVTP treatable landscape is a change to the geographic extent in the PEIR, the existing conditions in the project area relating to air quality are essentially the same for treatment areas within the CalVTP treatable landscape and treatment areas outside the CalVTP treatable landscape. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR and the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to air quality would occur.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR AQ-1 Comply with Air Quality Regulations:</b> This SPR applies to all treatment activities and all treatment types.	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>
<b>SPR AQ-2 Submit Smoke Management Plan:</b> This SPR applies only to prescribed burning treatment activities and all treatment types.	No	<u>N/A</u>	<u>N/A</u>
<b>SPR AQ-3 Create Burn Plan:</b> The project proponent will create a burn plan using the CAL FIRE burn plan template for all prescribed burns. This SPR applies only to prescribed burning treatment activities and all treatment types.	No	<u>N/A</u>	<u>N/A</u>

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR AQ-4 Minimize Dust:</b> This SPR applies to all treatment activities and treatment types.	Yes	MFPD During	MFPD
<b>SPR AQ-5 Avoid Naturally Occurring Asbestos:</b> This SPR applies to all treatment activities and treatment types, including treatment maintenance.	No	N/A	N/A
<b>SPR AQ-6 Prescribed Burn Safety Procedures:</b> Prescribed burns will follow all safety procedures required of CAL FIRE crews, including the implementation of an approved Incident Action Plan (IAP).	No	N/A	N/A
<b>MM AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques:</b> Where feasible, project proponents will implement emission reduction techniques to reduce exhaust emissions from off-road equipment.	Yes	MFPD During	MFPD

### 3.4 Archaeological, Historical, and Tribal Cultural Resources

Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact CUL-1:</b> Cause a substantial adverse change in the significance of built historical resources	Impact CUL-1, pp. 3.5-14-3.5-15	SPR CUL-1 SPR CUL-7 SPR CUL-8	LTS	Yes	SPR CUL-1	LTS	<input checked="" type="checkbox"/>

**Impact Discussion:** No built historical resources were identified within the proposed project site areas, where ground-disturbing activities are proposed to occur, As a result of a record search of the California Historical Resources Information System (CHRIS) database (SPR CUL-1). Additionally, no built historical resources were identified within the proposed project site areas, where ground-disturbing activities are proposed to occur, as a result of the intensive pedestrian survey conducted for this investigation (SPR CUL-4), nor as a result of background research conducted, including a relevant literature review and thorough review of historic maps and aerial images (SPR CUL-3).

The inclusion of land outside the CalVTP treatable landscape constitutes a change in the geographic extent described in the PEIR. However, the environmental conditions of the areas outside the CalVTP treatable landscape and within the treatable landscape are essentially the same, and the likelihood for built

Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

historical resources to be present on site is the same. Further, no built historical resources were identified within the proposed project site areas located within the treatable landscape and outside the treatable landscape, where ground-disturbing activities are proposed to occur. As such, impacts to built historical resources would be less than significant. This determination is consistent with the PEIR and would not constitute a substantially greater impact than what was identified in the PEIR.

<b>Impact CUL-2:</b> Cause a substantial adverse change in the significance of unique archaeological resources or subsurface historical resources	Impact CUL-2, pp. 3.5-15-3.15-16	SPR CUL-1 through SPR CUL-5 SPR CUL-8 MM CUL-2	SU	Yes	SPR CUL-1 through SPR CUL-5 SPR CUL 8 MM CUL-2	LTSM	<input checked="" type="checkbox"/>
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**Impact Discussion:** No unique archaeological resources or subsurface historical resources were identified within the proposed project site areas, where ground-disturbing activities are proposed to occur, based on a record search of the CHRIS database (SPR CUL-1). A pedestrian-level survey was conducted for the proposed project (SPR CUL-4) and is summarized in the Archaeological Survey Report included as Attachment C). All areas proposed to include treatment activities with the potential for ground disturbance of any type and degree were surveyed by a qualified archaeologist provided the terrain was safe and accessible. No unique archaeological resources or subsurface historical resources were identified within the proposed project site areas where ground-disturbing activities are proposed to occur during the intensive pedestrian survey conducted for this investigation (SPR CUL-4). Nor were unique archaeological resources or subsurface historical resources identified as a result of background research conducted, including a relevant literature review and thorough review of historic maps and aerial images (SPR CUL-3). The proposed treatment primarily involves treatment activities that either require no soil disturbance or very shallow soil disturbance. Despite the negative findings of the records searches and intensive pedestrian survey, and no tribal cultural resources being identified, there is always a potential for unknown unique archaeological resources or subsurface historical resources to be inadvertently damaged during treatment activities. This would be a potentially significant impact if unknown cultural resources are inadvertently encountered during ground-disturbing activities. However, SPR CUL-5, SPR CUL-6, and MM-CUL-2 would be implemented to protect an inadvertent discovery of archaeological or historical resources. As a result, the impact would be less than significant with mitigation.

The inclusion of land outside the CalVTP treatable landscape constitutes a change in the geographic extent described in the PEIR. However, the environmental conditions of the areas outside the CalVTP treatable landscape and within the treatable landscape are essentially the same, and the likelihood for inadvertent discoveries is the same within the treatable landscape and outside the treatable landscape. This determination is consistent with the PEIR and with mitigation would not constitute a substantially more severe impact than what was determined in the PEIR.

Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact CUL-3:</b> Cause a substantial adverse change in the significance of a tribal cultural resource	Impact CUL-3, p. 3.5-17	SPR CUL-1 through SPR CUL-6 SPR CUL-8	LTS	Yes	SPR CUL-1 through SPR CUL-6 SPR CUL-8	LTSM	<input checked="" type="checkbox"/>

**Impact Discussion:** No tribal cultural resources have been identified within the proposed project site areas where ground-disturbing activities are proposed to occur, based on a record search of the CHRIS database (SPR CUL-1). A pedestrian-level survey was conducted for the proposed project (SPR CUL-4) (the survey report is included as Attachment C). All areas proposed to include treatment activities with the potential for ground disturbance of any type and degree were surveyed by a qualified archaeologist provided the terrain was safe and accessible. No tribal cultural resources were identified within the proposed project site areas where ground-disturbing activities are proposed to occur during the intensive pedestrian survey conducted for this investigation (SPR CUL-4). Nor were tribal cultural resources identified as a result of background research conducted, including a relevant literature review and thorough review of historic maps and aerial images (SPR CUL-3). The proposed treatment primarily involves treatment activities that either require no soil disturbance or very shallow soil disturbance. Additionally, in accordance with SPR CUL-2, Native American tribes culturally and geographically affiliated with the region were contacted via email and certified mail. Additionally, in accordance with SPR CUL-2, Native American tribes culturally and geographically affiliated with the region were contacted via email and certified mail. As a result of the notification, the MFPD received one request for consultation with the Santa Ynez Band of Chumash Indians (Tribe). Formal consultation was conducted between the MFPD and Tribe, agreement was made and consultation was closed. As a result of tribal consultation in accordance with SPR CUL-6 Treatment of Tribal Cultural Resources, the MFPD has developed effective protection measures for important cultural resources located within treatment areas. These measures and specific implementation methods have been included in the description of SPRs and MMs in Attachment A. As a result, the impact would be less than significant with mitigation.

The inclusion of land outside the CalVTP treatable landscape constitutes a change in the geographic extent described in the PEIR. However, the environmental conditions of the areas outside the CalVTP treatable landscape and within the treatable landscape are essentially the same, and the likelihood for inadvertent discoveries is the same within the treatable landscape and outside the treatable landscape. This determination is consistent with the PEIR and with mitigation would not constitute a substantially more severe impact than what was determined in the PEIR.

<b>Impact CUL-4:</b> Disturb human remains	Impact CUL-4, pp. 3.5-18	N/A	LTS	Yes	N/A	LTS	<input checked="" type="checkbox"/>
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**Impact Discussion:** No human remains, cemeteries, or burial sites were identified within the proposed project site areas where ground-disturbing activities are proposed to occur, based on a record search of the CHRIS database (SPR CUL-1). Additionally, no human remains, cemeteries, or burial sites were identified within the proposed project site areas where ground-disturbing activities are proposed to occur during the intensive pedestrian

Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

survey conducted for this investigation (SPR CUL-4). Nor were human remains, cemeteries, or burial sites identified as a result of background research conducted, including a relevant literature review and thorough review of historic maps and aerial images (SPR CUL-3). The proposed treatment primarily involves treatment activities that either require no soil disturbance or very shallow soil disturbance where human remains are not traditionally or historically known to be buried. Compliance with California Health and Safety Code Sections 7050.5 and 7052 and California Public Resources Code, Section 5097, would avoid disturbance. This impact does not apply to the project.

The inclusion of land outside the CalVTP treatable landscape constitutes a change in the geographic extent described in the PEIR. However, the environmental conditions of the areas outside the CalVTP treatable landscape and within the treatable landscape are essentially the same. No cemeteries, burial sites, or archaeological resources were identified on the treatment sites located within the treatable landscape and outside the treatable landscape. Therefore, this impact does not apply to the land within and the land outside the CalVTP treatable and would not constitute a more significant impact than what was identified in the PEIR.

<b>Other Impacts to Archeological, Historical, and Tribal Cultural Resources:</b> Would the project result in other impacts on archeological, historical, or tribal cultural resources that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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Site-specific characteristics of the proposed VMP are consistent with the environmental and regulatory conditions outlined in Section 3.5.1 and Section 3.5.2 of the CalVTP PEIR. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR. While the inclusion of land outside the CalVTP treatable landscape is a change to the geographic extent in the PEIR, the existing conditions in the project area relating to unique archaeological, historical, built environment, human remains, and tribal cultural resources are essentially the same for treatment areas within the CalVTP treatable landscape and treatment areas outside the CalVTP treatable landscape. A records search of the CHRIS database and Native American Heritage Commission Sacred Land Files, pre-field research, and a cultural resource reconnaissance level surveys were conducted on lands both inside and outside the treatable landscape. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR, and the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to unique archaeological, historical, built environment, human remains, and tribal cultural resources would occur.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<p><b>SPR CUL-1 Conduct Record Search:</b> For treatments led by CAL FIRE, an archaeological and historical resource record search will be conducted per the “Archaeological Review Procedures for CAL FIRE Projects” (current edition dated 2010). This SPR applies to all treatment activities and treatment types.</p>	Yes	MFPD Prior	MFPD
<p><b>SPR CUL-2 Contact Geographically Affiliated Native American Tribes:</b> The project proponent will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List, which may be obtained from the CAL FIRE website, as appropriate. This SPR applies to all treatment activities and treatment types.</p>	Yes	MFPD Prior	MFPD
<p><b>SPR-CUL-3 Pre-field Research:</b> The project proponent will conduct research prior to implementing treatments as part of the cultural resource investigation. This SPR applies to all treatment activities and treatment types</p>	Yes	MFPD Prior	MFPD
<p><b>SPR CUL-4 Archaeological Surveys:</b> The project proponent will coordinate with an archaeologically trained resource professional or qualified archaeologist to conduct a site-specific survey of the treatment area. This SPR applies to all treatment activities and treatment types.</p>	Yes	MFPD Prior	MFPD
<p><b>SPR CUL-5 Treatment of Archaeological Resources:</b> If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. This SPR applies to all treatment activities and treatment types.</p>	Yes	MFPD During	MFPD
<p><b>SPR CUL-6 Treatment of Tribal Cultural Resources:</b> If a tribal cultural resource is identified within a treatment area, and cannot be avoided, the project proponent in consultation the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. This SPR applies to all treatment activities and treatment types.</p>	Yes	MFPD During	MFPD
<p><b>SPR CUL-8 Cultural Resource Training:</b> The project proponent will train all crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. This SPR applies to all treatment activities and treatment types.</p>	Yes	MFPD Prior-During	MFPD

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<p><b>MM CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources</b></p> <p>If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil (“midden”), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified professional archaeologist or CAL FIRE archeological trained Registered Professional Forester will assess the significance of the find.</p>	Yes	MFPD During	MFPD

### 3.5 Biological Resources

Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<p><b>Impact BIO-1:</b> Substantially affect special-status plant species either directly or through habitat modifications</p>	Impact BIO-1, pp. 3.6-132–3.6-139	SPR BIO-1 SPR BIO-2 SPR BIO-7 SPR BIO-9 SPR AQ-3 SPR AQ-4 SPR GEO-1 SPR GEO-3 SPR GEO-4 SPR GEO-5 SPR GEO-7 SPR HYD-5	LTSM	Yes	SPR BIO-1 SPR BIO-2 SPR BIO-6 SPR BIO-7 SPR BIO-9 SPR AQ-4 SPR GEO-1 SPR GEO-3 SPR GEO-4 SPR GEO-5 SPR GEO-7 SPR HAZ-1	LTSM	<input checked="" type="checkbox"/>



Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
		MM BIO-1a, MM BIO-1b MM BIO-1c			MM BIO-1a MM BIO-1b		

Treatment activities could result in direct or indirect impacts to 1 potentially occurring plant species listed under the California Endangered Species Act (CESA) and to 11 additional, non-listed special-status plants with potential to occur within the project site (Table 3.5.1). Data review and reconnaissance surveys were conducted for all areas, in accordance with SPR BIO-1 (see Attachment D, Biological Technical Memo for the Montecito Vegetation Management Project). A variety of soils and natural communities occur throughout the project site that may support special-status plants. Chaparral, oak woodland, and riparian are the dominant vegetation types, and each occurs throughout the project site. The variety of special-status plant species occurring in any one area depends mostly on which of these general vegetation types is supported. The only potentially occurring listed species, seaside bird's beak (*Cordylanthus rigidus* ssp. *littoralis*), has only a low potential to occur. But if it does occur, it could be subject to take from treatment activities. In the treatment areas, its potential to occur is limited to chaparral and woodland habitats.

Non-listed species potentially occurring in the treatment areas are silver slender moss (*Anomobryum julaceum*), late-flowered mariposa lily (*Calochortus fimbriatus*), mesa horkelia (*Horkelia cuneata* var. *puberula*), Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*), white-veined monardella (*Monardella hypoleuca* ssp. *hypoleuca*), aparejo grass (*Muhlenbergia utilis*), chaparral nolina (*Nolina cismontana*), Mexican earthmoss (*Pleuridium mexicanum*), Nuttall's scrub oak (*Quercus dumosa*), black-flowered figwort (*Scrophularia atrata*), and. Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*). None of these were observed during reconnaissance surveys, but the California Natural Diversity Database (CNDDDB) includes records for several within the treatment areas. Late-flowered mariposa lily is known to occur along Mountain Drive, in an area that encompasses several treatment areas from Cold Springs Creek westward (GT-2, GT-3, GT-5, GT-9, GT-10, GT-12, MT-3, MT-9, MT-12, MT-13). White-veined monardella has occurred within or near GT-3. Nuttall's scrub oak is known to occur within or adjacent to MT-1 (along Gibraltar Road) and in the lowlands near MT-7. Sonora maiden fern occurs along Romero Creek near several treatment areas (GT-21, GT-22, MT-22 through MT-26). Attachment D (specifically, Attachments B and C of Attachment D) includes all potentially occurring special-status plants by treatment area and an assessment of potential to occur for all special-status species identified in the literature review.

Potential impacts to special-status plant species include direct removal or destruction during hand treatment or from being crushed by workers; reduction of the potential for seed set, for example from plant debris left in place over areas occupied by special-status plants; alteration of growth and production through habitat modification or soil erosion; being damaged if placed under debris piles; and indirect impacts from spread of invasive plants and introduction of plant pathogens. During prescribed herbivory, special-status plants could be consumed or trampled by livestock, inadvertently crushed, trampled, broken, or otherwise damaged during installation or removal of fencing used to contain the animals. However, its use to reduce target populations, such as of invasive plants, may reduce fire fuels and competition with other plants.

Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

SPR BIO-7, which requires surveys for special-status plants, applies to all treatment activities. Attachment D (Table 2a, Table 2b) includes the schedule for special-status plant surveys by treatment area. Protocol-level surveys for special-status plants will not be required if the target special-status plant species in an area are herbaceous annuals, stump-sprouting species, or geophyte species, and if the treatment may be carried out during the dormant season for those species or when the species have completed their annual life cycle, provided the treatment will not alter habitat in a way that would make it unsuitable for the special-status plants to reestablish following treatment or destroy seeds, stumps, or roots, rhizomes, bulbs, and other underground parts of special-status plants.

Surveys during the blooming season (SPR BIO-7) will be conducted for seaside bird's beak, the only potentially occurring listed plant species, so that avoidance measures in SPR BIO-7 and MM BIO-1a could be implemented. Surveys conducted under SPR BIO-7 will also identify any non-listed special-status plant species occurring within the project site, and avoidance measures in MM BIO-1b will assure avoidance of areas occupied by these plants. Hand treatment methods proposed for the treatment project may occur in these areas if the plants are geophytic, stump-sprouting, or annual species and the treatment is conducted outside of the growing season or during the dormant season. However, only seaside bird's beak, late-flowered mariposa lily, mesa horkelia, and black-flowered figwort can be avoided in this manner. SPR BIO-2, which requires worker training in sensitive biological resources, will further reduce the potential for impacts to special-status plants.

Identification of the location of rare plants in accordance with SPR BIO-1, and avoidance under MM BIO-1a and MM BIO-1b, will also reduce or eliminate potential impacts to rare plants from habitat alteration. Several measures will reduce the potential for erosion to result in impacts to rare plants: SPR GEO-1, which will suspend treatment during heavy precipitation; SPR GEO-3, which will require stabilization of soil disturbed during treatment; SPR GEO-4, which will require monitoring for erosion; and SPR GEO-7, which prescribes measures to minimize erosion on steep slopes.

Several additional project requirements will reduce potential indirect impacts to special-status plants. SPR BIO-6 will prevent the spread of plant pathogens in areas with sensitive biological resources, while SPR BIO-9 will prescribe measures to prevent the spread of invasive plants. SPR AQ-4 includes dust control measures such as speed limits and use of water trucks if road use creates excessive dust. Additionally, SPR HAZ-1 will require regular maintenance of equipment, which will reduce the potential for fuel leaks and other spills from equipment. With implementation of the SPRs and the mitigation measure described above, impacts to special-status plants from the treatment project would be less than significant.

Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications	Impact BIO-2, pp. 3.6-139-3.6-187	SPR BIO-1 through SPR BIO-5 SPR BIO-8 SPR BIO-10 SPR BIO-11	PS/SU	Yes	SPR BIO-1 through SPR BIO-5 SPR BIO-10 SPR BIO-11	LTSM	<input checked="" type="checkbox"/>
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Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
		SPR HYD-1 SPR HYD-3 through SPR HYD-5 SPR HAZ-5 SPR HAZ-6 SPR HYD-5 MM BIO-2a through MM BIO-2h MM BIO-3a through MM BIO-3c MM BIO-4			SPR HYD-1 SPR HYD-3 through SPR HYD-5 SPR HAZ-5 SPR HAZ-6 MM BIO-2a MM BIO-2b MM BIO-3a MM BIO-4		

Treatment activities could result in direct and indirect impacts to special-status wildlife (Table 3.5.2). Data review and reconnaissance surveys were conducted in accordance with SPR BIO-1 (see Attachment D). The project proponent has consulted with regulatory agencies (California Department of Fish and Wildlife [CDFW], U.S. Fish and Wildlife Service, and the National Marine Fisheries Service) and will implement all agency recommendations into project design.

**Special-Status Fish:** One special-status fish species potentially occurs on the project site: the federally listed endangered steelhead, southern California Distinct Population Segment (DPS), or southern steelhead (*Oncorhynchus mykiss irideus* pop. 10), which is also a State candidate for listing. No non-listed species have potential to occur. Steelhead has potential to occur in several creeks in the vicinity that support federally designated critical habitat for the species: Sycamore Creek, Montecito Creek/Cold Springs Creek (East and West Forks), San Ysidro Creek, and Romero Creek. Critical habitat in both Montecito/Cold Springs and San Ysidro Creek occurs within treatment areas. Critical habitat within Sycamore Creek and Romero Creek occurs solely downstream of the project site, but impacts to steelhead could occur from activities within the treatment areas upstream. Federal habitat occurs within the following treatment areas: GT-14 and MT-12 (Montecito/Cold Springs) and GT-15 and MT-16 (San Ysidro Creek). Several other areas occur immediately adjacent or upstream of critical habitat: MT-1 (Sycamore Creek); GT-11, GT-12, MT-9, and MT-13 (Montecito/Cold Springs); GT-13, GT-16, GT-17, GT-18, GT-19, and MT-17 (San Ysidro); and GT-20, GT-21, GT-22, MT-22, MT-23, MT-24, and MT-25 (Romero). Note that critical habitat may not be mapped precisely, and actual habitat may occur within some of the latter areas, such as MT-22. Within critical habitat in the project vicinity,

Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

steelhead occurs during migration and spawning. Although impacts to steelhead may occur from well outside of occupied habitat (upstream or in adjacent uplands), its potential to occur is limited to the several streams where they are known to occur.

If manual treatments occur within or adjacent to aquatic habitat supporting steelhead, it could result in inadvertent fill of these features. Such treatments also can potentially result in instability or erosion due to removal of vegetation within or upstream of habitat. Erosion could result in inadvertent discharge of silt into watersheds, which could result in indirect adverse effects on aquatic species. Prescribed herbivory within or near critical habitat could result in inadvertent trampling of aquatic species or inadvertent fill of aquatic habitat through erosion and sedimentation, which could result in adverse effects on steelhead.

SPR BIO-3 will result in identification of sensitive communities, including riparian habitat along streams supporting critical habitat. Furthermore, implementation of SPR HYD-4 will require identification of Watercourse and Lakeshore Protection Zones (WLPZs), further ensuring that sensitive areas potentially supporting steelhead will be identified prior to implementation of treatments. SPR HYD-3 will prohibit prescribed herbivory within sensitive waterbodies, wetlands, or riparian areas. Implementation of MM BIO-2a will also result in avoidance of take of steelhead. In accordance with coordination with CDFW and NMFS, implementation of MM BIO-2a for steelhead will require that no activity occur within critical habitat streams, and no treatment will occur within riparian habitat other than removal of dead material, unless the project proponent consults with NMFS with regard to take of steelhead and files a Notification of Streambed Alteration with CDFW under Section 1602 of the Fish and Game Code. In addition, if any dead vegetation must be removed from riparian vegetation along a stream supporting steelhead critical habitat, it must be done outside the steelhead migration season. No cut vegetation would be stockpiled in streams or riparian habitats. Implementation of SPR BIO-4 will provide additional protection for steelhead by requiring that treatment be designed to avoid loss or degradation of riparian habitat function. Additional measures related to erosion control and water quality will also help ensure no impacts occur to steelhead. MM BIO-4 (Avoid State and Federally Protected Wetlands) will further ensure avoidance of habitat that may support steelhead. Several other measures will limit erosion and sedimentation impacts, and result in avoidance of water quality impacts. SPR GEO-1 will result in suspension of disturbance during and after heavy precipitation. SPR-GEO-4 will require erosion monitoring during prescribed herbivory and manual treatment. SPR HYD-1 will require that treatments comply with State Water Resources Control Board Waste Discharge Requirements. SPR HYD-3 will ensure additional water quality protections during prescribed herbivory, including identification of the sensitive areas (streams, riparian habitats) and a 50-foot buffer from which the treatment will be excluded, providing water for livestock from outside sources, and designing treatment to protect soil stability. The project description incorporates this requirement by limiting vegetation removed to a 75% target for herbaceous vegetation and a 50% target for shrubs, at which point animals are moved to the next enclosed area.

**Special-Status Amphibians:** Two special-status amphibian species, including one that is federally listed as endangered, occur in the vicinity of the project site. California red-legged frog (*Rana draytonii*) is federally listed as threatened and is known from several occurrences near or along Montecito Creek, downstream of MT-12 and south of MT-13. This species potentially occurs elsewhere in the project vicinity where suitable aquatic breeding

Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

habitat may be present, especially near perennial creeks, such as Cold Springs Creek, San Ysidro Creek, and Romero Creek. But other creeks where suitable pooling may occur may also support this species. Given the low number of occurrences in the vicinity, the species is likely not widely present in the treatment areas, but it potentially occurs in many areas, if suitable breeding habitat is present (Attachment D, Table 2a and Table 2b). Because the Cal VTP does not propose treatment of any kind in wetlands or aquatic habitat, direct impacts to breeding locations are not expected. However, the species may occur in previously unidentified wetlands and pools, where its habitat could be subject to inadvertent fill due to effects of manual treatment. Although California red-legged frogs could be subject to impacts within burrows or other upland refugia, the project does not propose the use of vehicles within the treatment areas. Also, most frogs are likely to occupy upland habitats near aquatic habitats, such as in riparian vegetation. Because agency comments requested only removal of dead material in riparian habitats unless the applicant seeks permitting under Section 1602 of the Fish and Game Code, it is highly unlikely these treatments will result in crushing of California red-legged frogs within their refugia in upland habitats. Prescribed herbivory could result in direct effects to California red-legged frog through crushing them in burrows or other refugia. Installation of temporary fencing could also result in crushing of result in crushing of frogs, if present. Also, effects from erosion could result in water quality impacts to aquatic breeding habitat and inadvertent fill from sedimentation. Finally, although effects to California red-legged frogs within their upland refugia are unlikely, the potential for direct harm increases during periods when frogs are moving through upland habitats between breeding habitats, such as during rain events.

SPR BIO-3 will result in identification of sensitive communities, including riparian habitat along streams, wetlands, and aquatic habitats. SPR BIO-4 will ensure that loss of riparian function is avoided. Furthermore, implementation of SPR HYD-4 will require identification of WLPZs, further ensuring that sensitive areas potentially supporting wetlands and aquatic habitat will be identified prior to implementation of treatments. SPR HYD-3 will prohibit prescribed herbivory altogether within sensitive waterbodies, wetlands, or riparian areas. Implementation of SPR BIO-10, which requires surveys for special-status wildlife species, and MM BIO-2a, which requires avoidance of take of listed species, will also result in avoidance of take of California red-legged frogs. Implementation of these measures will include surveys for suitable aquatic habitat within 300 feet of proposed treatment, to the extent access permits. Pre-activity surveys will also include searches of upland habitats where prescribed herbivory and associated fence installation will take place. If any California red-legged frogs are observed, MFPD will contact U.S. Fish and Wildlife Service to determine a course of action. MM BIO-4 (Avoid State and Federally Protected Wetlands) will further ensure avoidance of habitat that may support red-legged frogs. SPR GEO-2, by suspending treatment activities when rain is predicted, will further reduce the unlikely possibility that California red-legged frogs will be harmed within upland habitats, at times when they are most likely to be moving through these habitats. This and several other requirements will ensure that no adverse effects from erosion and sedimentation will occur in California red-legged frog breeding habitats downstream of treatment areas. SPR GEO-4 will require erosion monitoring during prescribed herbivory and manual treatment. SPR HYD-1 will require that treatments comply with State Water Resources Control Board Waste Discharge Requirements. SPR HYD-3 will ensure additional water quality protections during prescribed herbivory, including identification of the sensitive areas (streams, riparian habitats) and a 50-foot buffer from which the treatment will be excluded, providing water for livestock from outside

Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

sources, and designing treatment to protect soil stability. The project description incorporates this requirement by limiting vegetation removed to a 75% target for herbaceous vegetation and a 50% target for shrubs, at which point animals are moved.

**Special-Status Semi-aquatic Reptiles:** Two semi-aquatic special-status reptile species have the potential to occur on the project site: western pond turtle (*Emys marmorata*) and two-striped gartersnake (*Thamnophis hammondi*). Western pond turtles typically stay close to aquatic habitat, but occasionally wander far away from these habitats during winter or to establish nests. Two-stripe gartersnakes rarely stray far from aquatic habitats. Because project activities will not occur in aquatic habitats, no impacts will occur to these species in those habitats. However, impacts from erosion and sedimentation during both hand treatment and prescribed herbivory may have the potential to result in inadvertent fill of aquatic features. Two-striped gartersnake, which are relatively mobile, will likely be able to avoid impacts from hand treatment in riparian areas, and will not be subject to impacts in other upland habitats. However, western pond turtle are slow-moving and could be injured during manual treatments or prescribed herbivory. Also, any nests of this species could be subject to exposure during treatment, and therefore subject to predation. Or they could be trampled by workers or livestock.

SPR BIO-3 will result in identification of sensitive communities, including riparian habitat along streams potentially supporting these species. Furthermore, implementation of SPR HYD-4 will require identification of WLPZs, further ensuring that sensitive areas potentially supporting western pond turtle and two-striped gartersnake will be identified prior to implementation of treatments. SPR HYD-3 will prohibit prescribed herbivory within in sensitive waterbodies, wetlands, or riparian areas. These measures together will result in a substantial reduction in any potential for direct impacts to these species. SPR BIO-10, by requiring pre-activity wildlife surveys and avoidance of special-status wildlife identified, will further ensure avoidance of direct harm to these species. SPR GEO-2, by suspending treatment activities when rain is predicted, will reduce the potential for erosion. SPR-GEO-4 will require erosion monitoring during prescribed herbivory and manual treatment. SPR HYD-1 will require that treatments comply with State Water Resources Control Board Waste Discharge Requirements. SPR HYD-3 will ensure additional water quality protections during prescribed herbivory.

**Special-Status Upland Reptiles:** Direct and indirect impacts to several non-listed special-status reptiles, and to their habitats, could occur within the project site, including northern California legless lizard (*Anniella pulchra*), Blainville’s (i.e., coast) horned lizard (*Phrynosoma blainvillii*), and coast patch-nosed snake (*Salvadora hexalepis virgulata*). All three of these species spend much of their lives underground. Because the treatments do not include use of vehicles or heavy equipment within the treatment areas, the likelihood of harming individuals is relatively low. Blainville’s horned lizard or coast patch-nosed snake could be also subject to injury or mortality aboveground during treatment occurring in scrub or grassland habitats. Blainville’s horned lizard has been identified in several locations in the vicinity of treatment areas and both species have the potential to occur in scrub habitats throughout the project site (CDFW 2022a); Attachment D). Implementation of SPR BIO-10, which will involve conducting a focused survey for special-status wildlife, may result in identification of additional locations where these species occur. Implementation of MM BIO-2b will ensure establishment of buffers around the locations of any occupied sites. Due to implementation of these and additional SPRs meant to protect sensitive natural communities (SPR BIO-3), avoid effects of type conversion in coastal scrub and chaparral (SPR BIO-5), prevent the spread of plant pathogens (SPR BIO-6), and

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prevent the spread of invasive plants (SPR BIO-8), the project will not substantially affect the function of habitat for these species. Furthermore, implementation of MM BIO-3a will ensure treatment is designed to avoid loss of sensitive communities.

**Special-Status Bird Species:** Two special-status bird species were identified as having potential to occur in the treatment areas. One of these, olive-sided flycatcher (*Contopus cooperi*), was identified in the vicinity of MT-12 during surveys and may occur in other treatment areas in that vicinity, where taller trees occur. Yellow warbler (*Setophaga petechia*) occurs in some riparian areas in the project vicinity, and likely occurs in some of the treatment areas supporting such habitats. Although removal of tall, dead trees could reduce habitat quality for olive-sided flycatcher, which prefers high, exposed perches for hunting insects, the Project is not expected to result in an essential change to habitat that would affect the suitability for this species. Nesting by this species is unlikely to be affected by the project, as it tends to nest high in trees. However, manual treatment could result in disruption of nesting activities due to noise and human presence. Yellow warblers tend to nest closer to the ground and may nest in trees and shrubs in riparian habitats in the area. Because prescribed herbivory will be conducted completely outside riparian habitat, and manual treatment in riparian areas will be limited to removal of dead material, the Project is not likely to affect habitat suitability for this species. But even removal of dead material during manual treatment could result in direct impacts to yellow warbler nesting. SPR BIO-12, through its protections for common nesting birds, will result in avoidance of impacts to nesting olive-sided flycatchers and yellow warblers, due to its requirement to avoid the nesting season or conduct nesting bird surveys and implement avoidance of nests found. The nesting season for the Project region should be considered January 15 to August 31, although for these species the season is much narrower, from approximately April to August.

**Western Red Bat:** No bat roosts have been identified within the project site, and habitat for bats roosting in rock outcrops and crevices is limited, and it would not be directly affected by the project. However, the California Natural Diversity Database includes several records for one tree-foliage-roosting species, western red bat (*Lasiurus blossevillii*), which is a California Species of Special Concern. This species is generally associated with mature riparian habitat, and the records in the vicinity are in areas where such habitats occur and are from coastal lowlands. Riparian habitats, such as along Cold Spring, Romero, and San Ysidro Creeks, may have potential to support this species. Grazing treatments will include avoidance of riparian habitat and all areas within 50 feet. Based on consultation with CDFW, mixed treatments in riparian areas will include only removal of dead material, or otherwise must include a notification of Lake and Streambed Alteration, as specified by CDFW during consultation. Therefore, while the Project has some potential to result in impacts to roosting western red bats, the likelihood of disturbing a maternity roost is very low.

**Special-Status Mammals:** Two special-status mammal species, ringtail (*Bassariscus astutus*) and San Diego desert woodrat (*Neotoma lepida intermedia*), have the potential to occur within the treatment project site, and the project could result in impacts to these species, either by causing injury or harm to individuals or altering their habitats substantially. Ringtail is a California fully protected species that occurs in riparian, chaparral, oak woodland, and coastal scrub near a water source. They den in rocky areas, but also in tree cavities. San Diego desert woodrats live in nests (middens) that are piles of stick and other material, constructed in coastal scrub and chaparral. Manual treatments could result in impacts to ringtail by removing

Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

active dens or denning habitat, if the species occupies tree cavities in the area. Noise and human presence could potentially disturb ringtails in a natal den. Manual treatment could also result in removal of a woodrat nest, potentially resulting in mortality or disruption of nesting. Prescribed herbivory is unlikely to result in impacts to ringtails. However, grazing treatments could result in damage or destruction of woodrat nests. Because the Project as proposed is not likely to result in any type conversion of scrub, woodland, and riparian communities, it is not expected to result in loss of habitat for these species. Implementation of SPR BIO-10, to conduct a focused survey for special-status wildlife, will result in identification of locations where these species occur, or potentially occur. Implementation of MM BIO-2a will result in avoidance of ringtail, take of which is not allowed because it is a fully protected species. If ringtail is identified in the area, no trees or branches with large cavities will be removed without confirmation that the species does not occupy the cavity. Any woodrat nest and immediately surrounding vegetation should be avoided. In accordance with MM BIO-2b, the location of any woodrat nest that may be occupied by San Diego desert woodrat, and a sufficient buffer around the nest, will be marked in the field, and treatment will avoid the nest.

With implementation of the above SPRs and mitigation measures to address potential impacts to the species discussed above, impacts to special-status wildlife occurring within the project site will be less than significant.

<b>Impact BIO-3:</b> Substantially affect riparian habitat or other sensitive natural community through direct loss or degradation that leads to loss of habitat function	Impact BIO-3, pp. 3.6-187–3.6-192	SPR BIO-1 through SPR BIO-6 SPR BIO-8 SPR BIO-9 SPR HYD-4 SPR HYD-5 MM BIO-3a through MM BIO-3c	PS	Yes	SPR BIO-1 through SPR BIO-6 SPR BIO-9 SPR HYD-3 SPR HYD-4 MM BIO-3a	LTSM	<input checked="" type="checkbox"/>
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**Impact Discussion:** Treatment conducted within the project site has the potential to result in impacts to sensitive natural communities. This could include loss of sensitive communities or oak woodlands, degradation through removal of dominant and characteristic vegetation, and conversion of sensitive communities to common vegetation types. Sensitive communities are defined in the Manual of California Vegetation Online (CNPS 2022) and the California Natural Community List (CDFW 2022b). Communities with a global ranking of G1 to G3 or a state ranking of S1 to S3 are considered sensitive. Data review for all areas and reconnaissance surveys were conducted in accordance with SPR BIO-1 (Attachment D). Vegetation communities mapped included California brittle bush scrub (G3, S3 ranking; MT-1, MT-3) and needle grass grassland (G3G4, S3S4 ranking; G-10). Smaller areas of



Impacts and Discussions	PEIR specific			Project specific			
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sensitive vegetation per the California Native Plant Society (CNPS 2022) and CDFW (2022a) may occur elsewhere in the treatment areas. In addition to these communities, riparian vegetation, also regarded as sensitive and typically considered under the jurisdiction of CDFW under Section 1602 of the California Fish Game Code, occurs along the streams that traverse many of the treatment areas. Coast live oak woodland, which is protected under the Montecito Community Plan (County of Santa Barbara 1995), also occurs widely in the treatment areas (Attachment D). California brittle bush scrub and other scrub communities are designated as sensitive by the California Native Plant Society (CNPS 2022) and CDFW (2022b), although they would not be removed by hand treatment or prescribed herbivory, and may not be subject to type conversion, would be altered by treatment. Sensitive grassland communities, where up to 75% of cover from herbaceous vegetation could occur, could be severely impacted by prescribed herbivory, which could result in the loss of enough native grassland cover to result in type conversion. Removal of live riparian vegetation could impact the quality of such habitats. In oak woodlands, no live trees will be removed, and neither hand treatment nor prescribed herbivory would result in type conversion. Also, as the Montecito Community Plan provisions pertain to development restrictions within and adjacent to oak woodlands, and the Project proposes no development, the Project is not expected to result in impacts to oak woodland that violate the provisions of the Community Plan.

SPR BIO-3 requires a survey for sensitive vegetation communities prior to treatment, to ensure these are identified and treatment avoids these communities. SPR BIO-3 also requires that no fuel breaks occur in S1 (critically imperiled) or S2 (imperiled) communities. SPR BIO-4 will ensure that treatment is designed to maintain riparian function. Furthermore, implementation of SPR HYD-4 will require identification of WLPZs, further ensuring that sensitive areas potentially supporting wetlands and aquatic habitat will be identified prior to implementation of treatments. More importantly, based on consultation with CDFW, impacts to live vegetation (as opposed to removal of dead material) will be avoided in riparian areas, or a Notification of Lake and Streambed Alteration will be filed, in accordance with California Fish and Game Code Section 1602. SPR HYD-3 will prohibit prescribed herbivory altogether within in sensitive waterbodies, wetlands, or riparian areas. SPR BIO-5 will ensure that treatment is designed to maintain or enhance habitat function of chaparral and coastal sage scrub communities. And SPR BIO-6 requires that best management practices be employed to avoid spread of plant pathogens, while SPR BIO-9 prescribes actions to prevent the spread of invasive plants.

In addition to these requirements, MM BIO-3a will ensure that treatment is designed to avoid loss of sensitive natural communities and oak woodlands, including enhancement of communities to restore the natural fire regime and vegetation composition and structure. MM BIO-3b and MM BIO-3c, which relate to compensation for loss of sensitive natural communities and oak woodlands and of riparian habitat, respectively, are not anticipated to be necessary. With implementation of the above SPRs and mitigation measures, impacts to sensitive natural communities occurring within the project site would be less than significant.

Impact BIO-4: Substantially affect state or federally protected wetlands	Impact BIO-4, pp. 3.6-192-3.6-193	SPR BIO-1 SPR HYD-1 SPR HYD-3	PS	Yes	SPR BIO-1 SPR HYD-1 SPR HYD-3	LTSM	<input checked="" type="checkbox"/>
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Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
		SPR HYD-4 MM BIO-4			SPR HYD-4 MM BIO-4		

Reconnaissance surveys conducted in accordance with SPR BIO-1 did not include delineation of state or federally protected wetlands. However, these resources potentially occur on a small scale in several treatment areas throughout the project site, specifically, along several creeks and in riparian areas (Attachment D, Table 2a and Table 2b). The Cal-VTP does not propose treatment within wetlands, but where unmapped wetlands occur, they could be subject to impacts, such as unpermitted removal of wetland vegetation, and alteration of wetland hydrology, or loss or degradation of wetland function. Some of these effects could occur due to vegetation removal in upland areas adjacent to wetlands.

SPR HYD-1 and SPR HYD-3 require water quality protections, and SPR HYD-4 requires identification and protection of WLPZs. But some potential for impacts to wetlands would still exist with implementation of these SPRs. Implementation of MM BIO-4, however, would require that treatment be designed to avoid loss or degradation of wetland habitat function. This would include delineation of the boundaries of wetlands, establishment of buffers a minimum of 25 feet wide, monitoring of wetland buffers to confirm that boundaries remain intact, prohibition of herbicides within the buffer, and prohibition of manual, mechanical, and prescribed herbivory treatments within the buffer. With implementation of the SPRs and the mitigation measure described above, impacts to state and federally protected wetlands from the treatment project would be less than significant with mitigation incorporated.

<b>Impact BIO-5:</b> Interfere substantially with wildlife movement corridors or impede use of nurseries	Impact BIO-5, pp. 3.6-193-3.6-197	SPR BIO-1 SPR BIO-4 SPR BIO-5 SPR BIO-10 SPR BIO-11 SPR HYD-1 SPR HYD-4 MM BIO-5	PS	Yes	SPR BIO-1 SPR BIO-4 SPR BIO-5 SPR BIO-10 SPR BIO-11 SPR HYD-1 SPR HYD-4 MM BIO-5	LTSM	<input checked="" type="checkbox"/>
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**Impact Discussion:** Because the project site is located at the edge of a vast area of undeveloped habitats supporting a wide variety of wildlife, and because much of the northern portion of the project site is sparsely developed, larger wildlife species such as mule deer (*Odocoileus hemionus*) likely move through the area regularly. Some of these species likely use creeks and other narrower areas of habitat extending southward to the coastal plain, to access more southerly portions of the Montecito Community Plan Area. Movement of fish, in particular, is tied to creeks within the project vicinity. Smaller animals occupying chaparral, oak woodland, and streamside habitats outside the project area occur also along undeveloped corridors extending into the Plan Area that provide avenues of gene flow for populations. Therefore, the treatment areas likely support wildlife connectivity in the

Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

vicinity. Significant nursery sites in the vicinity occur along streams and associated aquatic habitat and wetland and riparian vegetation, which support breeding by fish, amphibians, some reptiles and mammals, and riparian bird species.

Short-term effects of treatment, including hand removal of undergrowth, limbing of trees, and presence of livestock, could cause wildlife to avoid the project site temporarily and disrupt wildlife movement. However, wildlife using the area for movement would have access to the extensive undeveloped surrounding lands during treatment. In addition, within manual treatment areas, which are generally in the vicinity of residential and other development, wildlife are likely somewhat habituated to human presence already. Finally, SPR BIO-11, which calls for wildlife friendly fencing during prescribed herbivory, would ensure that smaller and some medium-sized wildlife are safely able to move through the areas. Project treatment would not create long-term barriers to wildlife movement and would not result in habitat changes that would limit movement. Since wildlife nursery sites are limited to streams and riparian areas, protection for these areas during treatment would reduce any potential impacts to nursery sites. SPR BIO-10 requires surveys for special-status wildlife and nursery sites and would further ensure that sensitive areas such as those the subject of surveys in accordance with SPR BIO-3 would be identified prior to treatment. SPR BIO-10 also requires that nursery sites be avoided during treatment. SPR HYD-3 would require that livestock used in these treatments be excluded from these areas. Any potential long-term impacts to nursery sites would be limited by SPR BIO-4, which ensures that treatment will not result in loss or degradation or riparian function; SPR BIO-5, which requires that treatment avoid the effects of type conversion within scrub habitats; and SPR HYD-4, which would establish WLPZs. Any residual impacts to nursery sites would be further reduced by implementation of MM BIO-5, under which a biologist, prior to treatment, will identify important habitat features that provide nursery sites and mark the sites and a suitable buffer for avoidance. Implementation of MM BIO-5 would ensure avoidance of nursery sites and establishment of buffers. Implementation of these measures would reduce any potential impacts to less than significant.

<b>Impact BIO-6:</b> Substantially reduce habitat or abundance of common wildlife	Impact BIO-6, pp. 3.6-197 – 3.6-199	SPR BIO-1 through SPR BIO-5 SPR BIO-12	LTS	Yes	SPR BIO-1 through SPR BIO-5 SPR BIO-12	LTS	<input checked="" type="checkbox"/>
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The project could result in direct and indirect impacts to common wildlife, including nesting birds. The various habitats that occur within the project site, consisting mostly of chaparral, oak woodland, developed land covers, and riparian woodland, with smaller amounts of grassland and coastal scrub, and support a variety of common wildlife, including nesting birds. Treatment could result in substantial reduction of habitat for common species. All treatment activities, including manual treatment and prescribed herbivory, if conducted during the nesting bird season (approximately January 15 to August 31 in the region), could result in direct loss of active bird nests, or in disturbance of nesting birds from noise and presence of personnel and equipment that could disrupt nesting activities and cause nest abandonment and failure.

Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

Extensive areas of similar habitats occur adjacent to the treatment project site, such that substantial similar habitats will remain in surrounding areas that are available to common wildlife species during and after treatment. In addition, implementation of SPR BIO-1, SPR BIO-2, SPR BIO-3, and SPR BIO-5 would limit the loss and degradation of high-quality habitat for common species within the project site. SPR BIO-2 would require worker training in sensitive biological resources. SPR BIO-3 would ensure mapping of sensitive habitats. And SPR BIO-5 would result in avoidance of type conversion in scrub habitats. Therefore, project treatment would remove vegetation and alter habitat structure locally but would not result in permanent habitat degradation or conversion. Vegetation would be retained in a mosaic pattern in shrub communities, and quality of habitat may improve in the long term in some cases. Overall diversity and abundance of common birds and other wildlife would not substantially change in the long term.

For nesting birds, implementation of SPR BIO-12 would require a survey for common nesting birds prior to treatment, if avoiding the nesting season is not possible. A qualified biologist will review a list of the common nesting birds, including raptors, in the vicinity, using available data sources. See Attachment D for a list of common birds that likely nest within the project site. For any nests found, SPR BIO-12 requires establishment of buffers and modification and deferral of treatment in the vicinity of the nests.

No mitigation measures are required to address this impact, and with implementation of the SPRs noted above, this impact would be less than significant.

<b>Impact BIO-7:</b> Conflict with local policies or ordinances protecting biological resources	Impact BIO-7, pp. 3.6-199	SPR AD-3	No Impact	Yes	SPR AD-3	N/A	<input checked="" type="checkbox"/>
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Several local policies or ordinances may apply to resources that occur within the project site. The Conservation Element of the Montecito Community Plan (County of Santa Barbara 1995) includes policies and development standards for biological resources, as well as an Environmentally Sensitive Habitat overlay, and additional mapping showing protected resources. The majority of Environmentally Sensitive Habitat occurring on the project site consists of streams and riparian vegetation. Policies pertaining to Environmentally Sensitive Habitat largely pertain to preservation of riparian vegetation, and protections for oak woodland, wetlands, monarch butterfly habitat, and coastal sage scrub. Many of the protections for these habitats pertain to restrictions on development, although protections for riparian habitat emphasize preservation of riparian vegetation. In addition, the Montecito Community Plan recognizes the value of habitats north of Mountain Drive and Bella Vista Drive and requires development proposals to be designed to avoid the sensitive resources in this area.

SPR BIO-3 requires a survey for sensitive vegetation communities prior to treatment, to ensure these are identified and treatment avoids these communities. SPR BIO-3 also requires that no fuel breaks occur in S1 (critically imperiled) or S2 (imperiled) communities. SPR BIO-4 will ensure that treatment is designed to maintain riparian function. Furthermore, implementation of SPR HYD-4 will require identification of (WLPZs, further ensuring that sensitive areas potentially supporting wetlands and aquatic habitat will be identified prior to implementation of treatments. More importantly, based on consultation with CDFW, impacts to live vegetation (as opposed to removal of dead material) will be avoided, or a Notification of Lake and Streambed Alteration will be filed, in accordance with California Fish and Game Code Section 1602. SPR SPR HYD-3 will prohibit prescribed herbivory

Impacts and Discussions	PEIR specific			Project specific			
	Identify location of impact Analysis in the PEIR	SPRs & MMs applicable to the impact analysis in PEIR	Identify impact Significance in the PEIR	Does the Impact Apply to the project Treatments proposed	SPRs & MMs applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

altogether within sensitive waterbodies, wetlands, or riparian areas. BIO-5 will ensure that treatment is designed to maintain or enhance habitat function of chaparral and coastal sage scrub communities. And SPR BIO-6 requires that best management practices be employed to avoid spread of plant pathogens, while SPR BIO-9 prescribes actions to prevent the spread of invasive plants. In addition to these requirements, MM BIO-3a will ensure that treatment is designed to avoid loss of sensitive natural communities and oak woodlands, including enhancement of communities to restore the natural fire regime and vegetation composition and structure.

Reconnaissance surveys and the data review conducted in accordance with SPR BIO-1 identified one known monarch butterfly roost within the treatment areas, within GT-15 (Attachment D). Only marginally suitable areas were identified elsewhere on the project site. Any additional occupied roost will be identified during surveys conducted under SPR BIO-10. SPR AD-3 requires that treatment be consistent with local plans and policies. Montecito Community Plan (County of Santa Barbara 1995) Policy BIO-M-1.5 prohibits trimming or clearing within a known monarch butterfly habitat or a 50-foot buffer without review and approval of the Environmental Resource Management Department. Therefore, implementation of SPR AD-3 will require avoidance of the known roost in GT-15 and the designated buffer unless the project proponent receives approval from the Environmental Resource Management Department.

With implementation of SPR AD-3 and the additional SPRs listed above, the project would result in no impact.

<b>Impact BIO-8:</b> Conflict with the provisions of an adopted natural community conservation plan, habitat conservation plan, or other approved habitat plan	Impact BIO-8, pp. 3.6-199 – 3.6-200	N/A	No Impact	No	N/A	N/A	<input checked="" type="checkbox"/>
No natural community conservation plans, habitat conservation plans, or other approved habitat plans occur within the project site.							
<b>Other Impacts to Biological Resources:</b> Would the project result in other impacts to biological resources that are not evaluated in the CalVTP PEIR?	–	–	–	No	N/A	N/A	<input checked="" type="checkbox"/>

Site-specific characteristics of the proposed treatment plan are consistent with the environmental and regulatory conditions outlined in the CalVTP EIR Section 3.6. Any impacts associated with the proposed project are consistent with the impacts covered in the PEIR. No new impact related to biological resources would occur.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<p><b>SPR BIO-1: Review and Survey Project-Specific Biological Resources.</b></p> <p>1. Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided.</p> <p>2. Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided.</p> <p>This SPR applies to all treatment activities and treatment types.</p>	<p>Yes</p> <p>Yes</p> <p>No</p>	<p><u>MFPD</u></p> <p>Prior</p>	<p><u>MFPD</u></p>
<p><b>SPR BIO-2: Require Biological Resource Training for Workers.</b> The project proponent will require crew members and contractors to receive training from a qualified registered professional forester (RPF) or biologist prior to beginning a treatment project. This SPR applies to all treatment activities and treatment types.</p>	<p>Yes</p>	<p><u>MFPD</u></p> <p>Prior</p>	<p><u>MFPD</u></p>
<p><b>SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats.</b> If SPR BIO-1 determines that sensitive natural communities or sensitive habitats may be present and adverse effects cannot be avoided. This SPR applies to all treatment activities and treatment types.</p>	<p>Yes</p>	<p><u>MFPD</u></p> <p>Prior</p>	<p><u>MFPD</u></p>
<p><b>SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function.</b> Project proponents, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions. This SPR applies to all treatment activities and treatment types.</p>	<p>Yes</p>	<p><u>MFPD</u></p> <p>Prior</p>	<p><u>MFPD</u></p>
<p><b>SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Sage Scrub.</b> The project proponent will design treatment activities to avoid type conversion where native coastal sage scrub and chaparral are present. These SPR requirements apply to all treatment activities and all treatment types.</p> <p>Additional measures will be applied to ecological restoration treatment types</p>	<p>Yes</p>	<p><u>MFPD</u></p> <p>Prior-During</p>	<p><u>MFPD</u></p>
<p><b>SPR BIO-6: Prevent Spread of Plant Pathogens.</b> When working in sensitive natural communities, riparian habitats, or oak woodlands that are at risk from plant pathogens (e.g., lone chaparral, blue oak woodland), the project proponent will implement 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). This SPR applies to all treatment activities and treatment types.</p>	<p>Yes</p>	<p><u>MFPD</u></p> <p>During</p>	<p><u>MFPD</u></p>

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<p><b>SPR BIO-7: Survey for Special-Status Plants.</b> If SPR BIO-1 determines that suitable habitat for special-status plant species is present and cannot be avoided, the project proponent will require a qualified RPF or botanist to conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment prior to initiation of the treatment. The survey will follow the methods in the current version of CDFW’s “Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.” This SPR applies to all treatment activities and treatment types.</p>	Yes	<u>MFPD</u> Prior	<u>MFPD</u>
<p><b>SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife.</b> This SPR applies to all treatment activities and treatment types.</p>	Yes	<u>MFPD</u> During	<u>MFPD</u>
<p><b>SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites.</b> If SPR BIO-1 determines that suitable habitat for special-status wildlife species or nurseries of any wildlife species is present and cannot be avoided, the project proponent will require a qualified RPF or biologist to conduct focused or protocol-level surveys for special-status wildlife species or nursery sites (e.g., bat maternity roosts, deer fawning areas, heron or egret rookeries) 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. This SPR applies to all treatment activities and treatment types.</p>	Yes	<u>MFPD</u> Prior	<u>MFPD</u>
<p><b>SPR BIO-12. Protect Common Nesting Birds, Including Raptors.</b> The project proponent will schedule treatment activities to avoid the active nesting season of common native bird species, including raptors, that could be present within or adjacent to the treatment site, if feasible. Common native birds are species not otherwise treated as special status in the CalVTP PEIR. The active nesting season or peak nesting season will be defined by the qualified RPF or biologist. This SPR applies to all treatment activities and treatment types.</p>	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>
<p><b>MM BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA</b> 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).</p>	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>
<p><b>MM BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA</b> 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</p>	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
EIR) are determined to be present through application of SPR BIO-1 and SPR BIO-7, the project proponent will implement measures to avoid loss of individuals and maintain habitat function of occupied habitat.			
<b>MM BIO-2a: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Listed Wildlife Species and California Fully Protected Species (All Treatment Activities)</b>	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>
<p><b>MM BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)</b> 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.</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 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. If it is determined that treatment activities would be beneficial to special-status wildlife, no compensatory mitigation will be required.</p>	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>
<p><b>MM BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands</b> The project proponent will implement the following measures when working in treatment areas that contain sensitive natural communities identified during surveys conducted pursuant to</p> <p><b>SPR BIO-3:</b></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. If it is determined that treatment activities would be beneficial to sensitive natural communities or oak woodlands, no compensatory mitigation will be required.</p>	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>
<b>MM BIO-4: Avoid State and Federally Protected Wetlands</b>	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>
<b>MM BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites</b>	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>



**Table 3.5.1. Special-Status Plant Species with Potential to Occur in the Treatment Area**

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
<i>Anomobryum julaceum</i>	slender silver moss	None/None/4.2	Broadleaved upland forest, Lower montane coniferous forest, North Coast coniferous forest/ moss/330–3,280	Potentially occurs. Suitable broadleaved upland forest occurs in the treatment areas.
<i>Calochortus fimbriatus</i>	late-flowered mariposa-lily	None/None/1B.3	Chaparral, Cismontane woodland, Riparian woodland; Serpentine (sometimes)/perennial bulbiferous herb/ June–Aug/900–6,250	Potentially occurs. Suitable riparian woodland, chaparral, and cismontane woodland vegetation communities occur within the treatment areas. A CNDDDB occurrence overlaps with several of the treatment areas; however, these occurrences are outdated (CDFW 2022a).
<i>Cordylanthus rigidus</i> ssp. <i>littoralis</i>	seaside bird's-beak	None/SE/1B.1	Chaparral, Cismontane woodland, Closed-cone coniferous forest, Coastal dunes, Coastal scrub/ Apr–Oct/0–1,690	Low potential to occur. Although the species is not known from the project vicinity, data are limited and suitable habitat occurs in some of the treatment areas, which are also generally within the known elevation range of the species.
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	None/None/1B.1	Chaparral, Cismontane woodland, Coastal scrub; Gravelly (sometimes), Sandy (sometimes)/ perennial herb/ Feb–July (Sep)/230–2,655	Potentially occurs. Suitable chaparral and cismontane woodland vegetation communities occur within the treatment areas.

**Table 3.5.1. Special-Status Plant Species with Potential to Occur in the Treatment Area**

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
<i>Lonicera subspicata</i> var. <i>subspicata</i>	Santa Barbara honeysuckle	None/None/1B.2	Chaparral, Cismontane woodland, Coastal scrub/perennial evergreen shrub/ (Feb) May–Aug (Dec)/ 35–3,280	Potentially occurs. Suitable chaparral, and cismontane woodland vegetation communities occur within the treatment areas. A CNDDDB occurrence was recorded within 1 mile of the treatment areas (CDFW 2022a).
<i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i>	white-veined monardella	None/None/1B.3	Chaparral, Cismontane woodland/perennial herb/(Apr)May–Aug (Sep–Dec)/165–5,000	Potentially occurs. Suitable chaparral, and cismontane woodland vegetation communities occur within the treatment areas. A CNDDDB occurrence overlaps with several of the treatment areas; however, the occurrences are outdated (CDFW 2022a).
<i>Muhlenbergia utilis</i>	aparejo grass	None/None/2B.2	Chaparral, Cismontane woodland, Coastal scrub, Marshes and swamps, Meadows and seeps; Alkaline (sometimes), Serpentinite (sometimes)/ perennial rhizomatous herb/Mar–Oct/80–7,625	Potentially occurs. Suitable mesic chaparral, and riparian scrub vegetation communities occur within the treatment areas.
<i>Nolina cismontana</i>	chaparral nolina	None/None/1B.2	Chaparral, Coastal scrub/perennial evergreen shrub/ (Mar) May–July/ 460–4,180	Potentially occurs. Suitable chaparral vegetation community occurs within the treatment areas.
<i>Pleuridium mexicanum</i>	Mexican earthmoss	None/None/2B.1	Chaparral/moss/ 1,440–1,440	Potentially occurs. Suitable chaparral vegetation community occurs within the treatment areas.

**Table 3.5.1. Special-Status Plant Species with Potential to Occur in the Treatment Area**

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
<i>Quercus dumosa</i>	Nuttall's scrub oak	None/None/1B.1	Chaparral, Closed-cone coniferous forest, Coastal scrub/perennial evergreen shrub/ Feb-Apr (May-Aug)/ 50-1,310	Potentially occurs. Suitable chaparral vegetation community occurs within the treatment areas. Multiple CNDDB occurrences overlap or are adjacent to treatment areas (CDFW 2022a). However, none were identified during the reconnaissance survey conducted in accordance with SPR BIO-1.
<i>Scrophularia atrata</i>	black-flowered figwort	None/None/1B.2	Chaparral, Closed-cone coniferous forest, Coastal dunes, Coastal scrub, Riparian scrub/perennial herb/Mar-July/35-1,640	Potentially occurs. Suitable chaparral, and riparian scrub vegetation communities occur within the treatment areas. A CNDDB occurrence was recorded within 1 mile of the treatment areas.
<i>Thelypteris puberula</i> var. <i>sonorensis</i>	Sonoran maiden fern	None/None/2B.2	Meadows and seeps/perennial rhizomatous herb/ Jan-Sep/165-2,000	Potentially occurs. Suitable meadow and seep vegetation community occurs within the treatment areas. Multiple CNDDB occurrences either overlap or were recorded within 1 mile of the treatment areas (CDFW 2022a).

**Status Legend:**

FE: Federally listed as endangered

SE: State listed as endangered

ST: State listed as threatened

SR: State Rare

CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere

CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere

CRPR 4: Watch List: Plants of limited distribution

.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3 Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

**Table 3.5.2. Special-Status Wildlife Species with Potential to Occur in the Treatment Area**

Row Labels	Common Name	Status (Federal/State)	Habitat	Potential to Occur
<i>Oncorhynchus mykiss irideus</i> pop. 10	southern steelhead - southern California DPS	FE/SCE	Clean, clear, cool, well-oxygenated streams; needs relatively deep pools in migration and gravelly substrate to spawn	High potential to occur. Federally designated critical habitat occurs along Cold Springs/Hot Springs Creek and San Ysidro Creek where they cross the treatment areas. Additional critical habitat occurs along Sycamore and Romero Creeks just downstream of treatments areas MT-1 and MT-22, respectively. Steelhead is expected to travel through or spawn in these areas.
<b>Amphibians</b>				
<i>Rana draytonii</i>	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	High potential to occur. Two CNDDB locations are near the confluence of Cold Springs and Hot Springs Creek south of MT-13 (CDFW 2022a), and the species may occur along other creeks in the vicinity, such as Romero or San Ysidro Creek.
<i>Taricha torosa</i> (Monterey Co. south only)	California newt	None/SSC	Wet forests, oak forests, chaparral, and rolling grassland	High potential to occur. CNDDB includes two occurrences along Cold Springs Creek within or near MT-12 (CDFW 2022a), and the species may occur elsewhere in the vicinity of aquatic habitats.

**Table 3.5.2. Special-Status Wildlife Species with Potential to Occur in the Treatment Area**

Row Labels	Common Name	Status (Federal/State)	Habitat	Potential to Occur
<b>Reptiles</b>				
<i>Emys marmorata</i>	western pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Moderate to occur. Some streams may support suitable aquatic habitat, and individuals may occupy upland habitats nearby when not occupying aquatic habitats.
<i>Anniella pulchra</i>	northern California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley-foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and sandy or loose, loamy soils	Moderate potential to occur. Occurrence may be limited by extensive areas of rocky substrates, but in area of loose soils, leaf litter (such as may accumulate under some oak woodland), and riparian habitat, this species has potential to occur.
<i>Phrynosoma blainvillii</i>	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley-foothill hardwood, conifer, riparian, pine-cypress, juniper, and annual grassland habitats	High potential to occur. This species has potential to occur, mostly in scrub habitats, within the project site. CNDDB includes an occurrence within MT-3 and near MT-4, MT-8, MT-9, MT-10, MT-11, and GT-5 (CDFW 2022a).
<i>Salvadora hexalepis virgulata</i>	coast patch-nosed snake	None/SSC	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Moderate potential to occur. This species has potential to occur, mostly in scrub habitats, within the project site.

**Table 3.5.2. Special-Status Wildlife Species with Potential to Occur in the Treatment Area**

Row Labels	Common Name	Status (Federal/State)	Habitat	Potential to Occur
<i>Thamnophis hammondi</i>	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Moderate potential to occur. This species may occur along perennial streams in the project vicinity, such as along Romero Creek, San Ysidro Creek, or Cold Springs Creek.
<b>Birds</b>				
<i>Contopus cooperi</i>	olive-sided flycatcher	None/SSC	Nests in mixed-conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir, and lodgepole pine habitats; usually close to water. Where it occurs more coastally, it may occur in habitats supporting other taller trees, such as <i>Eucalyptus</i> spp.	Observed. Known to occur along Cold Springs Creek near where it occurs along Mountain Drive.
<i>Setophaga petechia</i> (nesting)	yellow warbler	None/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	High potential to occur. Riparian habitats, especially more extensive habitats on major creeks such as Romero Creek, have a high potential to support breeding by this species.

**Table 3.5.2. Special-Status Wildlife Species with Potential to Occur in the Treatment Area**

Row Labels	Common Name	Status (Federal/State)	Habitat	Potential to Occur
<b>Mammals</b>				
<i>Lasiurus blossevillii</i>	western red bat	None/SSC	Forest, woodland, riparian, mesquite bosque, and orchards, including fig, apricot, peach, pear, almond, walnut, and orange; roosts in tree canopy	Moderate potential to occur. Suitable roosting habitat occurs in riparian habitat and oak woodland the project site, where maternity roosts may occur.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	None/SSC	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	High potential to occur. Likely occurs in scrub habitats, especially those with rocky substrates.

**Status Legend:**

FE: Federally Endangered  
 FT: Federally Threatened  
 SCE: State Candidate Endangered  
 ST: State Threatened  
 FP: California Fully Protected Species  
 SSC: California Species of Special Concern

### 3.6 Geology, Soils, Paleontology, and Mineral Resources

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact GEO-1:</b> Result in substantial erosion or loss of topsoil	Impact GEO-1, pp. 3.7-27-3.7-30, Table 3.7-3, Table 3.7-4	SPR GEO-1 through SPR GEO-8 SPR AQ-3 SPR AQ-4 SPR HYD-3 SPR HYD-4	LTS	Yes	SPR GEO-1 SPR GEO-2 SPR GEO-4 SPR HYD-3 SPR HYD-4	LTS	<input checked="" type="checkbox"/>

**Impact Discussion:** Treatment activities implemented under the proposed CalVTP may involve the disturbance of soils as well as a reduction in vegetative cover, which has the potential to substantially increase rates of erosion and loss of topsoil. The proposed project would not include mechanical treatments. Rather, the project would be limited to mixed (manual) treatment activities and prescribed herbivory treatment activities. The CalVTP would reduce the amount of vegetation in all treated areas, which has the potential to expose soil to wind and water erosion. However, SPRs would be implemented to ensure soil stability. Implementation of SPRs GEO-1, GEO-2, and GEO-4 would avoid and minimize the risk of substantial erosion and loss of topsoil. SPR GEO-3 would not apply to the project because mulch would not be applied in treatment areas. SPR GEO-5 would not apply because the project would not involve compacted and/or bare linear treatment areas. SPR GEO-6 would not apply because vegetation manually removed would be chipped and hauled off site, rather than disposed of via burn piles. SPR GEO-7 would not apply because prescribed herbivory would occur on slopes in excess of 50%. SPR GEO-8 would not apply because this SPR does not apply to manual treatments and prescribed herbivory. Nonetheless, a Dudek certified engineering geologist completed a site reconnaissance of the proposed grazing treatment areas, focused on areas with slopes greater than 50%, as further discussed below. In addition, SPRs HYD-3 and HYD-4 require that treatment prescriptions be designed to protect soil stability in order to reduce siltation of creeks.

As previously discussed in Section 1.2, California Environmental Quality Act Compliance, for the proposed project, the inclusion of areas outside of the CalVTP treatable landscape and the inability to implement SPR GEO-7 represent a revision or change to the CalVTP. The inability to implement SPR GEO-7 relates to the use of prescribed herbivory treatments on slopes greater than 50%. Due to steep terrain that precludes access for manual or mechanical treatments, prescribed herbivory is the most feasible treatment activity in the proposed treatment areas. These areas are subject to invasive species growth, which present flammable fuels that would be reduced by implementation of the project. Prescribed herbivory treatments would result in removal of invasive species and flashy fuels, while larger shrubs and trees would be retained, resulting in a mosaic plant pattern where generally up to



Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

50% of existing vegetation would be retained, as well as mature trees. This vegetation pattern would reduce the vegetation connectivity, thus reducing the speed and intensity of wildland fires.

With the exception of prescribed herbivory on slopes in excess of 50%, the proposed VMP treatment types and treatment activities are consistent with the CalVTP PEIR with respect to soil erosion and loss of topsoil. A Dudek certified engineering geologist completed a site reconnaissance of the proposed grazing treatment areas, including an area of previously conducted prescribed herbivory on slopes in excess of 50%, at project site GT-11 (the Tea Gardens property). This site was used by MFPD as a pilot project in 2020. As a result, this site is representative of vegetation conditions following two rainy seasons. In addition to the steep slopes, this site is representative of the soil conditions on the majority of the potential grazing project sites. The soils at GT-11 consist of Mayhem-rock outcrop complex (MbH) and Mayhem stony fine sandy loam (MaG), as designated by the U.S. Department of Agriculture, Soil Conservation Service (see Attachment E). These soils generally consist of stony fine sandy loam, loam, and unweathered bedrock (of the Coldwater sandstone formation [USGS 2009]), which are well drained and have high runoff, on 30% to 75% slopes. The U.S. Department of Agriculture soil descriptions do not provide characterizations pertaining to erodibility; however, no soil erosion or rilling was noted in the prescribed herbivory treatment area. The abundance of broken bedrock pieces within the soil appears to contribute to the soil stability on slopes in excess of 50%.

The soil type, steepness of slope, and vegetation types at GT-11 are representative of much of the proposed grazing sites located upslope of East Mountain Drive, Park Lane, and Bella Vista Drive (e.g., GT-2 through GT-5, GT-9 through GT-12, GT-19 through GT-21). Similarly, rock outcrop-Mayhem complex (Rb) soils underlie much of the proposed grazing sites upslope of East Mountain Drive and Park Lane (e.g., GT-13, GT-19, and GT-20). These soils also consist of stony fine sandy loam, loam, and unweathered bedrock on 75% to 100% slopes. One localized area of very steep slopes immediately upslope of East Mountain Drive (site GT-9) is underlain by Milpitas fine sandy loam (MdD), which consists of stony, fine sandy loam, stony clay, and very gravelly sand loam. This area exhibited no indications of excessive erosion. Therefore, the soils upslope of East Mountain Drive, Park Lane, and Bella Vista Drive would not be subject to excessive erosion as a result of prescribed herbivory. With implementation of SPRs GEO-1, GEO-2, and GEO-4, no new erosion-related impacts would occur with respect to the PEIR upslope of East Mountain Drive, Park Lane, and Bella Vista Drive.

South of Bella Vista Drive and north of Cima Del Mundo Road is proposed grazing site GT-22, and south of East Valley Road is GT-23. Both of these sites are underlain by the Sespe geologic formation, which consists primarily of reddish sandstone, with interbeds of mudstone (USGS 2009). Soils overlying this formation in project areas with slopes in excess of 50% consist primarily of Todos-Lodos Complex (TdF2) and Lodo-Sespe Complex soils (LcG). These soils generally consist of clay loam, gravelly clay loam, clay, and weathered bedrock, on eroded 30% to 75% slopes. Similar to upslope (north) of Bella Vista Drive, vegetation is typically dense with chaparral shrubs and small trees. During a site reconnaissance, localized steep slopes that had been mechanically treated, resulting in very short-cropped grass, demonstrated no excessive soil erosion. Therefore, it is anticipated that the soils at GT-22 and GT-23 would not be subject to excessive erosion as a result of prescribed herbivory. With implementation of SPRs GEO-1, GEO-2, and GEO-4, no erosion-related impacts not covered in the PEIR would occur at GT-22 and GT-23.

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

The topography of proposed grazing sites GT-14 and GT-15 is generally gently sloping to the south. An exception occurs within GT-15 (the Ennisbrook Open Space property), where localized steep slopes are present along the banks of San Ysidro Creek, which is underlain by Cortina stony loamy sand. However, the project would implement SPR HYD-3 and SPR HYD-4, which establish water quality protections, such as establishment of buffers and watercourse and lake protection zones (WLPZs) to ensure that prescribed herbivory treatments do not impact environmentally sensitive areas such as water bodies, wetlands, or riparian areas; exclusionary fencing would be used and grazing animals would be provided water and would be herded out of an area if accelerated soil erosion is observed. Therefore, the soils at GT-14 and GT-15 would not be subject to excessive erosion as a result of prescribed herbivory. With implementation of SPRs GEO-1, GEO-2, and GEO-4, as well as SPRs HYD-3 and HYD-4, no erosion-related impacts not covered in the PEIR would occur at GT-14 and GT-15.

Proposed manual treatment site MT-6, located off Barker Pass Road and Sycamore Canyon Road, are underlain by the Rincon shale formation, which consists primarily of mudstone and shale, with some sandstone (USGS 2009). The overlying soils consist of Zaca clay (AaF2), which consists of eroded clay and weathered bedrock. Based on a site reconnaissance, the exposed bedrock and overlying soils are loose, unconsolidated, and easily disturbed. A locally oversteepened slope on the eastern portion of MT-6 exhibited excessive erosion, which had been remediated with erosion control fabric and netting. The vegetation on the eastern portion of MT-6 is generally less dense (in comparison to other proposed treatment sites), with more isolated trees and shrubs.

Similarly, the vegetation on a large area of the western portion of MT-6 consists primarily of grasses, with less dense concentrations of shrubs. This area is one of several landslides that occurred along Sycamore Canyon during the winters of 1982-1983, 1997-1998, and 2004-2005. (See Impact GEO-2 below for more information on the landslide.) The landslide has been repaired, resulting in slopes that are primarily less than 50%. In addition, the landslide repair area appears to have been manually or mechanically treated, resulting in short, cropped grass with low concentrations of shrubs. No erosion was noted during a site reconnaissance. However, an exception is along the southern perimeter of the western portion of MT-6, which consists of a steep, north-facing slope, which is covered in shrubs and trees. Treatment activities on these steep slopes, which are mantled by loose erodible soils, could result in excessive soil erosion and loss of topsoil, which would be considered a potentially significant impact. However, with implementation of SPRs GEO-1 through GEO-5, impacts would be reduced to less than significant.

Impact GEO-2: Increase risk of landslides	Impact GEO-2, pp. 3.7-30-3.7-31	SPR GEO-3 SPR GEO-4 SPR GEO-7 SPR GEO-8	LTS	Yes	SPR GEO-4 SPR GEO-7, SPR HYD-3, SPR HYD-4	LTS	☒
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**Impact Discussion:** A review of landslide inventory mapping data for the project area revealed that landslides have occurred throughout Montecito, including proposed treatment areas (USGS 2019). Proposed manual treatment site MT-6 is underlain by Rincon shale deposits, which are regionally known (within the

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

County) as being prone to slope failure. Slope failures within Rincon shale deposits typically occur as a result of excessive precipitation over short periods of time and/or undercutting/destabilizing slopes during grading activities. Treatment area MT-6 overlies the Canon View Road/Sycamore Canyon Landslide, which destroyed and/or damaged numerous homes, roadways, and driveways. A landslide repair project from 2007 to 2012 included extensive engineering and construction methods to remediate the slide, including the use of retaining walls, numerous reinforced concrete piers, structures to tie the piers together and anchor them to the hillside, reinforced earth-fills and buttresses, and new drainage systems (City of Santa Barbara 2013). The slope repair, in its existing condition, was observed by a Dudek certified engineering geologist during a site reconnaissance. As a result of the slope repair, the slope is generally less than a 50% gradient and is traversed by numerous slope drains, which control drainage and reduce the potential for additional failures.

A Dudek certified engineering geologist compared the proposed project sites to a January 20, 2018, map of Montecito that delineates areas affected by the January 2018 debris flows, which had devastating effects on the community. The debris flows resulted from an extremely heavy precipitation event on steeply sloping areas that had recently burned during the 2017 Thomas Fire. Based on this review, with the exception of GT-14 and GT-15, no prescribed herbivory areas overlie mapped debris flow areas. GT-14 is the Ennisbrook Open Space property, which consists predominantly of gentle slopes. Localized steep banks along San Ysidro Creek would not be disturbed during prescribed herbivory with implementation of SPRs HYD-3 and HYD-4. GT-15 is similarly gently sloping and includes no steep slopes (i.e., greater than 50%). As a result, the proposed project would have no impact with respect to the mapped debris flow areas. The PEIR indicated that removing vegetation during treatments implemented under the CalVTP could potentially increase the risk of landslide by removing root systems that stabilize slopes. This risk was addressed with SPR GEO-3, which requires stabilization of mechanically disturbed or prescribed-herbivory-disturbed soil; SPR GEO-4, which requires erosion inspections; SPR GEO-7, which minimizes erosion by prohibiting mechanical treatment on steep slopes; and SPR GEO-8, which requires that a registered professional forester or licensed geologist evaluate treatment areas with slopes greater than 50% for unstable areas. The PEIR also indicated that removing vegetation could also potentially increase the risk of landslide by removing vegetation that no longer takes up groundwater, thereby increasing the water content of the soil and making soils more prone to sliding. The removal of forest cover decreases interception and transpiration, and in wetter areas, this generally increases annual water yields. A rising groundwater table (“bottom up” saturation) within the saturated zone leads to a gradual growth of porewater pressure in the soil which leads to destabilization of slopes and can lead to slope failure.

As previously discussed in Section 1.2, the inclusion of areas outside the CalVTP treatable landscape and the inability to implement SPR GEO-7 represent a revision or change to the CalVTP. The inability to implement SPR GEO-7 relates to the use of prescribed herbivory treatments on slopes greater than 50%. Due to steep terrain that precludes access for manual or mechanical treatments, prescribed herbivory is the most feasible treatment activity in the proposed treatment areas. Grazing would result in very short, cropped grasses, interspersed between a mosaic of shrubs and trees, which could potentially result in soil erosion in areas of loose, unconsolidated soils, but would generally not remove root systems such that slope instability would occur. In addition, prescribed herbivory would not remove vegetation roots, resulting in a decrease in groundwater uptake, and would not remove forest cover such that interception and transpiration would decrease. In addition, as part of the project, potential slope instability would be minimized through

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

implementation of SPR GEO-3, which requires stabilization of prescribed-herbivory-disturbed soil, and SPR GEO-4, which requires erosion inspections. SPR GEO-8 would not apply because this SPR does not apply to manual treatments and prescribed herbivory, but only to mechanically treated areas.

Implementation of SPRs as described above would avoid and minimize the risk of landslide from treatments implemented under the project. No new impacts would occur and this impact would be less than significant.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR GEO-1 Suspend Disturbance During Heavy Precipitation:</b> This SPR applies to all treatment activities and all treatment types.	Yes	<u>MFPD</u> During	<u>MFPD</u>
<b>SPR GEO-2 Limit High Ground Pressure Vehicles:</b> This SPR applies to all treatment activities and all treatment types.	Yes	<u>MFPD</u> During	<u>MFPD</u>
<b>SPR GEO-3 Stabilize Disturbed Soil Areas:</b> This SPR applies to all treatment activities and all treatment types.	No	<u>N/A</u>	<u>N/A</u>
<b>SPR GEO-4 Erosion Monitoring:</b> This SPR applies to all treatment activities and all treatment types.	Yes	<u>MFPD</u> During	<u>MFPD</u>
<b>SPR GEO-5 Drain Stormwater Via Water Breaks:</b> This SPR applies to all treatment activities and all treatment types.	No	<u>N/A</u>	<u>N/A</u>
<b>SPR GEO-6 Minimize Burn Pile Size:</b> This SPR applies to mechanical, manual, and prescribed burning treatment activities and all treatment types, including treatment maintenance.	No	<u>N/A</u>	<u>N/A</u>
<b>SPR GEO-7 Minimize Erosion:</b> This SPR applies to all treatment activities and all treatment types, including treatment maintenance	Yes	<u>MFPD</u> During	<u>MFPD</u>
<b>SPR GEO-8 Steep Slopes:</b> This SPR applies only to mechanical treatment activities and WUI fuel reduction, non-shaded fuel breaks, and ecological restoration treatment types, including treatment maintenance.	No	<u>N/A</u>	<u>N/A</u>

### 3.7 Greenhouse Gas Emissions

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact GHG-1:</b> Conflict with the applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs	Impact GHG-1, pp. 3.8-10-3.8-11	SPR GHG-1	LTS	Yes	N/A	LTS	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The use of vehicles and equipment associated with manual and herbivory treatments would result in greenhouse gas (GHG) emissions. Consistency with plans, policies, and regulations governing GHG emissions was examined in the PEIR. The project would be consistent with the applicable policies, plans, and regulations to reduce GHG emissions as described in California’s 2017 Climate Change Scoping Plan (CARB 2017), the California Forest Carbon Plan (Forest Climate Action Team 2018), and the Draft California 2030 Natural and Working Lands Climate Change Implementation Plan (CARB 2019). It would also be consistent with local policies, plans, and regulations regarding GHG emission reduction in Santa Barbara County’s Energy and Climate Action Plan (County of Santa Barbara 2015), Sustainability Action Plan (County of Santa Barbara 2010b), and Climate Action Study (County of Santa Barbara 2011). The project would be implemented so as to not be in conflict with application plans, policies, and/or regulations, and the impact would be less than significant.</p> <p>SPR GHG-1 is not applicable to the proposed project; MFPD is not subject to providing information to inform reporting under the Board of Forestry and Fire Protection’s Assembly Bill (AB) 1504 Carbon Inventory Process because this project is not a registered offset project. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.</p>							
<b>Impact GHG-2:</b> Generate Greenhouse Gas Emissions through Treatment Activities	Impact GHG-2, p. 3.8-11-3.8-17	SPR AQ-3 MM GHG-2	PSU	Yes	N/A	PSU	<input checked="" type="checkbox"/>

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

**Impact Discussion:** The intent of vegetation treatments is to reduce wildfire risk, which would reduce GHG emissions related to wildfires. The project would result in the generation of GHG emissions from treatment activities through the use of vehicles and mechanical equipment needed to perform the manual treatments and prescribed herbivory treatments. However, although mitigation actions would be implemented to reduce GHG emissions, the treatments would still contribute to the annual emissions generated by the CalVTP and would remain potentially significant and unavoidable. The project does not include the use of prescribed burning; therefore SPR AQ-3 and MM GHG-2 do not apply.

Therefore, the impact on GHG emissions would not constitute a substantially more severe impact than that was determined in the PEIR. Impacts would be potentially significant and unavoidable. This determination is consistent with the PEIR and would not constitute a substantially more severe significant impact than what was covered in the PEIR.

<b>Other Impacts to related to Greenhouse Gases:</b> Would the project result in other impacts related to greenhouse gases that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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**Impact Discussion:** The project is consistent with the CalVTP PEIR. Site-specific characteristics of the proposed treatment plan are consistent with the environmental and regulatory conditions outlined in the CalVTP PEIR, Section 3.8. While the inclusion of land outside the CalVTP treatable landscape is a change to the geographic extent in the PEIR, the existing conditions in the project area relating to GHG emissions are essentially the same for treatment areas within the CalVTP treatable landscape and treatment areas outside the CalVTP treatable landscape. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR, and the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to GHG emissions would occur.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<b>SPR GHG-1 Contribute to the AB1504 Carbon Inventory Process:</b> 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. This SPR applies to all treatment activities and all treatment types, including treatment maintenance.	No	N/A	N/A
<b>MM GHG-2 Implement GHG Emission Reduction Techniques during Prescribed Burns:</b> 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.	No	N/A	N/A

### 3.8 Energy

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact ENG-1:</b> Result in wasteful, inefficient, or unnecessary consumption of energy	Impact ENG-1, pp. 3.9-7-3.9-8	N/A	LTS	Yes	N/A	LTS	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The project would require the consumption of energy through the use of fossil fuels associated with the use of vehicles and mechanical equipment, including handheld equipment (e.g., track chipper, chainsaws) and trucks. Diesel- and petroleum-based fuels, such as gasoline, would be consumed during the use of trucks, mechanical equipment, and the transport of personnel, animals (goats and sheep), and equipment to and from and within the project site. The primary objective of the project is to reduce wildfire risk and decrease the intensity of fires. Wildfire response requires an immediate response from emergency personnel and mobilization of equipment from across the state and even across the nation, which often results in inefficient consumption of energy. Implementation of treatment activities would reduce wildfire risk and the intensity of fire responses. There are no SPRs applicable to this impact, and the impact would be less than significant, which is consistent with the PEIR.</p>							
<b>Other Impacts to Energy Resources:</b> Would the project result in other impacts on energy	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
resources that are not evaluated in the CalVTP PEIR?							

**Impact Discussion:** The project is consistent with the CalVTP PEIR. Site-specific characteristics of the proposed treatment plan are consistent with the environmental and regulatory conditions outlined in the CalVTP PEIR, Section 3.9. While the inclusion of land outside the CalVTP treatable landscape is a change to the geographic extent in the PEIR, the existing conditions in the project area and required energy use are essentially the same for treatment areas within the CalVTP treatable landscape and treatment areas outside the CalVTP treatable landscape. As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR. The inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR.

### 3.9 Hazardous Materials, Public Health, and Safety

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact HAZ-1:</b> Create a significant health hazard from the use of hazardous materials	Impact HAZ-1, pp. 3.10-14-3.10-15	SPR HAZ-1 SPR HYD-4	LTS	Yes	SPR HAZ-1 SPR HYD-4	LTS	<input checked="" type="checkbox"/>

**Impact Discussion:** The proposed project would include manual treatments and prescribed herbivory. Treatment activities and transportation of equipment would require the use of hazardous materials, including fuels, oils, and lubricants. Potential impacts related to use of such materials during



Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<p>treatment activities are within the scope of the activities and impacts addressed in the PEIR because the types of treatments and associated equipment and types of hazardous materials that would be used are consistent with those analyzed in the PEIR. SPR HAZ-1 is applicable to the project, and requires that all equipment would be properly maintained and regularly inspected for leaks. Additionally, the project proponent would ensure that the transport and use of hazardous materials would be conducted in compliance with existing federal, state, and local regulations governing hazardous material use, storage, disposal, and transport to prevent project-related risks to public health and safety.</p> <p>Additionally, project treatment activities would not be conducted within protection zones for watercourses (SPR HYD-4). Watercourses and potential drainages leading to watercourses have been identified during field surveys and protection zones have been implemented during project design (further discussed in Section 3.10, Hydrology and Water Quality). Therefore, the project would result in a less than significant impact related to the use of hazardous materials, and the project would not result in impacts that would be more severe than those evaluated in the PEIR.</p>							
<b>Impact HAZ-2:</b> Create a significant health hazard from the use of herbicides	Impact HAZ-2, pp. 3.10-16-3.10-18	SPR HAZ-5 through SPR HAZ-9	LTS	No	N/A	N/A	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> This impact does not apply to the proposed project because the project would include manual treatments and prescribed herbivory treatments; the use of herbicides is not proposed as part of the project.</p>							
<b>Impact HAZ-3:</b> Expose the public or environment to significant hazards from disturbance to known hazardous material sites	Impact HAZ-3, pp. 3.10-18-3.10-19	MM HAZ-3	PS	Yes	MM HAZ-3	LTSM	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The project site is located on private property and the public does not have access to the treatment areas. However, the proposed project treatments would include manual treatment and prescribed herbivory, which would result in soil disturbance and could expose workers or the environment to hazards from a hazardous materials site, if present within the project area. The potential for the proposed treatment activities to encounter contamination that could expose workers or the environment to hazardous materials was examined in the PEIR. This impact was identified as potentially significant in the PEIR because hazardous materials sites could be present within treatment sites and soil disturbance or burning in those areas could expose people or the environment to hazards.</p>							

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

Due to the potential for soil disturbance, MM HAZ-3 is applicable to the project. With the implementation of MM HAZ-3, searches of the California Department of Toxic Substances Control's EnviroStor were conducted (results are contained within Attachment F). These databases contain information regarding the location and status of hazardous materials sites included on the Cortese List (California Government Code Section 65962.5). A review of these regulatory databases showed that the project site does not contain any known hazardous materials sites and the nearest known hazardous materials sites are located more than 1 mile south of the proposed treatment areas (DTSC 2022). The database did indicate that there were leaking underground storage tank (LUST) cleanup sites within the project areas. However, the project does not include ground disturbance and proposed treatment activities are not likely to pose a risk to workers within the treatment areas. Therefore, project impacts would be less than significant with implementation of MM HAZ-3.

<b>Other Impacts to Hazardous Materials, Public Health and Safety:</b> Would the project result in other impacts to hazardous materials, public health and safety that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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**Impact Discussion:** The project is consistent with the CalVTP PEIR and the site-specific characteristics are consistent with the regulatory and environmental setting examined in Section 3.10 of the PEIR. The inclusion of land outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the environmental conditions of the project areas outside the treatable landscape and within the treatable landscape are essentially the same. Further, the use of hazardous materials and proximity to known hazardous material sites would be the same for project areas inside and outside the CalVTP treatable landscape. Therefore, the project would not result in other impacts related to hazards and hazardous materials not addressed in the PEIR. The impacts associated with the proposed treatment activities were also determined to be consistent with the PEIR and would not result in a more significant impact.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<b>SPR HAZ-1 Maintain All Equipment:</b> The project proponent will maintain all diesel- and gasoline-powered equipment per the manufacturer’s specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. This SPR applies to all treatment activities and treatment types.	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>
<b>SPR HAZ-2 Require Spark Arrestors:</b> This SPR applies only to manual treatment activities and all treatment types	Yes	<u>MFPD</u> During	<u>MFPD</u>
<b>SPR HAZ-3 Require Fire Extinguishers:</b> The project proponent will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one ax or Pulaski consistent with PRC Section 4428. This SPR applies only to manual treatment activities and all treatment types.	Yes	<u>MFPD</u> During	<u>MFPD</u>
<b>SPR HAZ-4 Prohibit Smoking in Vegetated Areas:</b> This SPR applies to all treatment activities and treatment types.	Yes	<u>MFPD</u> During	<u>MFPD</u>
<b>SPR HAZ-5 Spill Prevention and Response Plan:</b> This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	No	<u>N/A</u>	<u>N/A</u>
<b>SPR HAZ-6 Comply with Herbicide Application Regulations:</b> This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	No	<u>N/A</u>	<u>N/A</u>
<b>SPR HAZ-7 Triple Rinse Herbicide Containers:</b> This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	No	<u>N/A</u>	<u>N/A</u>
<b>SPR HAZ-8 Minimize Herbicide Drift to Public Areas:</b> This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	No	<u>N/A</u>	<u>N/A</u>
<b>SPR HAZ-9 Notification of Herbicide Use in the Vicinity of Public Areas:</b> This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.	No	<u>N/A</u>	<u>N/A</u>
<b>MM HAZ-3: Identify and Avoid Known Hazardous Waste Sites:</b> 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.	Yes	<u>MFPD</u> Prior	<u>MFPD</u>

### 3.10 Hydrology and Water Quality

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in the PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<p><b>Impact HYD-1:</b> 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</p>	Impact HYD-1, pp. 3.11-25-3.11-27	SPR AQ-3 SPR HYD-4 SPR BIO-4 SPR BIO-5 SPR GEO-4 SPR GEO-6 MM BIO-3b	LTS	No	N/A	N/A	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The project does not include the use of prescribed burning. Therefore, there is no impact associated with violation of water quality standards or waste discharge requirements (WDRs), degradation of surface or groundwater, or conflict with or obstruction of the implementation of a water quality control plan due to the use of prescribed burning. No new water quality-related impacts would occur in addition to those addressed in the PEIR.</p>							
<p><b>Impact HYD-2:</b> 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</p>	Impact HYD-2, pp. 3.11-27-3.11-29	SPR HYD-1 SPR HYD-4 SPR HYD-5 SPR BIO-1 SPR GEO-1 through 4 SPR GEO-7 SPR GEO-8 SPR HAZ-1 SPR HAZ-5	LTS	Yes	SPR HYD-1 SPR HYD-2 SPR HYD-4 SPR BIO-1 SPR GEO-1 SPR GEO-4 SPR HAZ-1	LTS	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The proposed project includes manual treatment activities. There are several creeks and small water bodies within the areas adjacent to the project sites. These include Sycamore Creek, Montecito Creek, Oak Creek, San Ysidro Creek, Romero Creek, and Picay Creek. There are also several unnamed small water bodies and unnamed drainages (USGS 2022). The treatment areas also overlie the Montecito and the Santa Barbara groundwater basins (SBCWA 2020). The potential for manual treatment and prescribed herbivory activities to violate water quality regulations or degrade water quality was examined in the PEIR. Per SPR HYD-1, the project would be implemented in compliance with all state and regional water</p>							

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

quality regulations, including WDRs per the Central Coast Regional Water Quality Control Board (RWQCB). Appendix HYD-1 of the CalVTP PEIR includes the Central Coast RWQCB Conditional Waiver of WDRs. The project would not include construction of new roads (SPR HYD-2). Per SPR HYD-4, WLPZs ranging from 50 to 150 feet would be established for any watercourses or drainages that could lead to surface waters or groundwater. WLPZs have been identified during field surveys conducted in accordance with SPR BIO-1.

The project would limit ground disturbance during and after precipitation (SPR GEO-1), and would inspect for erosion and remediated prior to the rainy season and following the first large storm or rainfall event (SPR GEO-4). The project does not include mechanical treatment and vehicles and the chipper would be staged on roads. Disturbed areas would not be stabilized during prescribed herbivory treatments with mulch or equivalent immediately after treatment activities; therefore, SPR GEO-3 would not apply. SPR GEO-5 would not apply because the project does not propose compacted and/or bare linear treatment areas. SPR GEO-7 would not apply because the project does not propose use of heavy equipment and would allow prescribed herbivory treatments on slopes in excess of 50% (see Impact GEO-1). The project does not include the use of herbicides or the use of prescribed burning; therefore, SPR HAZ-5, SPR HYD-5, and SPR GEO-6 do not apply. SPR GEO-8 would not apply because this SPR does not apply to manual treatments and prescribed herbivory. However, per SPR HAZ-1, all equipment would be maintained to ensure there are no leaks or spills that could impact water quality.

With the implementation of SPRs and compliance with regulatory requirements, impacts on water quality would be less than significant. This determination is consistent with the PEIR and would not constitute an increase in impacts with respect to the PEIR.

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	Impact HYD-3, pp. 3.11-29	SPR HYD-3	LTS	Yes	SPR HYD-3	LTS	<input checked="" type="checkbox"/>
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**Impact Discussion:** The project includes vegetation treatment reduction through the use of prescribed herbivory. As discussed in the PEIR, the use of prescribed herbivory has the potential to impact water quality. As described above there are several creeks and small water bodies within the vicinity of treatment areas and the project overlies the Montecito and Santa Barbara groundwater basins. However, the project would implement SPR HYD-3, which would reduce the potential for water quality impacts as determined in the PEIR. Prescribed herbivory treatments would be implemented with water quality protections (SPR HYD-3), including keeping animals out of water bodies, wetlands, or riparian areas; providing water for animals; and avoiding soil erosion. Per SPR HYD-3 the project would prevent grazing animals from lingering in riparian areas by establishing buffers around the riparian zones, thereby preventing the denudation of vegetation, loss of soil structure, and accumulation of animal waste adjacent to water bodies. Water will also be provided on site for the grazing animals to prevent them from seeking out existing water bodies. Grazing will also be monitored to prevent accelerated soil erosion and moved accordingly. Further stream access points and crossings would be avoided to further prevent water quality impacts.

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<p>With implementation of SPR HYD-3, impacts on water quality would be less than significant. This determination is consistent with the PEIR and would not constitute an increase in impacts with respect to the PEIR.</p>							
<p><b>Impact HYD-4:</b> 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</p>	Impact HYD-4, pp. 3.11-30-3.11-31	SPR HYD-5 SPR BIO-4 SPR HAZ-5 SPR HAZ-7	LTS	No	N/A	N/A	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> This impact does not apply to the proposed project because the project would include manual treatments and prescribed herbivory treatments; the use of herbicides is not proposed as part of the project. Therefore, SPR HYD-5, SPR BIO-4, SPR HAZ-5, and SPR HAZ-7 are not applicable to the project. No new water quality-related impacts would occur with respect to the PEIR.</p>							
<p><b>Impact HYD-5:</b> Substantially alter the existing drainage pattern of a treatment site or area</p>	Impact HYD-5, pp. 3.11-31	SPR HYD-4 SPR HYD-6 SPR GEO-5	LTS	Yes	SPR HYD-4 SPR HYD-6	LTS	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> Based on the PEIR, the potential for alteration of drainage patterns would be greatest as a result of extensive ground disturbance required for creation of non-shaded fuel breaks. Proposed project treatments would be limited to manual treatment and prescribed herbivory; non-shaded fuel breaks would not be created. Additionally, SPRs HYD-4 and HYD-6 would be implemented, which would ensure that watercourses are protected. SPR GEO-5 would not apply because the project does not propose compacted and/or bare linear treatment areas. As a result, the project would not substantially alter the existing drainage pattern of a treatment site or area, and no new impacts would occur with respect to the PEIR. Impacts would be less than significant.</p>							
<p><b>Other Impacts to Hydrology and Water Quality:</b> Would the project result in other impacts to hydrology and water quality that are not evaluated in the CalVTP PEIR?</p>	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The project is consistent with the CalVTP PEIR, and the site-specific characteristics are consistent with the regulatory and environmental setting examined in Section 3.11 of the PEIR. The inclusion of land outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the environmental conditions, including proximity to surface waters, groundwater, and existing drainage of the project areas outside the treatable landscape and within the treatable landscape are essentially the same. Therefore, the project would not result in other impacts related to hydrology and water</p>							

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

quality not addressed in the PEIR. The impacts associated with the proposed treatment actives were also determined to be consistent with the PEIR and would not result in a more significant impact.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR HYD-1 Comply with Water Quality Regulations:</b> Project proponents must conduct proposed vegetation treatments in conformance with appropriate RWQCB timber-, vegetation-, and land disturbance-related WDRs and/or related Conditional Waivers of WDRs (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. This SPR applies to all treatment activities and treatment types.	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>
<b>SPR HYD-2 Avoid Construction of New Roads:</b> The project proponent will not construct or reconstruct (i.e., cutting or filling involving less than 50 cubic yards/0.25 linear road miles) any new roads (including temporary roads). This SPR applies to all treatment activities and treatment types.	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>
<b>SPR HYD-3 Water Quality Protections for Prescribed Herbivory:</b> The project proponent will implement water quality protections for all prescribed herbivory treatments. This SPR applies to prescribed herbivory treatment activities and all treatment types, including treatment maintenance.	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>
<b>SPR HYD-4 Identify and Protect Watercourse and Lake Protection Zones:</b> The project proponent will establish Watercourse and Lake Protection Zones (WLPZs) as defined in 14 CCR Section 916.5 of the California Forest Practice Rules on either side of watercourses. This SPR applies to all treatment activities and treatment types.	Yes	<u>MFPD</u> Prior	<u>MFPD</u>
<b>SPR HYD-5 Protect Non-Target Vegetation and Special-status Species from Herbicides:</b> This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.	No	<u>N/A</u>	<u>N/A</u>
<b>SPR HYD-6 Protect Existing Drainage Systems:</b> This SPR applies to all treatment activities and treatment types.	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>

### 3.11 Land Use and Planning, Population, and Housing

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact LU-1:</b> Cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation	Impact LU-1, pp. 3.12-13-3.12-14	SPR AD-3 SPR AD-9	LTS	Yes	SPR AD-3	LTS	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The treatments would occur on private property within State Responsibility Areas and Local Responsibility Areas within Santa Barbara County (CAL FIRE 2007). As a local agency, MFPD is required to comply with local plans, policies, and regulations. SPR AD-3 would be implemented, which would ensure that the project does not conflict with land use plans, policies, and regulations. The project would be designed and implemented consistent with applicable local planning documents, policies, and ordinances. Treatments would be designed and take place in a manner that is consistent with applicable plans, policies, and regulations outlined in the County Comprehensive Plan Land Use Element (County of Santa Barbara 2016), the County Land Use &amp; Development Code (County of Santa Barbara 2021), the Montecito Community Plan (County of Santa Barbara 1995), the County Unit Strategic Fire Plan (Santa Barbara County Fire Department 2021), and the Montecito Community Wildfire Protection Plan (MFPD 2019). As discussed in Section 3.2, Agriculture and Forest Resources, and Section 3.5, Biological Resources, treatment activities would be implemented consistent with the County Oak Tree Protection Ordinance. Additionally, as discussed in Section 3.12, Noise, treatment activities would take place during daytime hours, consistent with the County Noise Ordinance.</p> <p>The potential for vegetation treatment to cause a significant impact on land use planning, policy, and regulation was examined in the PEIR. The project area is not within the Coastal Zone and is therefore exempt from acquiring a Coastal Development Permit under the Coast Act (County of Santa Barbara 2019); SPR AD-9 does not apply to the treatment project.</p>							
<b>Impact LU-2:</b> Induce substantial unplanned population growth	Impact LU-2, pp. 3.12-14-3.12-15	N/A	LTS	Yes	N/A	LTS	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The potential for implementation of treatment projects to result in population growth was analyzed in the PEIR. The project would require between 2 and 28 persons for an MFPD Fuel Crew to implement hand treatments and a 4-person MFPD Fire Crew to implement prescribed herbivory treatments. The project would require a short-term increase in demand for workers. However, it is anticipated that workers implementing the proposed treatment project would primarily consist of existing MFPD, CAL FIRE, or contract crews, and the project would not require the hiring of new</p>							



Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

permanent employees. Additionally, the number of workers required for the implementation of treatment activities is consistent with the crew sizes analyzed in the PEIR.

Though the project includes land outside the CalVTP treatable landscape, constituting a change to the geographic extent in the PEIR, the environmental conditions of the land outside the treatable landscape are essentially the same as those of the land inside the treatable landscape. Therefore, the resulting impact on population and housing is the same and would not result in a substantially more significant impact than covered in the PEIR. There are no SPRs applicable to this impact.

<b>Other Impacts related to Land Use and Planning, Population, and Housing:</b> Would the project result in other impacts related to land use and planning, and population and housing that are not evaluated in the CalVTP PEIR?	—	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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**Impact Discussion:** The project is consistent with the CalVTP PEIR. Site-specific characteristics of the proposed treatment plan are consistent with the environmental and regulatory conditions outlined in CalVTP PEIR, Section 3.12. While the inclusion of land outside the CalVTP treatable landscape is a change to the geographic extent in the PEIR, the existing conditions in the project area relating to land use and planning, population, and housing are essentially the same for treatment areas within the CalVTP treatable landscape and treatment areas outside the CalVTP treatable landscape. Further, the land outside the treatment landscape is subject to the same land use plans, policies, and regulations as the land inside the treatable landscape, and project implementation on land outside the treatable landscape would not result in increased population growth. Therefore, the impact on land use is the same in both areas, and the project would not result in a substantially more significant impact than that covered in the PEIR; impacts would be less than significant.

As a result, the impacts associated with the proposed project are consistent with the impacts covered in the PEIR. Additionally, the inclusion of areas outside the CalVTP treatable landscape would not result in new impacts not covered in the PEIR. No new impact related to land use and planning, population, and housing would occur.

### 3.12 Noise

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact NOI-1:</b> Result in a substantial short-term increase in exterior ambient noise levels during treatment implementation	Impact NOI-1, pp. 3.13-9-3.13-12; Appendix NOI-1	SPR NOI-1 through SPR NOI-6 SPR AD-3	LTS	Yes	SPR NOI-1 SPR NOI-2 SPR NOI-4 SPR NOI-5 SPR AD-3	LTS	<input checked="" type="checkbox"/>

**Impact Discussion:** The proposed treatments would require heavy noise-generating equipment. The County identifies noise restrictions for construction activities, and these would also apply to the vegetation treatments. The County Code Section 40 prohibits the production of excessive noise on Sundays–Thursdays from 10:00 p.m. to 7:00 a.m. and on Fridays and Saturdays from after midnight to 7:00 a.m. the next day (County of Santa Barbara 2022). Additionally, noise within these time frames cannot be audible from 100 feet outside the property line. The treatment activities would occur during the daytime hours and would be consistent with the County Noise Ordinance. Sensitive receptors near the treatment areas include residential areas as well as Westmont College and Montecito School for Girls. Due to the potential for treatments to occur adjacent to sensitive noise receptors, SPR NOI-6 would be implemented and sensitive noise receptors within 1,500 feet of the project activities would be notified prior to the commencement of work. SPRs AD-3 and NOI-1, NOI-2, NOI-4 and NOI-5 would be implemented to limit the potential impact on ambient noise levels.

The impact would be less than significant, and the project would not result in a more significant impact than that covered in the PEIR.

<b>Impact NOI-2:</b> Result in a substantial short-term increase in truck-generated SENLs during treatment activities	Impact NOI-2, pp. 3.13-12	SPR NOI-1	LTS	Yes	SPR NOI-1	LTS	<input checked="" type="checkbox"/>
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**Impact Discussion:** The project would require the use of trucks to haul equipment, personnel, and animals to the project site. The project site would be accessed by the existing public road network and would use paved roads as well as unpaved roads going through the project areas. While trucks would pass residential sensitive receptors, it is not anticipated that project traffic would result in a substantial increase in truck-generated noise along these roads. The event of each truck passing could increase the single-event noise levels (SENLs). Consistent with the County Noise Ordinance, SPR NOI-1 would be implemented and equipment hauling trips would be limited to daylight hours, limiting SENL exposure during more noise-sensitive hours such as evening and nighttime.

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

Therefore, the impact would be less than significant and the project would not result in a more significant impact than that covered in the PEIR.

<b>Other Impacts Related to Noise:</b> Would the project result in other impacts related to noise that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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**Impact Discussion:** The project is consistent with the CalVTP PEIR and the site-specific characteristics are consistent with the regulatory and environmental setting in Section 3.13 of the PEIR. The inclusion of land outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the environmental conditions of the project areas outside the treatable landscape and within the treatable landscaper were determined to be essentially the same as those addressed in the PEIR. Noise sensitive receptors are located in similar proximity to project areas within and outside the treatable landscape. The impacts associated with the proposed treatment activities were also determined to be consistent with the PEIR and would not result in a more significant impact. Therefore, the project would not result in other impacts to noise not addressed in the PEIR.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR NOI-1 Limit Heavy Equipment Use to Daytime Hours:</b> 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.	Yes	<u>MFPD</u> During	<u>MFPD</u>
<b>SPR NOI-2 Equipment Maintenance:</b> 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.	Yes	<u>MFPD</u> During	<u>MFPD</u>
<b>SPR NOI-3 Engine Shroud Closure:</b> The project proponent will require that engine shrouds be closed during equipment operation. This SPR applies only to mechanical treatment activities and all treatment types.	No	<u>N/A</u>	<u>N/A</u>

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
<b>SPR NOI-4 Locate Staging Areas away from Noise-Sensitive Land Uses:</b> This SPR applies to all treatment activities and treatment types.	Yes	MFPD During	MFPD
<b>SPR NOI-5 Restrict Equipment Idle Time:</b> The project proponent will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes. This SPR applies to all treatment activities and all treatment types.	Yes	MFPD During	MFPD
<b>SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors:</b> 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.	No	N/A	N/A

### 3.13 Recreation

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Impact Significance for the Treatment Project	No New Impact
<b>Impact REC-1:</b> Directly or indirectly disrupt recreational activities within designated recreation areas	Impact REC-1, pp. 3.14-6-3.14-7	SPR REC-1	LTS	Yes	N/A	LTS	<input checked="" type="checkbox"/>
<b>Impact Discussion:</b> The proposed treatments would occur on private property. There are designated recreational areas, trails, and private amenities immediately adjacent to the proposed sites as identified in the County Comprehensive Plan, Montecito Community Plan, and the County Parks Division (County of Santa Barbara 1995, 2009b, 2016; Santa Barbara County Parks 2022). However, the project would only occur on private property and							

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Impact Significance for the Treatment Project	No New Impact

treatment activities would not restrict access or disrupt recreational activities. Therefore, treatments would not result in a temporary closure or disruption of access to recreational facilities (e.g., access to parks, trails, open space areas), and SPR REC-1 does not apply.

As a result, the impact on recreation is within the scope of the PEIR. The project would not result in a more significant impact than that covered in the PEIR.

<b>Other Impacts to Recreation:</b> Would the project result in other impacts to recreation that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	<input checked="" type="checkbox"/>
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**Impact Discussion:** The project is consistent with the CalVTP PEIR and the site-specific characteristics are consistent with the regulatory and environmental setting in Section 3.14 of the PEIR. The inclusion of land outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the environmental conditions of the project areas outside the treatable landscape and within the treatable landscape were determined to be essentially the same as those addressed in the PEIR. The impacts associated with the proposed treatment activities were also determined to be consistent with the PEIR and would not result in a more significant impact. Therefore, the project would not result in other impacts on recreation not addressed in the PEIR.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR REC-1 Notify Recreational Users of Temporary Closures:</b> If a treatment activity would require temporary closure of a public recreation area or facility, the project proponent will coordinate with the owner/manager of that recreation area or facility. This SPR applies to all treatment activities and treatment types, including treatment maintenance.	No	N/A	<u>N/A</u>

### 3.14 Transportation

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact TRAN-1:</b> Result in temporary traffic operations impacts by conflicting with a program, plan, ordinance, or policy addressing roadway facilities or prolonged road closures	Impact TRAN-1, pp. 3.15-9-3.15-10	SPR TRAN-1 SPR AD-3	LTS	Yes	SPR TRAN-1 SPR AD-3	LTS	<input checked="" type="checkbox"/>

**Impact Discussion:** The project would temporarily increase vehicular traffic along with the existing public road network. The project sites would be completely accessible from public roads. The increase in traffic would be related to vehicles hauling heavy equipment, materials, and personnel commuting (crews ranging from 2 to 28 people) to the project site. The impact on traffic would be short term, and only a limited number of vehicles are required to complete the proposed treatments. No prolonged road closures would result from the project. Further, the treatments would not occur all at once but rather in phases. Therefore, the increase in traffic would be dispersed over the project timeline. As previously discussed, SPR AD-3 is applicable to the project and treatments would be consistent with local policies such as the County Comprehensive Plan Circulation Element and County Municipal Code. SPR TRAN-1 would be implemented and the project proponent would refer to the California Department of Transportation (Caltrans) and Santa Barbara County to determine whether a Traffic Management Plan is needed. All appropriate permits would be obtained.

Therefore, the impact on traffic is within the scope of the PEIR. The project would not result in a more significant impact than that covered in the PEIR. SPRs TRAN-1 and AD-3 apply to this impact.

<b>Impact TRAN-2:</b> Substantially increase hazards due to a design feature or incompatible uses	Impact TRAN-2, pp. 3.15-10-3.15-11	SPR TRAN-1 SPR AD-3	LTS	Yes	SPR TRAN-1	LTS	<input checked="" type="checkbox"/>
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**Impact Discussion:** The project would utilize existing roads to access the site. The project does not include the construction of new roads proposed nor the redesign or alteration of current roadways. Per SPR TRAN-1, prior to the initiation of vegetation treatment local traffic agencies having jurisdiction would be consulted to ensure that the activities do not increase road hazards or require a Traffic Management Plan. Additionally, per SPR AD-3, the project would be implemented consistent with local plans, policies and ordinances.

Therefore, the impact of increased hazards is within the scope of the PEIR. The project would result in a less than significant impact related to increasing road hazards and would not result in a more significant impact than that covered in the PEIR.

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<p><b>Impact TRAN-3:</b> Result in a net increase in VMT for the proposed CalVTP</p>	Impact TRAN-3, pp. 3.15-11-3.15-13	MM AQ-1	PSU	Yes	N/A	LTS	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The project would temporarily increase vehicle miles traveled (VMT) above baseline conditions. The project would require multiple trips to access the treatment locations. Vehicular travel associated with the implementation of the treatment actions would primarily originate from the MFPD Headquarters Station One or from the respective business locations of any contractors hired to complete the work. Per the analysis methodologies presented in the PEIR, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less than significant transportation impact. As presented in the PEIR, this would allow for up to 50 vehicles bringing crews and equipment to the project site in a single day. Because of the small sizes of the crews needed for the proposed project, and because the project would be implemented over a 10-year period, it is unlikely that the total VMT would exceed 110 trips per day. The majority of the treatments would be grazing activities, which would not require extensive vehicle trips. Further, the vehicle trips would be dispersed across multiple roadways. As such, impacts related to a potential increase in VMT would be less than significant. MM AQ-1 would not apply to the impact because the impact would be less than significant.</p> <p>Therefore, the potential to increase VMT would be less than significant and the project would not result in impacts greater than those covered in the PEIR.</p>							
<p><b>Other Impacts to Transportation:</b> Would the project result in other impacts to transportation that are not evaluated in the CalVTP PEIR?</p>	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The project is consistent with the CalVTP PEIR and the site-specific characteristics are consistent with the regulatory and environmental setting in Section 3.15 of the PEIR. The inclusion of land outside the CalVTP treatable landscape constitutes a change to the geographic extent presented in the PEIR. However, the environmental conditions of the project areas outside the treatable landscape and within the treatable landscape were determined to be essentially the same as those addressed in the PEIR. The impacts associated with the proposed treatment activities are consistent with the PEIR and would not result in a more significant impact. Therefore, the project would not result in impacts on transportation that were not addressed in the PEIR.</p>							

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR TRAN-1 Implement Traffic Control during Treatments:</b> Prior to initiating vegetation treatment activities the project proponent will work with the agency(ies) with jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed. This SPR applies to all treatment activities and treatment types.	Yes	MFPD Prior-During	MFPD

### 3.15 Public Services, Utilities, and Service Systems

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in the PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact UTIL-1:</b> Result in physical impacts associated with provision of sufficient water supplies, including related infrastructure needs	Impact UTIL-1, 3.16	N/A	LTS	Yes	N/A	LTS	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The proposed project would include manual treatments and prescribed herbivory. The project would not include road maintenance, mechanical treatment, or prescribed burning. As such, the project would not require on-site water supplies for fire suppression or dust controls. As discussed in Section 3.11, Land Use and Planning, Population, and Housing, implementation of the project would not require residential development or induce significant population growth in the area that would increase the water demand or require additional infrastructure. There are no SPRs applicable to this impact.</p> <p>The project would not result in a substantially more significant impact than that covered in the PEIR; the impact would be less than significant.</p>							
<b>Impact UTIL-2:</b> Generate solid waste in excess of state standards or exceed local infrastructure capacity	Impact UTIL-2, 3.16	SPR UTIL-1	PSU	Yes	SPR UTIL-1	LTS	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The vegetation treatments on the project site would generate biomass as a result of hand treatment vegetation removal. Herbivory would not produce significant biomass as the animals (goats and sheep) would consume the hazardous fuels. Biomass associated with manual treatments would be disposed of by either being chipped off site or being processed off site for retail landscaping woodchips and mulch. The project</p>							



Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

would result in approximately 3 to 4 tons per acre treated with the mixed treatments. Vegetation would not be disposed of on the project sites. Off-site biomass would be processed by Agri-Chip, which has an ongoing and current contract with MFPD. Attachment F includes documentation of MFPD's agreement with Agri-Chip. Further, Agri-Chip is not a solid waste facility, and the biomass is repurposed for retail uses. The project would also implement SPR UTIL-1 and create a solid organic waste disposition plan prior to initiating activities. Given that Agri-Chip is currently used by MFPD, is not a solid waste facility, and repurposes biomass, it is not anticipated that the project would result in generation of solid waste that is in excess of state standard or local infrastructure capacity.

The project would not result in a substantially more significant impact than that covered in the PEIR; the impact would be less than significant.

<b>Impact UTIL-3:</b> Comply with federal, state, and local management and reduction goals, statutes, and regulations related to solid waste	Impact UTIL-3, 3.16	SPR UTIL-1	LTS	Yes	SPR UTIL-1	LTS	<input checked="" type="checkbox"/>
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**Impact Discussion:** The project treatment activities would not generate substantial amounts of solid waste and would be consistent with solid waste regulations. Treatment activities associated with grazing would result in vegetation being consumed on site by the animals. While the hand treatments would produce biomass, it would be chipped and repurposed by Agri-Chip. As discussed above, Agri-Chip has an ongoing contract with MFPD and is not a solid waste facility but a green recycling industry that repurposes biomass into a retail landscaping product. Further, this would divert solid organic waste from solid waste facilities and is consistent with the determination in the PEIR. The project would also implement SPR UTIL-1, which requires the preparation of a Solid Organic Waste Disposition Plan that identifies the amount of solid waste to be processed off site and prohibits biomass generated by treatment activities from being disposed of in a landfill.

Therefore, the project would result in a less-than-significant impact, which is not a substantially more significant impact than that covered in the PEIR.

<b>Other Impacts to Public Services, Utilities, and Service Systems:</b> Would the project result in other impacts on public services, utilities, and service systems that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
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**Impact Discussion:** The project is consistent with the CalVTP and the site-specific characteristics are consistent with the regulatory and environmental setting in Section 3.16 of the PEIR. The project includes land that is outside the CalVTP treatable landscape, which constitutes a change in the geographic extent presented in the PEIR. However, the environmental conditions of the project area outside the treatable landscape and within the treatable landscape were determined to be essentially the same. The impacts associated with the proposed project were also determined to be consistent with the PEIR and

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

would not result in a more significant impact. Therefore, the project would not result in impacts on public services, utilities, and service systems that were not addressed in the PEIR.

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR UTIL-1 Solid Organic Waste Disposition Plan:</b> For projects requiring the disposal of material outside of the treatment area, the project proponent will prepare an Organic Waste Disposition Plan prior to initiating treatment activities. This SPR applies only to mechanical and manual treatment activities and all treatment types, including treatment maintenance.	Yes	MFPD Prior	MFPD

### 3.16 Wildfire

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
<b>Impact WIL-1:</b> Substantially exacerbate fire risk and expose people to uncontrolled spread of a wildfire	Impact WIL-1, pp. 3.17-14-3.17-15	SPR HAZ-2 SPR HAZ-3 SPR HAZ-4	LTS	Yes	SPR HAZ-2 SPR HAZ-3 SPR HAZ-4	LTS	<input checked="" type="checkbox"/>

**Impact Discussion:** The proposed VMP treatment activities aim to reduce fuel loads to create buffers between the wildland vegetation to the north of Montecito and to reduce fuel loads adjacent to critical roadways. These strategic treatments would help to reduce fire intensity during wildfires in areas directly adjacent to community resources and structures and in areas where firefighting resources can safely engage in suppression operations. The

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact

project would also reduce invasive species that have increased in the area after the 2017 Thomas Fire and the 2018 Debris Flow. The increased invasive species also pose an additional fire risk. The proposed VMP could result in a temporary increase in fire risk, as the use of vehicles and hand tools on the project site could result in an accidental ignition. The project would also utilize a track chipper during implementation of vegetation treatments and would use other vehicles to transport equipment and animals to the project site. The project would not include the use of prescribed fire. The potential increase in exposure to wildfire from the implementation of treatment activities was examined in the PEIR. The manual treatments on the project site would include the use of handheld equipment (e.g., chainsaws) to cut vegetation. The project proponent would require mechanized hand tools to have state-approved spark arrestors to reduce accidental ignition per SPR HAZ-2. SPR HAZ-3 would be implemented for manual treatments as well and would require each tree-cutting crew to carry one fire extinguisher per chainsaw and each vehicle to carry one long-handled shovel and either an ax or Pulaski, per PRC Section 4458, to quickly respond to ignition if one occurs. The project proponent would also prohibit smoking in vegetated areas, per SPR HAZ-4; designated smoking areas would be barren or cleared to mineral soil with a minimum 3-foot diameter to reduce the possibility of accidental fire ignition.

Therefore, the impact associated with wildfire risk would not result in a substantially more significant impact than that covered in the PEIR; the impact would be less than significant.

<b>Impact WIL-2:</b> Expose people or structures to substantial risks related to post-fire flooding or landslides	Impact WIL-2, pp. 3.17-15 - 3.17-16	SPR AQ-3 SPR GEO-3 through SPR GEO-5 SPR GEO-8	LTS	Yes	SPR AQ-3 SPR GEO-3 through SPR GEO-5	LTS	<input checked="" type="checkbox"/>
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**Impact Discussion:** The proposed project would include manual treatment and prescribed herbivory. Steep slopes are present in the project area, and the removal of vegetation and prescribed burning could result in slope instability. Further, after the 2017 Thomas Fire, the project was impacted by the 2018 Debris Flow. Treatment activities would occur adjacent to and within the debris flow scar because one of the treatment goals is to reduce invasive species within the debris flow scar to prevent increased fire risk. However, no broadcast burning is proposed as part of the project, nor is any other type of prescribed burning. There would be no mechanical treatment on the project site. Further, proposed project treatments would retain up to 50% of existing vegetation, which would help to maintain the stability of the soil.

While steep slopes are present in the project area, SPRs GEO-3 through GEO-5 would be implemented, which would minimize issues related to slope instability. Additionally, "no-work zones" have been established in areas of sensitive environmental resources and environmental constraints such as steep slopes. The project does not include any compacted and/or bare linear treatments; however, SPR GEO-4 would be implemented during proposed road maintenance activities.

Impacts and Discussions	PEIR-Specific			Project-Specific			
	Identify Location of Impact Analysis in the PEIR	SPRs & MMs Applicable to the Impact Analysis in PEIR	Identify Impact Significance in the PEIR	Does the Impact Apply to the Project Treatments Proposed	SPRs & MMs Applicable to the Project Impact Analysis	Identify Impact Significance for the Treatment Project	No New Impact
Therefore, the project would not expose people or structures to substantial risks from post-prescribed burning landslides or flooding. Consistent with the PEIR, impacts would be less than significant, and the project would not result in a substantially more severe significant impact than was covered in the PEIR.							
<b>Other Impacts Related to Wildfire:</b> Would the project result in other impacts related to wildfires that are not evaluated in the CalVTP PEIR?	N/A	N/A	N/A	No	N/A	N/A	<input checked="" type="checkbox"/>
<p><b>Impact Discussion:</b> The project is consistent with the CalVTP and the site-specific characteristics are consistent with the regulatory and environmental setting in Section 3.17 of the PEIR. The project includes land that is outside the CalVTP treatable landscape, which constitutes a change in the geographic extent presented in the PEIR. However, the environmental conditions of the project area outside the treatable landscape and within the treatable landscape were determined to be essentially the same. The impacts associated with the proposed project were also determined to be consistent with the PEIR and would not result in a more significant impact. Therefore, the project would not result in other impacts to wildfire that were not addressed in the PEIR.</p>							

### 3.17 Administrative Standard Project Requirements

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/Monitoring Entity
<b>SPR AD-1 Project Proponent Coordination:</b> For treatments coordinated with CAL FIRE, CAL FIRE would 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 would also discuss the details of the burn plan in the incident action plan (IAP). This SPR applies to all treatment activities and treatment types.	Yes	<u>MFPD</u> Prior	<u>CAL FIRE</u>
<b>SPR AD-2 Delineate Protected Resources:</b> The project proponent will clearly define the boundaries of the treatment area and protected resources on maps for the treatment area and	Yes	<u>MFPD</u>	<u>MFPD</u>

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
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.		Prior-During	
<b>SPR AD-3 Consistency with Local Plans, Policies, and Ordinances:</b> The project proponent would 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.	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>
<b>SPR AD-4 Public Notifications for Prescribed Burning:</b> At least three days prior to the commencement of prescribed burning operations, the project proponent would: 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 would 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.	No	<u>N/A</u>	<u>N/A</u>
<b>SPR AD-5 Maintain Site Cleanliness:</b> If trash receptacles are used on-site, the project proponent will use fully covered trash receptacles with secure lids (wildlife proof) to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities. This SPR applies to all treatment activities and all treatment types.	Yes	<u>MFPD</u> During-Post	<u>MFPD</u>
<b>SPR AD-6 Public Notifications for Treatment Projects:</b> One to three days prior to the commencement of a treatment activity, the project proponent would 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 would be provided with the notice) if they have questions or concerns. This SPR applies to all treatment activities and all treatment types, including treatment	Yes	<u>MFPD</u> Prior	<u>MFPD</u>

SPRs and MMs	Applicable	Implementing Entity & Timing Relative to Implementation	Verifying/ Monitoring Entity
maintenance. Prescribed burning is subject to the additional notification requirements of SPR AD-4.			
<b>SPR AD-7 Provide Information on Proposed, Approved, and Completed Treatment Projects:</b> For any vegetation treatment project using the CalVTP PEIR for CEQA compliance, the project proponent will provide the information listed below to the Board 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. This SPR applies to all treatment activities and all treatment types.	Yes	<u>MFPD</u> Prior-During-Post	<u>MFPD</u>
<b>SPR AD-8 Request Access for Post-Treatment Assessment:</b> For MFPD projects, during contract development, MFPD would 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 would be a requirement of the executed contract. This SPR applies to all treatment activities and all treatment types.	Yes	<u>MFPD</u> Prior-During	<u>MFPD</u>

## 3.18 Mandatory Findings of Significance

	New Impact that is Significant or Potentially Significant	New Impact that is Less Than Significant with Mitigation Incorporated	New Impact that is Less Than Significant Impact	No New Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Discussion

No additional comments.

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## 4 References and Preparers

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## 4.2 List of Preparers

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Rachel Swick, Biologist

Heather McDevitt , Senior Cultural Resources Specialist

Jennifer DeAlba, Cultural Resources Specialist

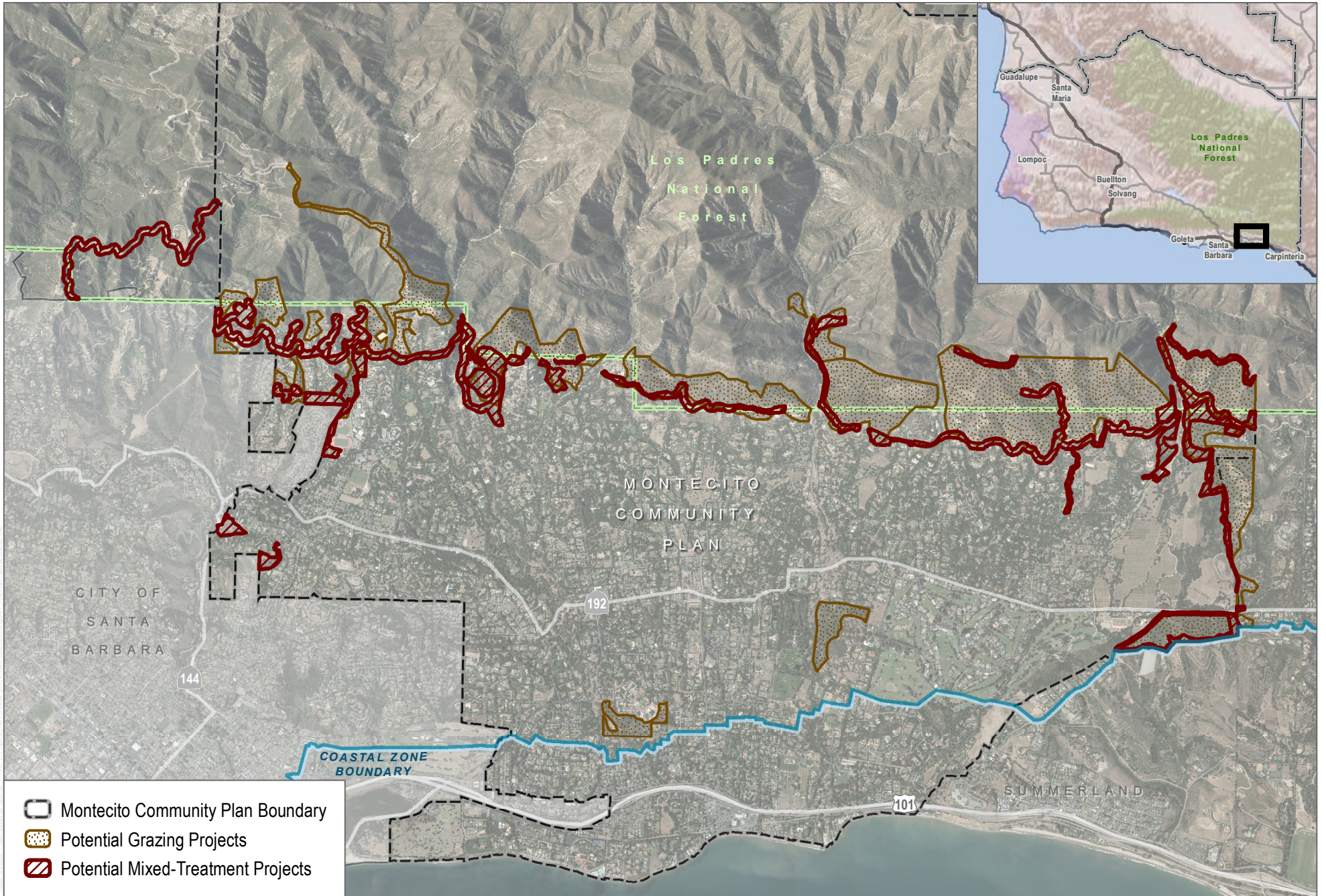
Perry Russell, Certified Engineering Geologist

### Montecito Fire Protection District

Nic Elmquist

Maeve Juarez

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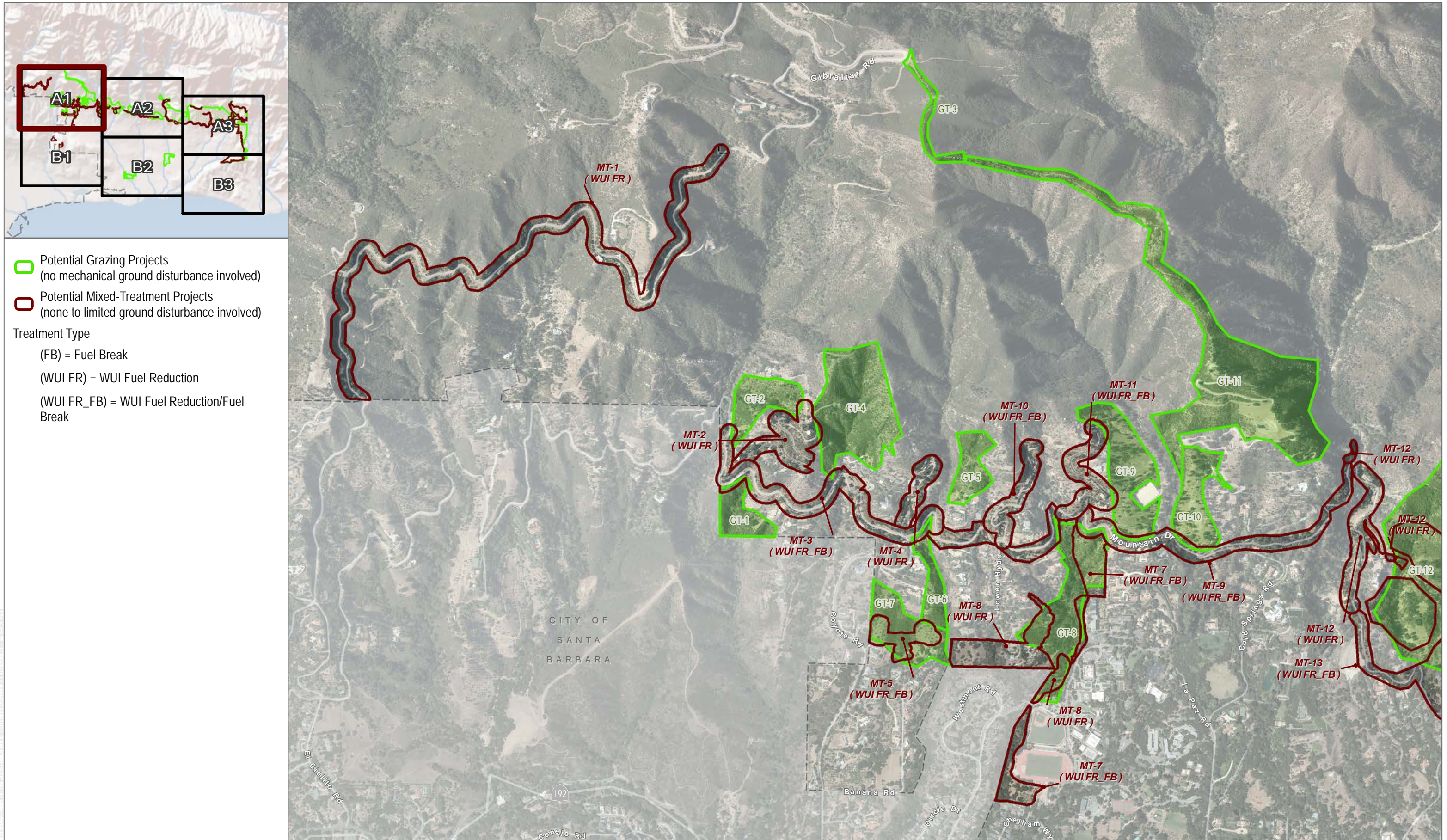
SOURCE: Sanborn 2020 Imagery

**FIGURE 1**

Potential Projects Location

Montecito Fire Protection District Vegetation Treatment Program

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SOURCE: Sanborn 2020



FIGURE 2-A1  
Potential Projects

Montecito Fire Protection District Vegetation Treatment Program

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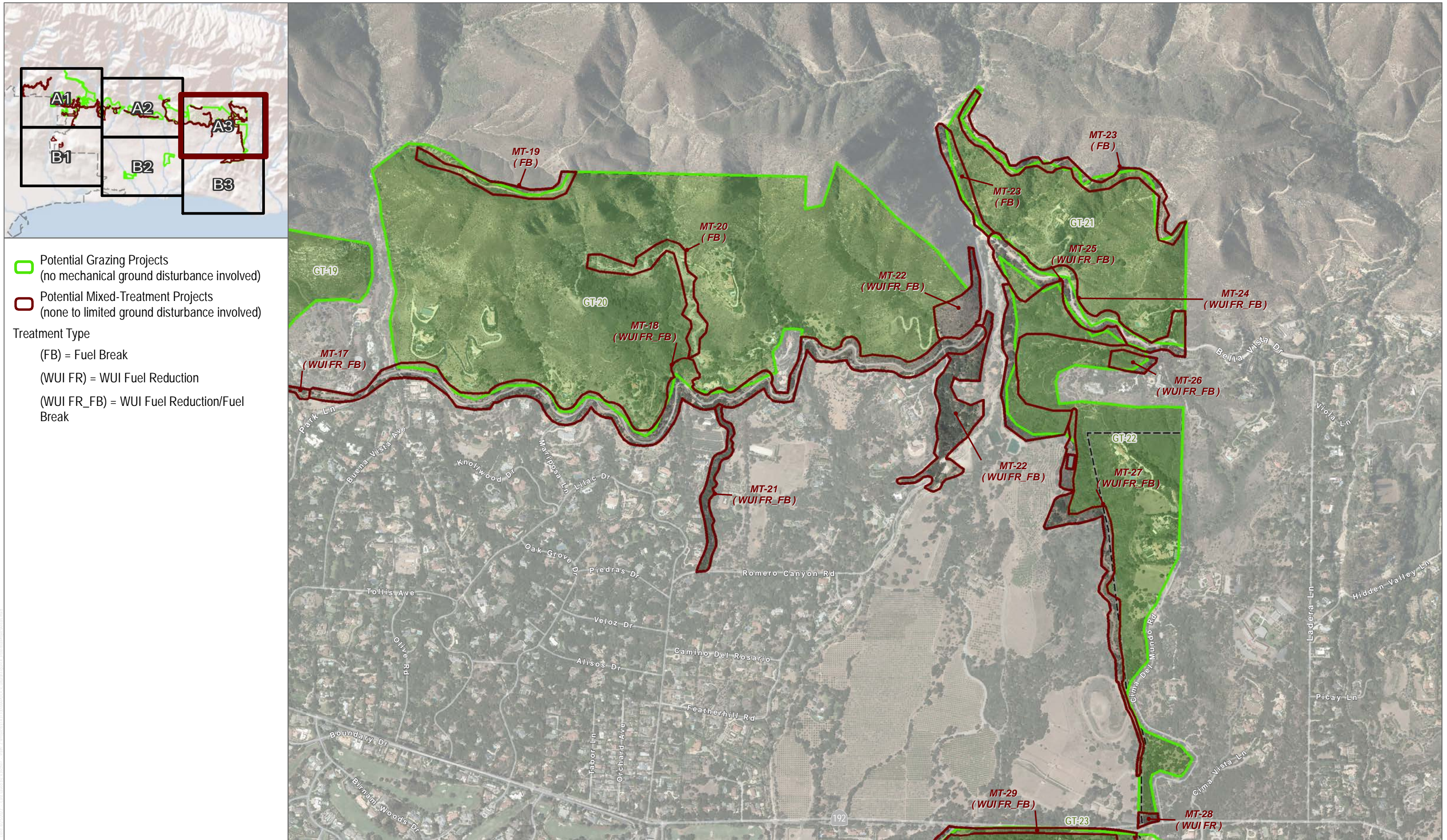
SOURCE: Sanborn 2020



FIGURE 2-A2  
Potential Projects

Montecito Fire Protection District Vegetation Treatment Program

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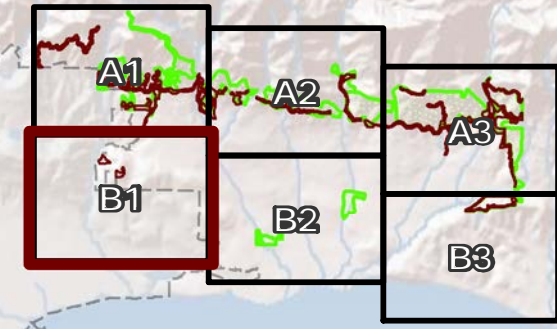
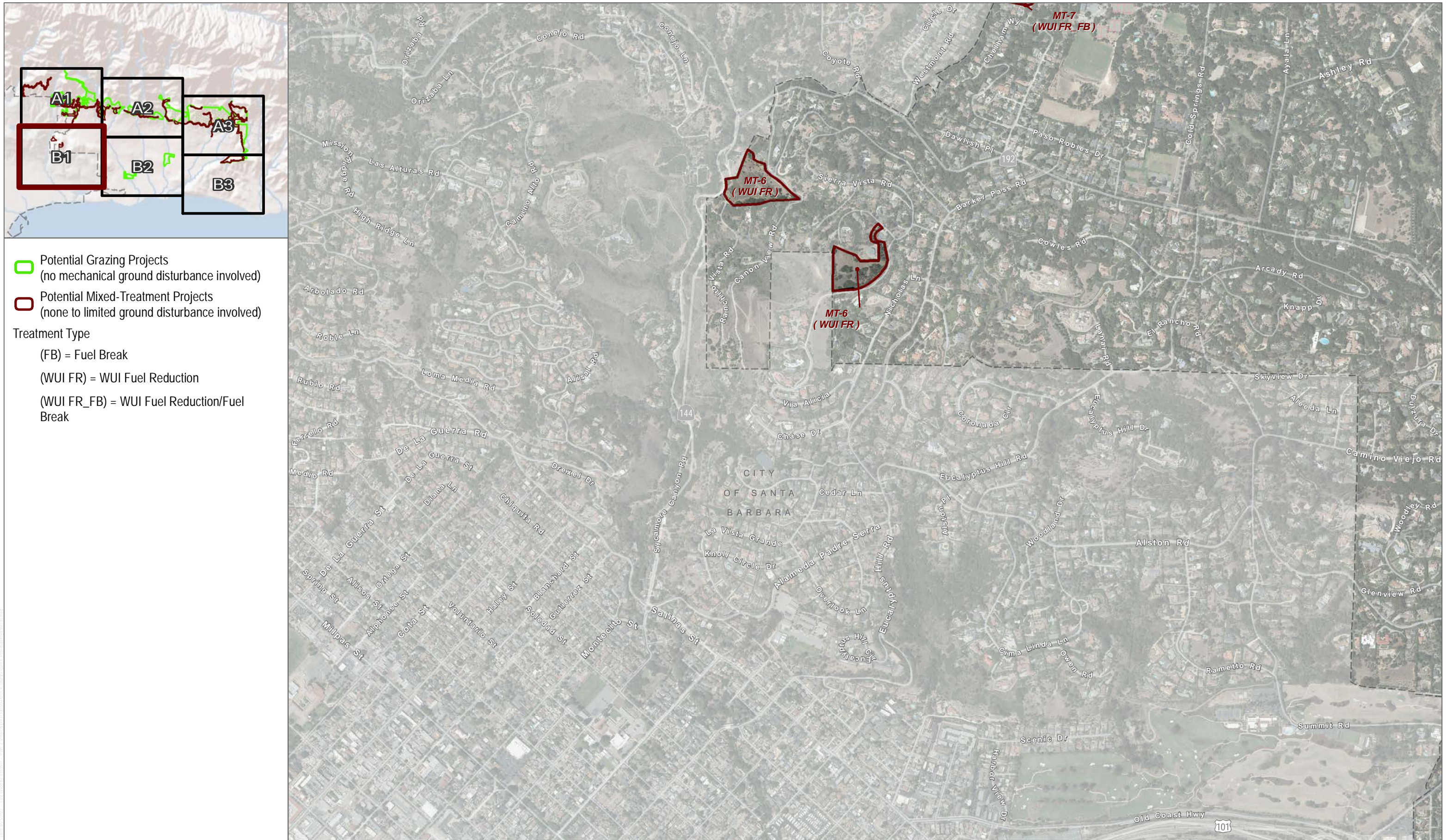
SOURCE: Sanborn 2020



FIGURE 2-A3  
Potential Projects

Montecito Fire Protection District Vegetation Treatment Program

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□ Potential Grazing Projects  
 (no mechanical ground disturbance involved)  
□ Potential Mixed-Treatment Projects  
 (none to limited ground disturbance involved)

Treatment Type

(FB) = Fuel Break

(WUI FR) = WUI Fuel Reduction

(WUI FR\_FB) = WUI Fuel Reduction/Fuel Break

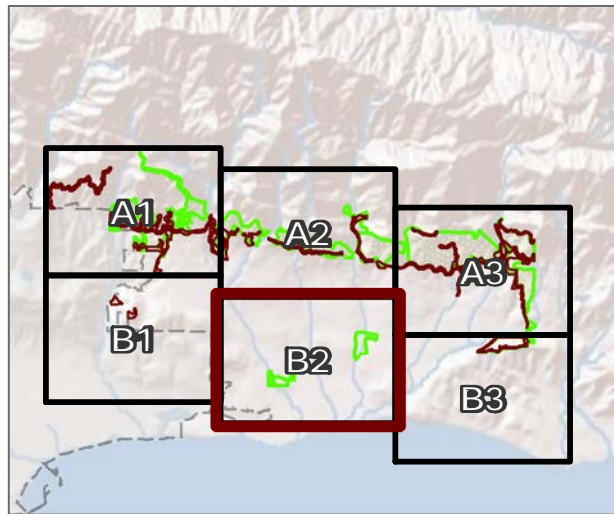
SOURCE: Sanborn 2020



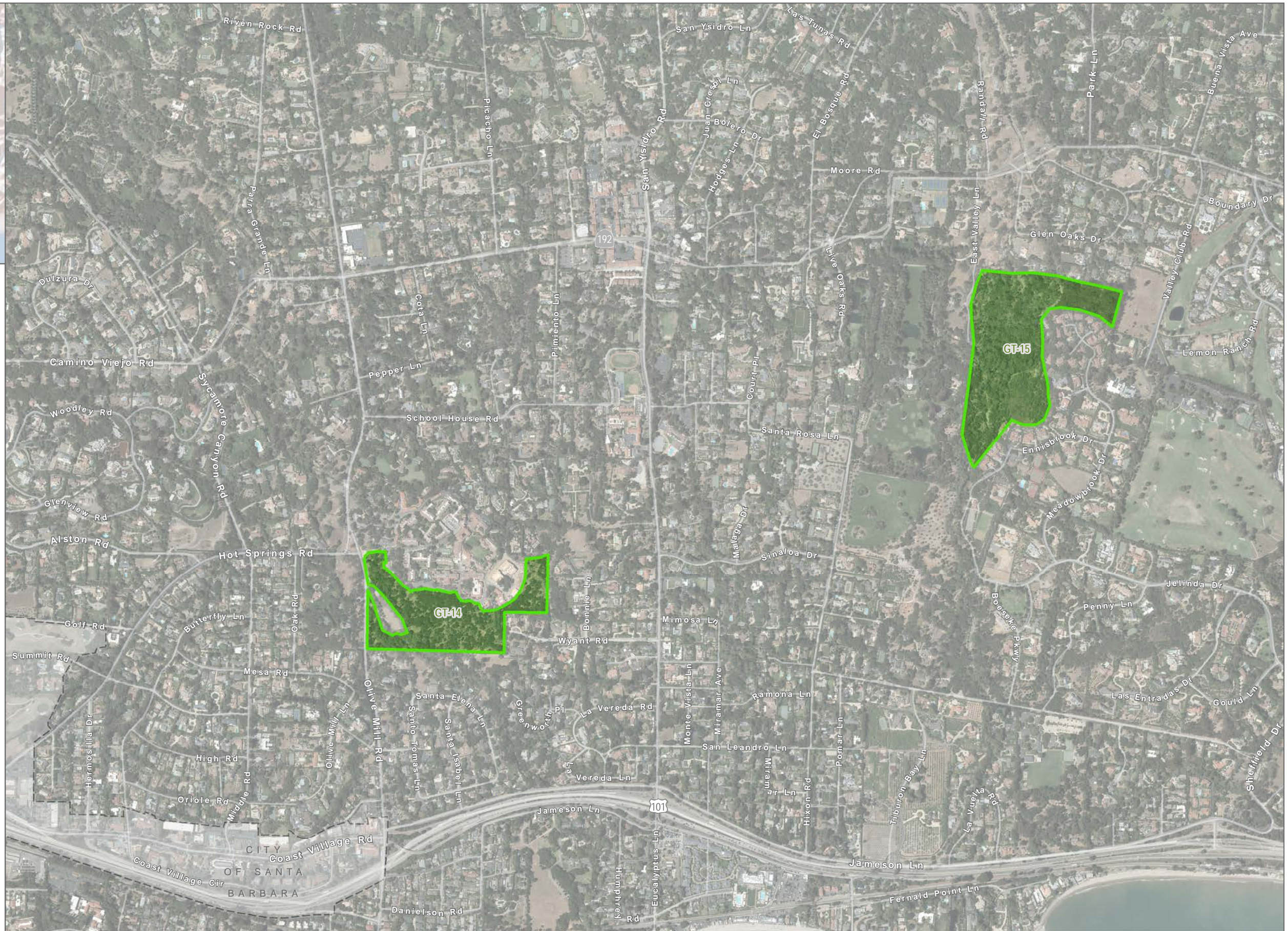
FIGURE 2-B1  
Potential Projects

Montecito Fire Protection District Vegetation Treatment Program

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- Potential Grazing Projects  
(no mechanical ground disturbance involved)
  - Potential Mixed-Treatment Projects  
(none to limited ground disturbance involved)
- Treatment Type
- (FB) = Fuel Break
  - (WUI FR) = WUI Fuel Reduction
  - (WUI FR\_FB) = WUI Fuel Reduction/Fuel Break



SOURCE: Sanborn 2020



FIGURE 2-B2  
Potential Projects

Montecito Fire Protection District Vegetation Treatment Program

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- Potential Grazing Projects  
(no mechanical ground disturbance involved)
  - Potential Mixed-Treatment Projects  
(none to limited ground disturbance involved)
- Treatment Type
- (FB) = Fuel Break
  - (WUI FR) = WUI Fuel Reduction
  - (WUI FR\_FB) = WUI Fuel Reduction/Fuel Break

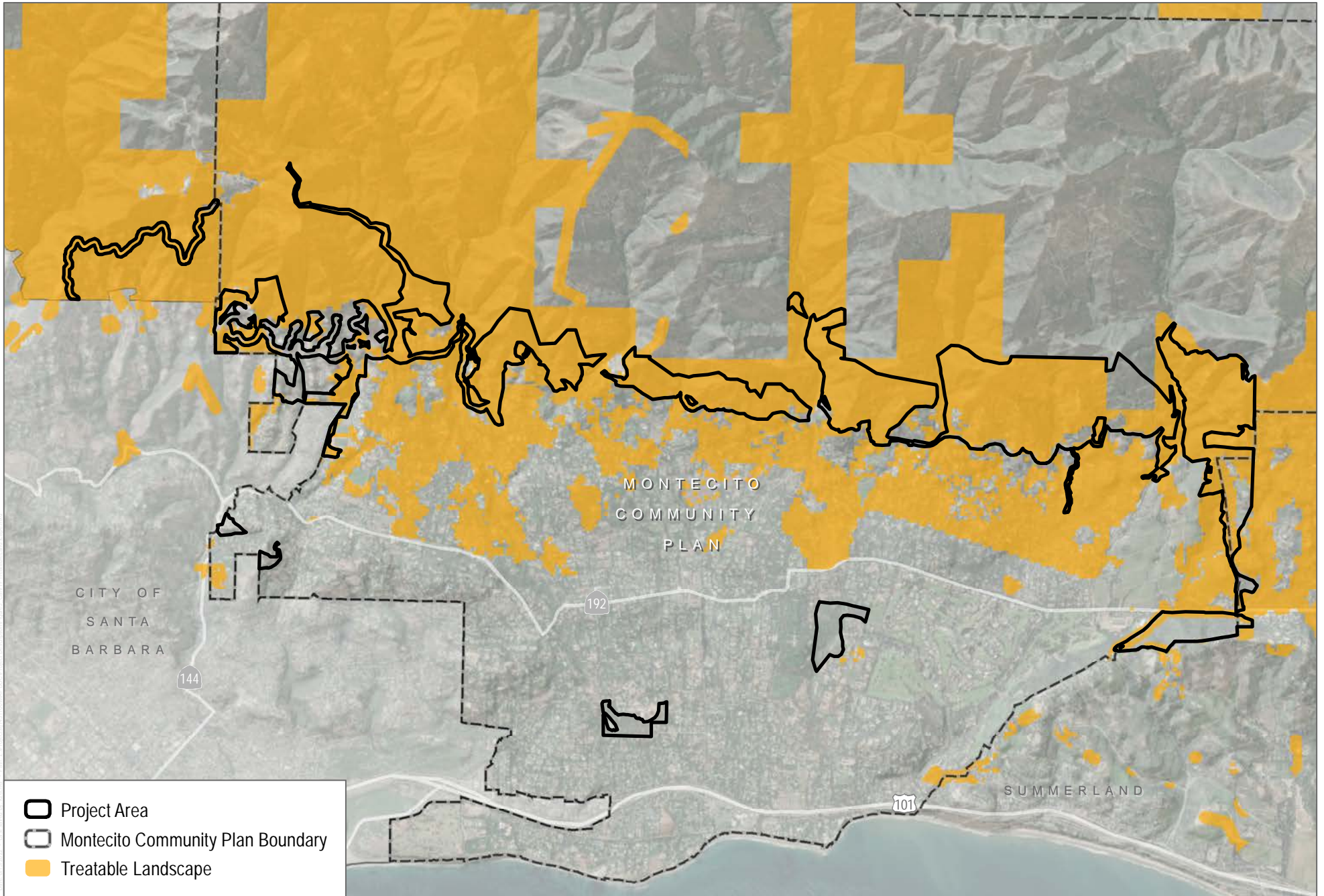
SOURCE: Sanborn 2020



FIGURE 2-B3  
Potential Projects

Montecito Fire Protection District Vegetation Treatment Program

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SOURCE: Sanborn 2020 Imagery, CalVTP

FIGURE 3

CalVTP Treatable Landscape

Montecito Fire Protection District Vegetation Treatment Program

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# **Attachment A**

## Mitigation Monitoring and Reporting Program



# 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	Implementin g Entity	Verifying/Monitorin g Entity
<b>Administrative Standard Project Requirements</b>				
<p>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.</p>	<p>Initial Treatment: N  Treatment Maintenance: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>
<p>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.</p>	<p>Initial Treatment: Y  Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>
<p>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.</p>	<p>Initial Treatment: Y  Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>
<p>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.</p>	<p>Initial Treatment: N  Treatment Maintenance: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>
<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: Y  Treatment Maintenance: Y</p>	<p>During-After</p>	<p>MFPD</p>	<p>MFPD</p>



Standard Project Requirements	Applicable? (Y/N)	Timing	Implementin g Entity	Verifying/Monitorin g Entity
<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: Y  Treatment Maintenance: Y</p>	<p>Prior</p>	<p>MFPD</p>	<p>MFPD</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"> <li>▶ GIS data that include project location (as a point);</li> <li>▶ project size (typically acres);</li> <li>▶ treatment types and activities; and</li> <li>▶ contact information for a representative of the project proponent.</li> </ul> <p>The project proponent will provide information on the proposed project to the Board or CAL FIRE as early as feasible in the planning phase. The project proponent will provide this information to the Board or CAL FIRE with sufficient lead time to allow those agencies to make the information available to the public 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"> <li>▶ A completed PSA Environmental Checklist;</li> <li>▶ A completed Mitigation Monitoring and Reporting Program (using Attachment A to the Environmental Checklist);</li> <li>▶ GIS data that include a polygon(s) of the project area, showing the extent of each treatment type included in the project (ecological restoration, fuel break, WUI fuel reduction).</li> </ul> <p>Information on completed projects:</p> <ul style="list-style-type: none"> <li>▶ GIS data that include a polygon(s) of the treated area, showing the extent of each treatment type implemented (ecological restoration, fuel break, WUI fuel reduction)</li> <li>▶ A post-project implementation report (referred to by CAL FIRE as a Completion Report) that includes <ul style="list-style-type: none"> <li>▪ Size of treated area (typically acres);</li> <li>▪ Treatment types and activities;</li> <li>▪ Dates of work;</li> <li>▪ A list of the SPRs and mitigation measures that were implemented</li> <li>▪ Any explanations regarding implementation if required by SPRs and mitigation measures (e.g., explanation for feasibility determination required by SPR BIO-12; explanation for reduction of a no-disturbance buffer below the general minimum size described in Mitigation Measures BIO-1a and BIO-2b).</li> </ul> </li> </ul>	<p>Initial Treatment: Y  Treatment Maintenance: Y</p>	<p>Prior-During-After</p>	<p>MFPD</p>	<p>MFPD</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
This SPR applies to all treatment activities and all treatment types, including treatment maintenance.				
<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: N</p> <p>Treatment Maintenance: N</p>	N/A	N/A	N/A
<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> <ul style="list-style-type: none"> <li>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</li> <li>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.</li> </ul> <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	N/A	N/A	N/A
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: Y</p> <p>Treatment Maintenance: Y</p>	During	MFPD	MFPD
<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: Y</p> <p>Treatment Maintenance: Y</p>	During	MFPD	MFPD

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<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: Y</p> <p>Treatment Maintenance: Y</p>	<p>During</p>	<p>MFPD</p>	<p>MFPD</p>
<p>Air Quality Standard Project Requirements</p>				
<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>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance Y:</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>
<p>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.</p>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>
<p>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.</p>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>
<p>SPR AQ-4 Minimize Dust: To minimize dust during treatment activities, the project proponent will implement the following measures:</p> <ul style="list-style-type: none"> <li>▶ Limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board (CARB) Fugitive Dust protocol.</li> <li>▶ If road use creates excessive dust, the project proponent will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions. Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board (SWRCB). The project proponent will not over-water exposed areas such that the water results in runoff. The type of dust suppression method will be selected by</li> </ul>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance Y:</p>	<p>During</p>	<p>MFPD</p>	<p>MFPD</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>the project proponent based on soil, traffic, site-specific conditions, and air quality regulations.</p> <ul style="list-style-type: none"> <li>▶ Remove visible dust, silt, or mud tracked-out on to public paved roadways where sufficient water supplies and access to water is available. The project proponent will remove dust, silt, and mud from vehicles at the conclusion of each workday, or at a minimum of every 24 hours for continuous treatment activities, in accordance with Vehicle Code Section 23113.</li> <li>▶ Suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may “cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property,” per Health and Safety Code Section 41700.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<p>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: N</p> <p>Treatment Maintenance: N</p>	N/A	N/A	N/A
<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: N</p> <p>Treatment Maintenance: N</p>	N/A	N/A	N/A
<p>Archaeological, Historical, and Tribal Cultural Resources Standard Project Requirements</p>				
<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>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: N</p>	Prior	MFPD	MFPD
<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>	<p>Initial Treatment: Y</p>	Prior	MFPD	MFPD

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ A written description of the treatment location and boundaries.</li> <li>▶ Brief narrative of the treatment objectives.</li> <li>▶ A description of the activities used (e.g., prescribed burning, mastication) and associated acreages.</li> <li>▶ A map of the treatment area at a sufficient scale to indicate the spatial extent of activities.</li> <li>▶ A request for information regarding potential impacts to cultural resources from the proposed treatment.</li> <li>▶ A detailed description of the depth of excavation, if ground disturbance is expected.</li> </ul> <p>In addition, the project proponent will contact the NAHC for a review of their Sacred Lands File. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	Treatment Maintenance: N			
<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>	Initial Treatment: Y  Treatment Maintenance: N	Prior	MFPD	MFPD
<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>	Initial Treatment: Y  Treatment Maintenance: N	Prior	MFPD	MFPD
<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 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.</p> <p>Cultural Resource Avoidance. In the case that Project activities are required within 50 feet of a known archaeological resource that contains only surface or subsurface deposits, a qualified archaeologist, meeting the Secretary of Interior Standards, shall be retained. The qualified archaeologist shall oversee the identification of the</p>	Initial Treatment: Y  Treatment Maintenance: Y	Prior-During	MFPD	MFPD

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>resource boundary and place a visible delineating fence 50 feet from the resource in each direction and maintain the fencing until the project activities have been completed in that area at which point, the fencing shall be removed so as not to draw attention to the resource.</p>				
<p>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.</p> <p>Cultural Resource Training: Project Incident Commander and Overhead shall be briefed prior to Project implementation as to the location of any previously identified cultural resources within the Project site and measures, as outlined below, to avoid disturbance of these cultural resources shall be made while still ensuring feasible protection from fire. In conformance with SPR CUL-8 Cultural Resource Training – The MFPD shall train all VMP crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers shall be trained to halt work, in accordance with Mitigation Measure CUL-2, if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance).</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>
<p>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.</p>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>
<p>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.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>
<p>Biological Resources Standard Project Requirements</p>				
<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</p>	<p>Initial Treatment: Y</p>	<p>Prior</p>	<p>MFPD</p>	<p>MFPD</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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>Treatment Maintenance: N</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> <ul style="list-style-type: none"> <li>a. by physically avoiding the suitable habitat, or</li> <li>b. by conducting treatment outside of the season when a sensitive resource could be present within the suitable habitat or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites).</li> </ul> <p>Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified RPF or biologist.</p> <p>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</p>				

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>and the scientific community, such as those that are available on the CDFW webpage at: <a href="https://www.wildlife.ca.gov/Conservation/Survey-Protocols">https://www.wildlife.ca.gov/Conservation/Survey-Protocols</a>. Specific survey requirements are addressed for each resource type in relevant SPRs (e.g., additional survey requirements are presented for special-status plants in SPR BIO-7).</p> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<p>SPR BIO-2: Require Biological Resource Training for Workers. The project proponent will require crew members and contractors to receive training from a qualified RPF or biologist prior to beginning a treatment project. The training will describe the appropriate work practices necessary to effectively implement the biological SPRs and mitigation measures and to comply with the applicable environmental laws and regulations. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats with the potential to occur in the treatment area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during treatment activities to leave the area unharmed and when it is necessary to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA) is encountered and cannot leave the site on its own (without being handled). This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>
<p>Sensitive Natural Communities and Other Sensitive Habitats</p>				
<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"> <li>▶ require a qualified RPF or biologist to perform a protocol-level survey following the CDFW "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" (current version dated March 20, 2018) of the treatment area prior to the start of treatment activities for sensitive natural communities and sensitive habitats. Sensitive natural communities will be identified using the best means possible, including keying them out using the most current edition of <i>A Manual of California Vegetation</i> (including updated natural communities data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>), or referring to relevant reports (e.g., reports found on the VegCAMP website).</li> <li>▶ map and digitally record, using a Global Positioning System (GPS), the limits of any potential sensitive habitat and sensitive natural community identified in the treatment area.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior</p>	<p>MFPD</p>	<p>MFPD</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"> <li>▶ Retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat identified and mapped during surveys conducted pursuant to SPR BIO-3. Native riparian vegetation will be retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities.</li> </ul>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>



Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species.</li> <li>▶ Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements.</li> <li>▶ Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do 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).</li> <li>▶ Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided.</li> <li>▶ Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints.</li> <li>▶ Only hand application of herbicides approved for use in aquatic environments will be allowed and only during low-flow periods or when seasonal streams are dry.</li> <li>▶ The project proponent will notify CDFW when required by California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway.</li> <li>▶ In consideration of spatial variability of riparian vegetation types and condition and consistent with California Forest Practice Rules Section 916.9(v) (February 2019 version), a different set of vegetation retention standards and protection measures from those specified in the above bullets may be implemented on a site-specific basis if the qualified RPF and the project proponent demonstrate through substantial evidence that alternative design measures provide a more effective means of achieving the treatment goals objectives and would result in effects to the Beneficial Functions of Riparian Zones equal or more favorable</li> </ul>				



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

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination;</li> <li>▶ clean soil and debris from equipment and sanitize hand tools, buckets, gloves, and footwear when moving from high risk to low risk areas or between widely separated portions of a treatment area; and</li> <li>▶ follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration sites or with rare plants and sensitive habitat (Working Group for <i>Phytoptheras</i> in Native Habitats 2016).</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<b>Special-Status Plants</b>				
<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"> <li>▶ If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys.</li> <li>▶ If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting presence/absence surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior</p>	<p>MFPD</p>	<p>MFPD</p>
<b>Environmentally Sensitive Habitat Areas</b>				
<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</p>	<p>Initial Treatment: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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"> <li>▶ 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.</li> <li>▶ 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.</li> <li>▶ A qualified biologist or RPF familiar with the ecology of the treatment area will monitor all treatment activities in ESHAs.</li> <li>▶ 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.</li> </ul> <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	<p>Treatment Maintenance: N</p>			
<p>Invasive Plants and Wildlife</p>				
<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"> <li>▶ clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife;</li> <li>▶ for all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area from an area with infestations of invasive plants, noxious weeds, or invasive wildlife. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species;</li> <li>▶ inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the treatment area. If the equipment is not clean, the qualified RPF or biological technician will deny entry to the work areas;</li> <li>▶ stage equipment in areas free of invasive plant infestations unless there are no uninfested areas present within a reasonable proximity to the treatment area;</li> <li>▶ identify significant infestations of invasive plant species (i.e., those rated as invasive by Cal-IPC or designated as noxious weeds by California Department of Food and Agriculture) during reconnaissance-level surveys and target them for removal during treatment activities. Treatment methods will be selected based on the invasive species present and may include herbicide application, manual or mechanical treatments, prescribed burning, and/or herbivory, and will be designed to maximize success in killing or removing the invasive plants and preventing reestablishment based on the life history characteristics of the invasive plant species present. Treatments will be focused on removing invasive plant species that cause ecological harm to native vegetation types, especially those that can alter fire cycles;</li> </ul>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>During</p>	<p>MFPD</p>	<p>MFPD</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ treat invasive plant biomass onsite to eliminate seeds and propagules and prevent reestablishment or dispose of invasive plant biomass offsite at an appropriate waste collection facility (if not kept on site); transport invasive plant materials in a closed container or bag to prevent the spread of propagules during transport; and</li> <li>▶ implement Fire and Fuel Management BMPs outlined in the "Preventing the Spread of Invasive Plants: Best Management Practices for Land Managers" (Cal-IPC 2012, or current version).</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<b>Wildlife</b>				
<p>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 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>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior</p>	<p>MFPD</p>	<p>MFPD</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"> <li>▶ 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.</li> <li>▶ Charge temporary electric fencing with intermittent pulse energizers; continuous output fence chargers will not be permitted.</li> <li>▶ 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.</li> <li>▶ Be highly visible to birds and mammals by using high-visibility tape or wire, flagging, or other markers.</li> </ul> <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>Prior-During</p>	<p>MFPD</p>	<p>MFPD</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</p>	<p>Initial Treatment: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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 on the potential species in the area, location of suitable nesting habitat, and type of treatment. For vegetation removal or project activities that would occur during the nesting season, the survey will be conducted at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies. Typically, this timeframe would be up to 3 weeks before treatment. The survey will occur in a single survey period of sufficient duration to reasonably detect nesting birds, including raptors, typically one day for most treatment projects (depending on the size, configuration, and vegetation density in the treatment site), and conducted during the active time of day for target species, typically close to dawn and/or dusk. The survey may be conducted concurrently with other biological surveys, if they are required by other SPRs. Survey methods will be tailored by the qualified RPF or biologist to site and habitat conditions, typically involving walking throughout the survey area, visually searching for nests and birds exhibiting behavior that is typical of breeding (e.g., delivering food).</p> <p>If an active nest is observed (i.e., presence of eggs and/or chicks) or determined to likely be present based on nesting bird behavior, the project proponent will implement a feasible strategy to avoid disturbance of active nests, which may include, but is not limited to, one or more of the following:</p> <ul style="list-style-type: none"> <li>▶ 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.</li> <li>▶ 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.</li> <li>▶ 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.</li> </ul> <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</p>	<p>Treatment Maintenance: Y</p>			

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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"> <li>▶ 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.</li> <li>▶ Retention of Raptor Nest Trees. Trees with visible raptor nests, whether occupied or not, will be retained.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<p>Geology, Soils, and Mineral Resource Standard Project Requirements</p>				
<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 deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials. This SPR applies only to mechanical, prescribed herbivory, and herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>During</p>	<p>MFPD</p>	<p>MFPD</p>
<p>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.</p>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>



Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
Existing compacted road surfaces are exempted as they are already compacted from use. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.				
SPR GEO-3 Stabilize Disturbed Soil Areas: The project proponent will stabilize soil disturbed during mechanical, prescribed herbivory treatments, and prescribed burns that result in exposure of bare soil over 50 percent or more of the treatment area with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. If mechanical, prescribed herbivory, or prescribed burn treatment activities could result in substantial sediment discharge from soil disturbed by machinery, animal hooves, or being bare, organic material from mastication or mulch will be incorporated onto at least 75 percent of the disturbed soil surface where the soil erosion hazard is moderate or high, and 50 percent of the disturbed soil surface where soil erosion hazard is low to help prevent erosion. Where slash mulch is used, it will be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface. This SPR only applies to mechanical, prescribed herbivory, and prescribed burns that result in exposure of bare soil over 50 percent of the project area treatment activities and all treatment types, including treatment maintenance.	Initial Treatment: Y  Treatment Maintenance: Y	During	MFPD	MFPD
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: Y  Treatment Maintenance: Y	During - After	MFPD	MFPD
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: Y  Treatment Maintenance: Y	During	MFPD	MFPD
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: N  Treatment Maintenance: N	N/A	N/A	N/A
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.	Initial Treatment: Y	Prior-During	MFPD	MFPD

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>(ii) Slopes steeper than 50 percent where the erosion hazard rating is high or extreme.</p> <p>(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.</p> <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> <p>(i) Existing tractor roads that do not require reconstruction, or</p> <p>(ii) New tractor roads flagged by the project proponent prior to the treatment activity.</p> <p>(3) Prescribed herbivory treatments will not be used in areas with over 50 percent slope.</p> <p>This SPR applies to all treatment activities and all treatment types, including treatment maintenance.</p>	Treatment Maintenance: Y			
<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>	Initial Treatment: N  Treatment Maintenance: N	N/A	N/A	N/A
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>	Initial Treatment: N  Treatment Maintenance: N	N/A	N/A	N/A
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>	Initial Treatment: Y  Treatment Maintenance: Y	Prior-During	MFPD	MFPD
<p>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.</p>	Initial Treatment: Y	During	MFPD	MFPD

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
	Treatment Maintenance: Y			
<p>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.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	During	MFPD	MFPD
<p>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.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	During	MFPD	MFPD
<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"> <li>▶ a map that delineates staging areas, and storage, loading, and mixing areas for herbicides;</li> <li>▶ a list of items required in an onsite spill kit that will be maintained throughout the life of the activity;</li> <li>▶ procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment.</li> </ul> <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	N/A	N/A	N/A
<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"> <li>▶ Be implemented consistent with recommendations prepared annually by a licensed PCA.</li> <li>▶ Comply with all appropriate laws and regulations pertaining to the use of pesticides and safety standards for employees and the public, as governed by the EPA, DPR, and applicable local jurisdictions.</li> <li>▶ Adhere to label directions for application rates and methods, storage, transportation, mixing, container disposal, and weather limitations to application such as wind speed, humidity, temperature, and precipitation.</li> <li>▶ Be applied by an applicator appropriately licensed by the State.</li> </ul> <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	N/A	N/A	N/A
<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</p>	<p>Initial Treatment: N</p>	N/A	N/A	N/A

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>6684. The project proponent will puncture used containers on the top and bottom to render them unusable, unless said containers are part of a manufacturer’s container recycling program, in which case the manufacturer’s instructions will be followed. Disposal of non-recyclable containers will be at legal dumpsites. Equipment will not be cleaned, and personnel will not be washed in a manner that would allow contaminated water to directly enter any body of water within the treatment area or adjacent watersheds. Disposal of all herbicides will follow label requirements and waste disposal regulations.</p> <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	Treatment Maintenance: N			
<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"> <li>▶ application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative);</li> <li>▶ spray nozzles will be configured to produce the largest appropriate droplet size to minimize drift;</li> <li>▶ low nozzle pressures (30-70 pounds per square inch) will be utilized to minimize drift; and</li> <li>▶ spray nozzles will be kept within 24 inches of vegetation during spraying.</li> </ul> <p>This SPR applies only to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	Initial Treatment: N  Treatment Maintenance: N	N/A	N/A	N/A
<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>	Initial Treatment: N  Treatment Maintenance: N	N/A	N/A	N/A
Hydrology and Water Quality Standard Project Requirements				
<p>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</p>	Initial Treatment: Y  Treatment Maintenance: Y	Prior-During	MFPD	MFPD

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity										
<p>conditions. The specifications for each WDR and Waiver vary by region. Regions 2 (San Francisco Bay), 4 (Los Angeles), 8 (Santa Ana), and 7 (Colorado River) are highly urban or minimally forested and do not offer WDRs or Waivers for fuel reduction or vegetation management activities. The current applicable WDRs and Waivers for timber and vegetation management activities are included in Appendix HYD-1. This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>														
<p>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.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>										
<p>SPR HYD-3 Water Quality Protections for Prescribed Herbivory: The project proponent will include the following water quality protections for all prescribed herbivory treatments:</p> <ul style="list-style-type: none"> <li>▶ 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.</li> <li>▶ 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.</li> <li>▶ Treatment prescriptions will be designed to protect soil stability. Grazing animals will be herded out of an area if accelerated soil erosion is observed.</li> </ul> <p>This SPR applies to prescribed herbivory treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>										
<p>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.</p> <p><b>Procedures for Determining Watercourse and Lake Protection Zone (WLPZ) widths</b></p> <table border="1"> <thead> <tr> <th>Water Class</th> <th>Class I</th> <th>Class II</th> <th>Class III</th> <th>Class IV</th> </tr> </thead> <tbody> <tr> <td> <p>Water Class Characteristics or Key Indicator Beneficial Use</p> </td> <td> <p>1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or</p> <p>2) Fish always or seasonally present onsite, includes habitat</p> </td> <td> <p>1) Fish always or seasonally present offsite within 1000 feet downstream and/or</p> <p>2) Aquatic habitat for nonfish aquatic species.</p> <p>3) Excludes Class III waters that are</p> </td> <td> <p>No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-water flow conditions after</p> </td> <td> <p>Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.</p> </td> </tr> </tbody> </table>	Water Class	Class I	Class II	Class III	Class IV	<p>Water Class Characteristics or Key Indicator Beneficial Use</p>	<p>1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or</p> <p>2) Fish always or seasonally present onsite, includes habitat</p>	<p>1) Fish always or seasonally present offsite within 1000 feet downstream and/or</p> <p>2) Aquatic habitat for nonfish aquatic species.</p> <p>3) Excludes Class III waters that are</p>	<p>No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I and II waters under normal high-water flow conditions after</p>	<p>Man-made watercourses, usually downstream, established domestic, agricultural, hydroelectric supply or other beneficial use.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior</p>	<p>MFPD</p>	<p>MFPD</p>
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Standard Project Requirements				Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
	to sustain fish migration and spawning.	tributary to Class I waters.	completion of timber operations.				
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					
<p>Source: 14 CCR Section 916.5 [936.5, 956.5] (February 2019 version)</p> <p>The following WLPZ protections will be applied for all treatments:</p> <ul style="list-style-type: none"> <li>▶ Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed area to act as a filter strip for raindrop energy dissipation and for wildlife habitat. If this percentage is reduced a qualified RPF will provide the project proponent with a site- and/or treatment activity-specific explanation for the percent surface cover reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced percent as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). This requirement is based on 14 CCR Section 916.4 [936.4, 956.4] Subsection (b)(6) (February 2019 version) and 14 CCR Section 916.5 (February 2019 version).</li> <li>▶ Equipment, including tractors and vehicles, must not be driven in wet areas or WLPZs, except over existing roads or watercourse crossings where vehicle tires or tracks remain dry.</li> <li>▶ Equipment used in vegetation removal operations will not be serviced in WLPZs, within wet meadows or other wet areas, or in locations that would allow grease, oil, or fuel to pass into lakes, watercourses, or wet areas.</li> <li>▶ WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately.</li> <li>▶ Burn piles will be located outside of WLPZs.</li> <li>▶ No fire ignition (nor use of associated accelerants) will occur within WLPZs however low intensity backing fires may be allowed to enter or spread into WLPZs.</li> <li>▶ Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for reduction of soil loss. Treatment shall occur prior to October 15th and disturbances that are created after October 15th shall be treated within 10 days. Stabilization measures shall be selected that will prevent significant movement of soil into water bodies and may include but are not limited to mulching, rip-rap, grass seeding, or chemical soil stabilizers.</li> <li>▶ Where mineral soil has been exposed by project operations on approaches to watercourse crossings of Class I, II, or III within a WLPZ, the disturbed area shall be stabilized to the extent necessary to prevent the discharge of soil into watercourses or lakes in amounts that would adversely affect the quality and beneficial uses of the watercourse.</li> </ul>							

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ Where necessary to protect beneficial uses of water from project operations, protection measures such as seeding, mulching, or replanting shall be used to retain and improve the natural ability of the ground cover within the WLPZ to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes.</li> <li>▶ Equipment limitation zones (ELZs) will be designated adjacent to Class III and Class IV watercourses with minimum widths of 25 feet where side-slope is less than 30 percent and 50 feet where side-slope is 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water.</li> </ul> <p>This SPR applies to all treatment activities and treatment types, including treatment maintenance.</p>				
<p>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"> <li>▶ Locate herbicide mixing sites in areas devoid of vegetation and where there is no potential of a spill reaching non-target vegetation or a waterway.</li> <li>▶ Use only herbicides labeled for use in aquatic environments when working in riparian habitats or other areas where there is a possibility the herbicide could come into direct contact with water. Only hand application of herbicides will be allowed in riparian habitats and only during low-flow periods or when seasonal streams are dry.</li> <li>▶ No terrestrial or aquatic herbicides will be applied within WLPZs of Class I and II watercourses, if feasible. If this is not feasible, hand application of herbicides labeled for use in aquatic environments may be used within the WLPZ provided that the project proponent notifies the applicable regional water quality control board no fewer than 15 days prior to herbicide application. The feasibility of avoiding herbicide application within WLPZ of Class I and II watercourses will be determined by the project proponent and may be based on whether doing so will preclude achieving CalVTP program objectives, including, but not limited to, protection of vulnerable communities. The reasons for infeasibility will be documented in the PSA.</li> <li>▶ No herbicides will be applied within a 50-foot buffer of ESA or CESA listed plant species or within 50 feet of dry vernal pools.</li> <li>▶ For spray applications in and adjacent to habitats suitable for special-status species, use herbicides containing dye (registered for aquatic use by DPR, if warranted) to prevent overspray.</li> <li>▶ Application will cease when weather parameters exceed label specifications or when sustained winds at the site of application exceeds 7 miles per hour (whichever is more conservative);</li> <li>▶ No herbicide will be applied during precipitation events or if precipitation is forecast 24 hours before or after project activities.</li> </ul> <p>This SPR applies to herbicide treatment activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	N/A	N/A	N/A
<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>	Initial Treatment: Y	Prior-During	MFPD	MFPD

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
	Treatment Maintenance: Y			
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: Y</p> <p>Treatment Maintenance: Y</p>	During	MFPD	MFPD
<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 properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. This SPR applies to all activities and all treatment types, including treatment maintenance.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	During	MFPD	MFPD
<p>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.</p>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	N/A	N/A	N/A
<p>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.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	During	MFPD	MFPD
<p>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.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	During	MFPD	MFPD
<p>SPR NOI-6 Notify Nearby Off-Site Noise-Sensitive Receptors: For treatment activities utilizing heavy equipment, the project proponent will notify noise-sensitive</p>	<p>Initial Treatment: N</p>	N/A	N/A	N/A



Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. Notification will include anticipated dates and hours during which treatment activities are anticipated to occur and contact information, including a daytime telephone number, of the project representative. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification. This SPR applies only to mechanical treatment activities and all treatment types, including treatment maintenance.</p>	<p>Treatment Maintenance: N</p>			
<p>Recreation Standard Project Requirements</p>				
<p>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.</p>	<p>Initial Treatment: N  Treatment Maintenance: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>
<p>Transportation Standard Project Requirements</p>				
<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: Y  Treatment Maintenance: Y  Initial Treatment: N  Treatment Maintenance: N</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>

Standard Project Requirements	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<b>Public Services and Utilities Standard Project Requirements</b>				
<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>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	Prior	MFPD	MFPD

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<b>Aesthetics and Visual Resources</b>				
<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>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	N/A	N/A	N/A

<b>Air Quality</b>				
<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>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	During	MFPD	MFPD

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ Diesel-powered off-road equipment used in construction will meet EPA’s Tier 4 emission standards as defined in 40 CFR 1039 and comply with the exhaust emission test procedures and provisions of 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Prior to implementation of treatment activities, the project proponent will demonstrate the ability to supply the compliant equipment. A copy of each unit’s certified tier specification or model year specification and operating permit (if applicable) will be available upon request at the time of mobilization of each unit of equipment.</li> <li>▶ Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following criteria:               <ul style="list-style-type: none"> <li>▪ meet California’s Low Carbon Fuel Standards and be certified by CARB Executive Officer;</li> <li>▪ be hydrogenation-derived (reaction with hydrogen at high temperatures) from 100 percent biomass material (i.e., non-petroleum sources), such as animal fats and vegetables;</li> <li>▪ contain no fatty acids or functionalized fatty acid esters; and</li> <li>▪ have a chemical structure that is identical to petroleum-based diesel and complies with American Society for Testing and Materials D975 requirements for diesel fuels to ensure compatibility with all existing diesel engines.</li> </ul> </li> <li>▶ Electric- and gasoline-powered equipment will be substituted for diesel-powered equipment.</li> <li>▶ Workers will be encouraged to carpool to work sites, and/or use public transportation for their commutes.</li> <li>▶ Off-road equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NO<sub>x</sub> and PM.</li> </ul>				
<b>Archaeological, Historical, and Tribal Cultural Resources</b>				
<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 protect the integrity of the resource. Procedures could include preservation in place (which is the preferred manner of mitigating impacts to archaeological sites), archival research, subsurface testing, or recovery of scientifically consequential information from and about the resource. Any find will be recorded standard DPR Primary Record forms (Form DPR 523) will be submitted to the appropriate regional information center.</p> <p>Cultural Monitoring. If avoidance of Project activities within 50 feet of a known or newly identified cultural resource is not feasible, a qualified archaeologist shall be retained by the MFPD to conduct archaeological monitoring when activities occur within 50 feet of a cultural resource. Additionally, if the known or newly discovered</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Dur</p> <p>ing</p>	<p>MFPD</p>	<p>MFPD</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>cultural resource is of Native American origin, as determined by the qualified archaeologist, the MFPD shall retain a Native American monitor from a culturally affiliated tribe to observe Project activities within 50 feet of the cultural resource.</p> <p>Response to Inadvertent Discoveries. In conformance with Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources, if any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources shall be halted and a qualified archaeologist shall assess the significance of the find. The qualified archaeologist shall work with the MFPD to develop a primary records report that shall comply with applicable state or local agency procedures. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan shall 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 shall work with MFPD 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 shall be recorded standard DPR Primary Record forms (Form DPR 523) shall be submitted to the appropriate regional information center.</p>				

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 (nor use of associated accelerants) will occur within 50 feet of listed plants.</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>
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Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<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"> <li>▶ Physically avoid the area occupied by the special-status plants by establishing a no-disturbance buffer around the area occupied by species and marking the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The no-disturbance buffers will generally be a minimum of 50 feet from special-status plants, but the size and shape of the buffer zone may be adjusted if a qualified RPF or botanist determines that a smaller buffer will be sufficient to avoid loss of or damaging to special-status plants or that a larger buffer is necessary to sufficiently protect plants from the treatment activity. The appropriate size and shape of the buffer zone will be determined by a qualified RPF or botanist and will depend on plant phenology at the time of treatment (e.g., whether the plants are in a dormant, vegetative, or flowering state), the individual species' vulnerability to the treatment method being used, and environmental conditions and terrain. Consideration of factors such as site hydrology, changes in light, edge effects, and potential introduction of invasive plants and noxious weeds may inform an appropriate buffer size and shape.</li> <li>▶ Treatments may be conducted within this buffer if the potentially affected special-status plant species is a geophytic, stump-sprouting, or annual species, and the treatment can be conducted outside of the growing season (e.g., after it has completed its annual life cycle) or during the dormant season using only treatment activities that would not damage the stump, root system or other underground parts of special-status plants or destroy the seedbank.</li> <li>▶ Treatments will be designed to maintain the function of special-status plant habitat. For example, for a fuel break proposed in treatment areas occupied by special-status plants, if the removal of shade cover would degrade the special-status plant habitat despite the requirement to physically or seasonally avoid the special-status plant itself, habitat function would be diminished and the treatment would need to be modified or precluded from implementation.</li> </ul>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>▶ No fire ignition (nor use of associated accelerants) will occur within the special-status plant buffer.</p> <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 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"> <li>▶ creating populations on mitigation sites outside of the treatment area through seed collection and dispersal (annual species) or transplantation (perennial species);</li> <li>▶ purchasing mitigation credits from a CDFW- or USFWS-approved conservation or mitigation bank in sufficient quantities to offset the loss of occupied habitat; and</li> <li>▶ 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.</li> </ul>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<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"> <li>▶ 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:</li> <li>▶ habitat conditions allow for plants to reestablish annually for a minimum of 5 years with no human intervention, such as supplemental seeding; and</li> <li>▶ reestablished habitats contain an occupied area comparable to existing occupied habitat areas in similar habitat types in the region.</li> </ul> <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 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>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p><u>Avoid Mortality, Injury, or Disturbance of Individuals</u></p> <p>The project proponent will implement one of the following 2 measures to avoid mortality, injury, or disturbance of individuals:</p> <ol style="list-style-type: none"> <li>1. Treatment will not be implemented within the occupied habitat. Any treatment activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as determined by a qualified RPF or biologist using the most current and commonly-accepted science and considering published agency guidance; OR</li> <li>2. Treatment will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, CDFW and/or USFWS/NOAA Fisheries will be consulted to determine if there is a period of time within which treatment could occur that would avoid mortality, injury, or disturbance of the species. <ul style="list-style-type: none"> <li>▶ For species listed under ESA or CESA, if the project proponent cannot avoid mortality, injury or disturbance by implementing one of the two options listed above, the project proponent will implement Mitigation Measure BIO-2c.</li> <li>▶ 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.</li> </ul> </li> </ol> <p><u>Maintain Habitat Function</u></p> <ul style="list-style-type: none"> <li>▶ The project proponent will design treatment activities to maintain the habitat function, by implementing the following: <ul style="list-style-type: none"> <li>▪ While performing review and surveys for SPR BIO-1 and SPR BIO-10, a qualified RPF or biologist will identify any habitat features that are necessary for survival (e.g., habitat necessary for breeding, foraging, shelter, movement) of the affected wildlife species (e.g., trees with complex structure, trees with large cavities, trees with nesting platforms; dens; tree snags; large raptor nests [including inactive nests]; downed woody debris; food sources). These habitat features will be marked and treatments applied to the features will be designed to minimize or avoid the loss or degradation of suitable habitat for listed species during treatments. Identification and treatment of these features will be based on the life history and habitat requirements of the affected species and the most current, commonly accepted science.</li> <li>▪ If it is determined during implementation of SPR BIO-1 and SPR BIO-10 that listed or fully protected wildlife with specific requirements for high canopy cover (e.g., Humboldt marten, fisher, spotted owl, coastal California gnatcatcher, riparian woodrat) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by expert opinion, published habitat association information, or other documented standards that are commonly accepted [e.g., 50 percent for coastal California gnatcatcher]) such that habitat function is maintained.</li> </ul> </li> <li>▶ A qualified RPF or biologist will determine if, after implementation of the impact avoidance measures listed above, the habitat function will remain for the affected species after implementation of the treatment. 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.</li> </ul>				



Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<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"> <li>▶ The project proponent will implement the following to avoid mortality, injury, or disturbance of individuals:</li> </ul> <p>For all treatment activities except prescribed burning, the project proponent will establish a no-disturbance buffer around occupied sites (e.g., nests, dens, roosts, middens, burrows, nurseries). Buffer size will be determined by a qualified RPF or biologist using the most current, commonly accepted science and will consider published agency guidance; however, 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"> <li>▶ No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). No activity will occur within the buffer areas until the qualified RPF or biologist has determined that the young have fledged or dispersed; the nest, den, or other occurrence is no longer active; or reducing the buffer would not likely result in disturbance, mortality, or injury. A qualified RPF, biologist, or biological technician will be required to monitor the effectiveness of the no-disturbance buffer around the nest, den, burrow, or other occurrence during treatment. If treatment activities cause agitated behavior of the individual(s), the buffer distance will be increased, or treatment activities modified until the agitated behavior stops. The qualified RPF, biologist, or biological technician will have the authority to stop any treatment activities that could result in mortality, injury or disturbance to special-status species.</li> <li>▶ For prescribed burning, the project proponent will implement the treatment outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season) during which the species may be more susceptible to disturbance, or disturbance could result in loss of eggs or young. For species present year-round, the qualified RPF or biologist will determine the period of time within which prescribed burning could occur that will avoid or minimize mortality, injury, or disturbance of the species. The project proponent may consult with CDFW and/or USFWS for technical information regarding appropriate limited operating periods.</li> </ul>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>

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

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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) 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. Compensation may include:</p> <ol style="list-style-type: none"> <li>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</li> <li>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).</li> </ol> <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"> <li>1. For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding 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.</li> <li>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.</li> </ol> <p>Review requirements are as follows:</p> <ul style="list-style-type: none"> <li>▶ 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.</li> <li>▶ 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.</li> <li>▶ 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.</li> </ul>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<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 Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (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"> <li>▶ 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.</li> <li>▶ If elderberry shrubs are located within 165 feet of the treatment area, the following measures will be implemented: <ul style="list-style-type: none"> <li>▪ 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"> <li>– 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.</li> <li>– 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.</li> </ul> </li> <li>▪ 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.</li> </ul> </li> </ul> <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>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</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"> <li>▶ Treatment areas within the range of these species will be surveyed for the host plant for each species (Table 3.6-34).</li> <li>▶ Host plants for federally listed butterflies within the occupied habitat will be marked with high-visibility flagging, fencing, or stakes, and no treatment activities will occur within 10 feet of these plants.</li> </ul>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ 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.</li> <li>▶ Treatment areas that are not occupied but are within the range of the federally listed butterfly will be divided into as many treatment units as feasible such that the entirety of the habitat is not treated within the same year.</li> <li>▶ Treatments will be conducted in a patchy pattern to the extent feasible in areas that are not occupied but are within the range of the federally listed butterfly, such that the entirety of the habitat is not burned or removed and untreated portions of suitable habitat are retained.</li> </ul> <p>If the project proponent cannot implement the measures above to avoid mortality, injury, or disturbance of federally listed butterflies or degradation of occupied habitat (host plants) such that its function would not be maintained, the project proponent will implement Mitigation Measure BIO-2c.</p> <p><b>CESA and ESA Listed Species.</b> A qualified RPF or biologist will determine if, after implementation of any feasible impact avoidance measures (potentially including others not listed above), the treatment will result in mortality, injury, or disturbance, or if after implementation of the treatment, habitat function will remain for the affected species. For species listed under CESA or ESA or that are fully protected, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding this determination. If consultation determines that mortality, injury, 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><b>Other Special-status Species.</b> A qualified RPF or biologist with knowledge of the special-status species' habitat and life history will review the treatment design and applicable impact minimization measures (potentially including others not listed above) to determine if the anticipated residual effects of the treatment would be significant under CEQA, because implementation of the treatment will not maintain habitat function of the special-status species' habitat or because the loss of special-status individuals would substantially reduce the number or restrict the range of a special-status species. If the project proponent determines the impact on special-status butterflies would be less than significant, no further mitigation will be required. If the project proponent determines that the loss of special-status butterflies or degradation of occupied habitat would be significant under CEQA after implementing feasible treatment design alternatives and impact minimization measures, then Mitigation Measure BIO-2c will be implemented.</p> <p>The only exception to this mitigation approach is in cases where it is determined by a qualified RPF or biologist that the special-status butterfly species would benefit from treatment in the occupied habitat area even though some may be killed, injured or disturbed during treatment activities. For a treatment to be considered beneficial to special-status butterfly species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., by citing scientific studies demonstrating that the species (or similar species) has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or otherwise reduced competition for resources). If it is determined that treatment activities would be beneficial to special-status butterflies, no compensatory mitigation will be required.</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<b>Table 3.6-34 Special-status Butterflies and Associated Host Plants</b>				
<b>Butterfly Species</b>	<b>Host Plants</b>			
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"> <li>▶ To avoid and minimize impacts to Mount Hermon June beetle and Zayante band-winged grasshopper, treatment</li> </ul>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	N/A	N/A	N/A

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>activities will not occur within "Sandhills" habitat in Santa Cruz County, the only suitable habitat for these species.</p> <ul style="list-style-type: none"> <li>▶ 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.</li> </ul> <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>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"> <li>▶ Prescribed burning within occupied or suitable habitat for special-status bumble bees will occur from October through February to avoid the bumble bee flight season.</li> <li>▶ Treatment areas in occupied or suitable habitat will be divided into a sufficient number of treatment units such that the entirety of the habitat is not treated within the same year; the objective of this measure is to provide refuge for special-status bumble bees during treatment activities and temporary retention of suitable floral resources proximate to the treatment area.</li> <li>▶ Treatments will be conducted in a patchy pattern to the extent feasible in occupied or suitable habitat, such that the entirety of the habitat is not burned or removed and untreated portions of occupied or suitable habitat are retained (e.g., fire breaks will be aligned to allow for areas of unburned floral resources for special-status bumble bees within the treatment area).</li> <li>▶ Herbicides will not be applied to flowering native plants within occupied or suitable habitat to the extent feasible during the flight season (March through September).</li> </ul> <p>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</p>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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>				
<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>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	N/A	N/A	N/A



Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ 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).</li> <li>▶ 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).</li> </ul>				
<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"> <li>▶ Reference the <i>Manual of California Vegetation</i>, Appendix 2, Table A2, <i>Fire Characteristics</i> (Sawyer et al. 2009 or current version, including updated natural communities data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>) or other best available information to determine the natural fire regime of the specific sensitive natural community type (i.e., alliance) present. The condition class and fire return interval departure of the vegetation alliances present will also be determined.</li> <li>▶ Design treatments in sensitive natural communities and oak woodlands to restore the natural fire regime and return vegetation composition and structure to their natural condition to maintain or improve habitat function of the affected sensitive natural community. Treatments will be designed to replicate the fire regime attributes for the affected sensitive natural community or oak woodland type including seasonality, fire return interval, fire size, spatial complexity, fireline intensity, severity, and fire type as described in <i>Fire in California's Ecosystems</i> (Van Wagtenonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>). Treatments will not be implemented in sensitive natural communities that are within their natural fire return interval (i.e., time since last burn is less than the average time required for that vegetation type to recover from fire) or within Condition Class 1.</li> <li>▶ To the extent feasible, no fuel breaks will be created in sensitive natural communities with rarity ranks of S1 (critically imperiled) and S2 (imperiled).</li> <li>▶ To the extent feasible, fuel breaks will not remove more than 20 percent of the native vegetation relative cover from a stand of sensitive natural community vegetation in sensitive natural communities with a rarity rank of S3 (vulnerable) or in oak woodlands. In forest and woodland sensitive natural communities with a rarity rank of S3, and in oak woodlands, only shaded fuel breaks will be installed,</li> </ul>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>and they will not be installed in more than 20 percent of the stand of sensitive natural community or oak woodland vegetation (i.e., if the sensitive natural community covers 100 acres, no more than 20 acres will be converted to create the fuel break).</p> <ul style="list-style-type: none"> <li>▶ Use prescribed burning as the primary treatment activity in sensitive natural communities that are fire dependent (e.g., closed-cone forest and woodland alliances, chaparral alliances characterized by fire-stimulated, obligate seeders), to the extent feasible and appropriate based on the fire regime attributes as described in <i>Fire in California's Ecosystems</i> (Van Wagtendonk et al. 2018) and the <i>Manual of California Vegetation</i> (Sawyer et al. 2009 or current version, including updated natural communities data at <a href="http://vegetation.cnps.org/">http://vegetation.cnps.org/</a>).</li> <li>▶ Time prescribed herbivory to occur when non-target vegetation is not susceptible to damage (e.g. non-target vegetation is dormant or has completed its reproductive cycle for the year). For example, use herbivores to control invasive plants growing in sensitive habitats or sensitive natural communities when sensitive vegetation is dormant but invasive plants are growing. Timing of herbivory to avoid non-target vegetation will be determined by a qualified botanist, RPF, or biologist based on the specific vegetation alliance being treated, the life forms and life conditions of its characteristic plant species, and the sensitivity of the non-target vegetation to the effects of herbivory.</li> </ul> <p>The feasibility of implementing the avoidance measures will be determined by the project proponent based on whether implementation of this mitigation measure will preclude completing the treatment project within the reasonable period of time necessary to meet CalVTP program objectives, including, but not limited to, protection of vulnerable communities. If the avoidance measures are determined by the project proponent to be infeasible, the project proponent will document the reasons implementation of the avoidance strategies are infeasible in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any change in the feasibility of avoidance strategies from those explained in the PSA, this will be documented in the post-project implementation report (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</p>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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>				
<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"> <li>▶ Compensate for unavoidable losses of sensitive natural community and oak woodland acreage and function by: <ul style="list-style-type: none"> <li>▪ restoring sensitive natural community or oak woodland functions and acreage within the treatment area;</li> <li>▪ restoring degraded sensitive natural communities or oak woodlands outside of the treatment area at a sufficient ratio to offset the loss of acreage and habitat function; or</li> <li>▪ preserving existing sensitive natural communities or oak woodlands of equal or better value to the sensitive natural community lost through a conservation easement at a sufficient ratio to offset the loss of acreage and habitat function.</li> </ul> </li> <li>▶ The project proponent will prepare a Compensatory Mitigation Plan that identifies the residual significant effects on sensitive natural communities or oak woodlands that require compensatory mitigation and describes the compensatory mitigation strategy being implemented to reduce residual effects, and: <ol style="list-style-type: none"> <li>1. For preserving existing habitat outside of the treatment area in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for</li> </ol> </li> </ul>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project proponent will submit evidence that the necessary mitigation has been implemented or that the project proponent has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity.</p> <p>2. For restoring or enhancing habitat within the treatment area or outside of the treatment area, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.</p> <p>The project proponent will consult with CDFW and/or any other applicable responsible agency prior to finalizing the Compensatory Mitigation Plan in order to satisfy that responsible agency's requirements (e.g., permits, approvals) within the plan.</p>				
<p>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"> <li>▶ Compensate for unavoidable losses of riparian habitat acreage and function by: <ul style="list-style-type: none"> <li>▪ restoring riparian habitat functions and acreage within the treatment area;</li> <li>▪ restoring degraded riparian habitat outside of the treatment area;</li> <li>▪ purchasing riparian habitat credits at a CDFW-approved mitigation bank; or</li> <li>▪ 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.</li> </ul> </li> <li>▶ 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"> <li>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</li> </ol> </li> </ul>	<p>Initial Treatment: N</p> <p>Treatment Maintenance: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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"> <li>▶ The qualified RPF or biologist will delineate the boundaries of federally protected wetlands according to methods established in the USACE wetlands delineation manual (Environmental Laboratory 1987) and the appropriate regional supplement for the ecoregion in which the treatment is being implemented.</li> <li>▶ The qualified RPF or biologist will delineate the boundaries of wetlands that may not meet the definition of waters of the United States, but would qualify as waters of the state, according to the state wetland procedures (California Water Boards 2019 or current procedures).</li> </ul>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>
<ul style="list-style-type: none"> <li>▶ A qualified RPF or biologist will establish a buffer around wetlands and mark the buffer boundary with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). The buffer will be a minimum width of 25 feet but may be larger if deemed necessary. The appropriate size and shape of the buffer zone will be determined in coordination with the qualified RPF or biologist and will depend on the type of wetland present (e.g., seasonal wetland, wet meadow, freshwater marsh, vernal pool), the timing of treatment (e.g., wet or dry time of year), whether any special-status species may occupy the wetland and the species' vulnerability to the treatment activities, environmental conditions and terrain, and the treatment activity being implemented.</li> </ul>				

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<ul style="list-style-type: none"> <li>▶ A qualified RPF or biological technician will periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided.</li> <li>▶ Within this buffer, herbicide application is prohibited.</li> <li>▶ Within this buffer, soil disturbance is prohibited. Accordingly, the following activities are not allowed within the buffer zone: mechanical treatments, prescribed herbivory, equipment and vehicle access or staging.</li> <li>▶ Only prescribed (broadcast) burning may be implemented in wetland habitats if it is determined by a qualified RPF or biologist that:               <ul style="list-style-type: none"> <li>▪ No special-status species are present in the wetland habitat</li> <li>▪ The wetland habitat function would be maintained.</li> <li>▪ The prescribed burn is within the normal fire return interval for the wetland vegetation types present</li> <li>▪ Fire containment lines and pile burning are prohibited within the buffer</li> <li>▪ No fire ignition (nor use of associated accelerants) will occur within the wetland buffer</li> </ul> </li> </ul>				
<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"> <li>▶ 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</li> <li>▶ 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.</li> </ul>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior-During</p>	<p>MFPD</p>	<p>MFPD</p>

Greenhouse Gas Emissions

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<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"> <li>▶ reduce the total area burned by isolating and leaving large fuels (e.g., large logs, snags) unburned;</li> <li>▶ reduce the total area burned through mosaic burning;</li> <li>▶ burn when fuels have a higher fuel moisture content;</li> <li>▶ reduce fuel loading by removing fuels before ignition. Methods to remove fuels include mechanical treatments, manual treatments, prescribed herbivory, and biomass utilization; and</li> <li>▶ schedule burns before new fuels appear.</li> </ul> <p>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: N</p> <p>Treatment Maintenance: N</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>
<p><b>Hazardous Materials, Public Health and Safety</b></p>				
<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 (<a href="https://www.envirostor.dtsc.ca.gov/public/">https://www.envirostor.dtsc.ca.gov/public/</a>) and consult DTSC’s Cortese List to identify any known contamination sites within the project site. If a proposed mechanical treatment or prescribed burn is located on a site included on the DTSC Cortese List as containing potential soil contamination that has not been cleaned up and deemed closed by DTSC, the area will be marked and no prescribed burning or soil disturbing treatment</p>	<p>Initial Treatment: Y</p> <p>Treatment Maintenance: Y</p>	<p>Prior</p>	<p>MFPD</p>	<p>MFPD</p>

Mitigation Measures	Applicable? (Y/N)	Timing	Implementing Entity	Verifying/Monitoring Entity
<p>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>				





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# **Attachment B**

## PROJECT-SPECIFIC CEQA FINDINGS AND STATEMENT OF OVERRIDING CONSIDERATIONS



# ATTACHMENT B - PROJECT-SPECIFIC CEQA FINDINGS AND STATEMENT OF OVERRIDING CONSIDERATIONS

Template Available for Use by Proponents of Vegetation Treatment Projects Within the Scope of the CalVTP Program EIR.

## INTRODUCTION

The Montecito Fire Protection District, referred to herein as "Project Proponent," in the exercise of its independent judgment, makes and adopts the following findings regarding its decision to approve the Montecito Vegetation Treatment Program, referred to herein as "vegetation treatment project," within the scope of the California Vegetation Treatment Program (CalVTP). This document has been prepared in accordance with the California Environmental Quality Act (Pub. Resources Code, Sections 21000 et seq.) (CEQA) and the CEQA Guidelines (Cal. Code Regs., Tit. 14, Sections 15000 et seq.).

## STATUTORY REQUIREMENTS FOR FINDINGS

Public Resources Code section 21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects[.]" The same section provides that the procedures required by CEQA "are intended to assist public agencies in systematically identifying both the significant effects of projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects." (Pub. Resources Code, Section 21002.) Section 21002 goes on to provide that "in the event [that] specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof."

The mandate and principles announced in Public Resources Code section 21002 are implemented, in part, through the requirement that agencies must adopt findings before approving projects for which EIRs are required. (See Pub. Resources Code, Section 21081, subd. (a); CEQA Guidelines, Section 15091, subd. (a).) For each significant environmental effect identified in an EIR for a project, the approving agency must issue a written finding reaching one or more of three permissible conclusions:

- (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
- (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

(CEQA Guidelines, Section 15091, subd. (a); Pub. Resources Code, Section 21081, subd. (a).) Public Resources Code section 21061.1 defines "feasible" to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, legal, and technological factors." (See also *Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 565.)

With respect to a project for which significant impacts are not avoided or substantially lessened, a public agency, after adopting proper findings, may nevertheless approve the project if the agency first adopts a Statement of Overriding Considerations setting forth the specific reasons why the agency found that the project's "benefits" rendered "acceptable" its "unavoidable adverse environmental effects." (CEQA Guidelines, Sections 15093, 15043, subd. (b); see also Pub. Resources Code, Section 21081, subd. (b).) The California Board of Forestry and Fire Protection (the Board), adopted Findings and a Statement of Overriding Considerations on December 30, 2019.

Here, as explained in the Board's Findings and the Draft Program Environmental Impact Report (Draft PEIR) and the Final PEIR (collectively, the "PEIR"), the CalVTP would result in significant and unavoidable environmental effects to the following: Aesthetics; Air Quality; Archaeological, Historical, and Tribal Cultural Resources; Biological Resources; Greenhouse Gas Emissions; Transportation; and Public Services, Utilities, and Service Systems. For reasons set forth in

the Board's Statement of Overriding Considerations, however, the Board determined that overriding economic, social, and other considerations outweigh the significant, unavoidable effects of the CalVTP.

When a responsible agency approves a vegetation treatment project using a within the scope finding for all environmental impacts, it must adopt its own 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. (See CEQA Guidelines section 15096(h).) According to case law, a responsible agency's findings need only address environmental impacts "within the scope of the responsible agency's jurisdiction." (*Riverwatch v. Olivenhain Municipal Water District* (2009) 170 Cal.App.4th 1186, 1202.) Although each responsible agency must adopt its own findings, 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. The following document sets forth the required findings for an agency's project-specific approval that relies on and implements the CalVTP PEIR.

The Project Proponent adopts these findings to document its exercise of its independent judgment regarding the potential environmental effects analyzed in the PEIR and to document its reasoning for approving the vegetation treatment project under the CalVTP in spite of these effects.

## BACKGROUND AND PROJECT DESCRIPTION

[Note to Template Users: PROVIDE PROJECT DESCRIPTION FROM PROJECT-SPECIFIC ANALYSIS]

## ENVIRONMENTAL REVIEW PROCESS

The Project Proponent followed the evaluation and reporting process outlined in the PSA and required under the CalVTP.

On May 31, 2022, Project Proponent submitted to CAL FIRE the required information regarding this project when it began preparing the PSA. The submittal included:

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

Upon adoption of these findings and approval of the project, Project Proponent 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:

- ▶ The completed PSA Environmental Checklist;
- ▶ The 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)

As required under the CalVTP, Project Proponent 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; and
  - 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.

## RECORD OF PROCEEDINGS

In accordance with Public Resources Code Section 21167, subdivision (e), the record of proceedings for the Project Proponent's decision to approve the vegetation treatment project under the CalVTP includes the following documents at a minimum:

- ▶ The certified Final PEIR for the CalVTP, including the Draft PEIR, responses to comments on the Draft PEIR, and appendices;
- ▶ All recommendations and findings adopted by the Board in connection with the CalVTP and all documents cited or referred to therein;
- ▶ All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the treatment project prepared by the Project Proponent, consultants to the Project Proponent, or responsible or trustee agencies with respect to the Project Proponent's compliance with the requirements of CEQA and with respect to the Project Proponent's action on the CalVTP;
- ▶ Matters of common knowledge to the Project Proponent, including but not limited to federal, state, and local laws and regulations;
- ▶ Any documents expressly cited in these findings, in addition to those cited above; and
- ▶ Any other materials required for the record of proceedings by Public Resources Code section 21167.6, subdivision (e).

Pursuant to CEQA Guidelines section 15091, subdivision (e), the documents constituting the record of proceedings are available for review during normal business hours at Montecito Fire Protection District, 595 San Ysidro Road, Santa Barbara, California 93108. The custodian of these documents is Nic Elmquist, Wildland Fire Specialist.

## MITIGATION MONITORING AND REPORTING PROGRAM

A Mitigation Monitoring and Reporting Program (MMRP) was adopted by the Board for the CalVTP, and the applicable mitigation measures for this treatment project have been identified in the PSA. The Project Proponent will use the MMRP to track compliance with the CalVTP mitigation measures. The MMRP will remain available for public review during the compliance period. The Final MMRP is attached to and is approved in conjunction with the approval of the treatment project and adoption of these Findings.

# FINDINGS FOR DETERMINATIONS OF LESS THAN SIGNIFICANT

The Project Proponent has reviewed and considered the information in the Final PEIR for the CalVTP addressing potential environmental effects, proposed mitigation measures, and alternatives. The Project Proponent, relying on the facts and analysis in the Final PEIR and the treatment project PSA, which were presented to the MFPD Board of Directors and reviewed and considered prior to any approvals, concurs with the conclusions of the Final PEIR and the treatment project PSA regarding the potential environmental effects of the CalVTP and the treatment project.

The Project Proponent concurs with the conclusions in the Final PEIR and treatment project PSA that all of the following impacts will be less than significant:

## AESTHETICS AND VISUAL RESOURCES

- ▶ 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
- ▶ 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

## AGRICULTURAL AND FORESTRY RESOURCES

- ▶ 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

## AIR QUALITY

- ▶ Impact AQ-2: Expose People to Diesel Particulate Matter Emissions and Related Health Risk
- ▶ Impact AQ-3: Expose People to Fugitive Dust Emissions Containing Naturally Occurring Asbestos and Related Health Risk
- ▶ Impact AQ-5: Expose People to Objectionable Odors from Diesel Exhaust

## ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

- ▶ Impact CUL-1: Cause a Substantial Adverse Change in the Significance of Built Historical Resources
- ▶ Impact CUL-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource
- ▶ Impact CUL-4: Disturb Human Remains

## BIOLOGICAL RESOURCES

- ▶ Impact BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife
- ▶ Impact BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources
- ▶ Impact BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan



## GEOLOGY, SOILS, AND MINERAL RESOURCES

- ▶ Impact GEO-1: Result in Substantial Erosion or Loss of Topsoil
- ▶ Impact GEO-2: Increase Risk of Landslide

## GREENHOUSE GAS EMISSIONS

- ▶ Impact GHG-1: Conflict with Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of GHGs

## ENERGY RESOURCES

- ▶ Impact ENG-1: Result in Wasteful, Inefficient, or Unnecessary Consumption of Energy

## HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY

- ▶ Impact HAZ-1: Create a Significant Health Hazard from the Use of Hazardous Materials
- ▶ Impact HAZ-2: Create a Significant Health Hazard from the Use of Herbicides

## HYDROLOGY AND WATER QUALITY

- ▶ 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
- ▶ 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
- ▶ 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
- ▶ 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
- ▶ Impact HYD-5: Substantially Alter the Existing Drainage Pattern of a Treatment Site or Area

## LAND USE AND PLANNING, POPULATION AND HOUSING

- ▶ Impact LU-1: Cause a Significant Environmental Impact Due to a Conflict with a Land Use Plan, Policy, or Regulation
- ▶ Impact LU-2: Induce Substantial Unplanned Population Growth

## NOISE

- ▶ Impact NOI-1: Result in a Substantial Short-Term Increase in Exterior Ambient Noise Levels During Treatment Implementation
- ▶ Impact NOI-2: Result in a Substantial Short-Term Increase in Truck-Generated SENL's During Treatment Activities

## RECREATION

- ▶ Impact REC-1: Directly or Indirectly Disrupt Recreational Activities within Designated Recreation Areas

## TRANSPORTATION

- ▶ 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
- ▶ Impact TRAN-2: Substantially Increase Hazards due to a Design Feature or Incompatible Uses

## PUBLIC SERVICES, UTILITIES, AND SERVICE SYSTEMS

- ▶ Impact UTIL-1: Result in Physical Impacts Associated with Provision of Sufficient Water Supplies, Including Related Infrastructure Needs
- ▶ Impact UTIL-3: Comply with Federal, State, and Local Management and Reduction Goals, Statutes, and Regulations Related to Solid Waste

## WILDFIRE

- ▶ Impact WIL-1: Substantially Exacerbate Fire Risk and Expose People to Uncontrolled Spread of a Wildfire
- ▶ Impact WIL-2: Expose People or Structures to Substantial Risks Related to Post-Fire Flooding or Landslides

## CUMULATIVE

- ▶ Agriculture and Forestry Resources
- ▶ Biological Resources
- ▶ Geology, Soils, Paleontology, and Mineral Resources
- ▶ Energy Resources
- ▶ Hazardous Materials, Public Health and Safety
- ▶ Hydrology and Water Quality
- ▶ Population and Housing
- ▶ Noise
- ▶ Recreation
- ▶ Wildfire

## SIGNIFICANT EFFECTS AND MITIGATION MEASURES

The PEIR identified a number of significant and potentially significant environmental effects (or impacts) that the CalVTP will contribute to or cause. The Board determined that some of these significant effects can be fully avoided through the application of feasible mitigation measures. Other effects, however, cannot be avoided by the adoption of feasible mitigation measures or alternatives and thus will be significant and unavoidable. For reasons set forth in Section 10.2 of the Board's Findings and Statement of Overriding Considerations, however, the Board determined that overriding economic, social, and other considerations outweigh the significant, unavoidable effects of the CalVTP.

The Board adopted the findings required by CEQA for all direct and indirect significant impacts. The findings provided a summary description of each impact, described the applicable mitigation measures identified in the PEIR and adopted by the Board, and stated the Board's findings on the significance of each impact after imposition of the adopted mitigation measures. A full explanation of these environmental findings and conclusions can be found in the Final PEIR; and the Board incorporated by reference into its findings the discussion in those documents supporting the Final PEIR's determinations. In making those findings, the Board ratified, adopted, and incorporated into the findings the analyses and explanations in the Draft PEIR and Final PEIR relating to environmental impacts and mitigation measures, except to the extent any such determinations and conclusions were specifically and expressly modified by the findings.

Not every individual treatment project will have all of the significant environmental impacts that the CalVTP was determined to contribute to or cause. Additionally, some of the environmental impacts predicted by the CalVTP PEIR to be significant and unavoidable or less than significant after mitigation may be determined in a PSA to be less severe for an individual treatment project than determined in the statewide PEIR. The impacts and mitigation measures identified in Sections 8.1 and 8.2 below reflect the conclusions of the PSA by indicating which of the CalVTP's impacts that this treatment project will contribute to or cause. By indicating the project-specific effects of this treatment project as follows, the Project Proponent's decisionmaker or decisionmaking body is hereby making the required findings under CEQA regarding the application or feasibility of mitigation measures to reduce those impacts.

## FINDINGS FOR IMPACTS MITIGATED TO LESS THAN SIGNIFICANT

The Project Proponent finds that changes or alterations have been required in, or incorporated into, the treatment project which avoid or substantially lessen the significant environmental effects indicated below, as identified in the Final PEIR and the PSA. Implementation of the mitigation measures indicated below to be applicable to the treatment project, which have been required or incorporated into the project, will reduce these impacts to a less than significant level. The Project Proponent hereby directs that these mitigation measures be adopted.

### BIOLOGICAL RESOURCES

- Impact BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modifications
  - Mitigation Measure BIO-1a: Avoid Loss of Special-Status Plants Listed under ESA or CESA
  - Mitigation Measure BIO-1b: Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA
  - Mitigation Measure BIO-1c: Compensate for Unavoidable Loss of Special-Status Plants
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Tree-Nesting and Cavity-Nesting Wildlife)
  - 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)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat

- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Shrub-Nesting Wildlife)
- 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)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Ground-Nesting Wildlife)
- 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)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Burrowing and Denning Wildlife)
- 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)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Insects and Other Terrestrial Invertebrates)

- 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)
- Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
- Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
- Mitigation Measure BIO-2d: Implement Protective Measures for Valley Elderberry Longhorn Beetle (All Treatment Activities)
- Mitigation Measure BIO-2e: Design Treatment to Retain Special-Status Butterfly Host Plants (All Treatment Activities)
- Mitigation Measure BIO-2f: Avoid Habitat for Special-Status Beetles, Flies, Grasshoppers, and Snails (All Treatment Activities)
- Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities)
- Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
- Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
- Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Bats)
  - 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)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Ungulates)
  - 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)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-2h: Avoid Potential Disease Transmission Between Domestic Livestock and Special-Status Ungulates (Prescribed Herbivory)

- Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
- Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
- Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Fish and Aquatic Invertebrates (in wetlands, vernal pools))
  - 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)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
  - Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands
- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Amphibians and Reptiles (in wetlands, vernal pools, associated riparian))
  - 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)
  - Mitigation Measure BIO-2b: Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Other Special-Status Wildlife Species (All Treatment Activities)
  - Mitigation Measure BIO-2c: Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife if Applicable (All Treatment Activities)
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
  - Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands
- Impact BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation that Leads to Loss of Habitat Function
  - Mitigation Measure BIO-3a: Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3b: Compensate for Loss of Sensitive Natural Communities and Oak Woodlands
  - Mitigation Measure BIO-3c: Compensate for Unavoidable Loss of Riparian Habitat
- Impact BIO-4: Substantially Affect State or Federally Protected Wetlands
  - Mitigation Measure BIO-4: Avoid State and Federally Protected Wetlands
- Impact BIO-5: Interfere Substantially with Wildlife Movement Corridors or Impede Use of Nurseries

- Mitigation Measure BIO-5: Retain Nursery Habitat and Implement Buffers to Avoid Nursery Sites

## HAZARDOUS MATERIALS, PUBLIC HEALTH AND SAFETY

- Impact HAZ-3: Expose the Public or Environment to Significant Hazards from Disturbance to Known Hazardous Material Sites
- Mitigation Measure HAZ-3: Identify and Avoid Known Hazardous Waste Sites

## FINDINGS FOR SIGNIFICANT AND UNAVOIDABLE IMPACTS

The CalVTP PEIR determined that some impacts of the program would be significant and unavoidable, even after implementation of all feasible mitigation. The Project Proponent finds that the treatment project would contribute to or cause the following significant and unavoidable impacts as indicated. Incorporating and implementing the following mitigation measures indicated to be applicable to the treatment project will reduce the severity of this impact, but not to a less-than-significant level. The Project Proponent hereby directs that these mitigation measures be adopted. The Project Proponent therefore finds that changes or alterations have been required in, or incorporated into, the treatment project that will substantially lessen, but not avoid, the significant environmental effect as identified in the PEIR and PSA.

The Project Proponent finds that fully mitigating these impacts are not feasible; there are no feasible mitigation measures beyond the mitigation measures indicated below to reduce these impacts. These impacts will remain significant and unavoidable. The Project Proponent concludes, however, that the benefits of the CalVTP and the vegetation treatment project outweigh the significant unavoidable impacts of the Program and treatment project, as set forth in the Board's Statement of Overriding Considerations the Project Proponent's own Statement of Overriding Considerations, if any].

## AESTHETICS AND VISUAL RESOURCES

- 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
- Mitigation Measure AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks

## AIR QUALITY

- Impact AQ-1: Generate Emissions of Criteria Air Pollutants and Precursors During Treatment Activities that Would Exceed CAAQS Or NAAQS and Conflict with Regional Air Quality Plans
- Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques
- Impact AQ-4: Expose People to Toxic Air Contaminants Emitted by Prescribed Burns and Related Health Risk
- No feasible mitigation is available.
- Impact AQ-6: Expose People to Objectionable Odors from Smoke During Prescribed Burning
- No feasible mitigation is available.

## ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

- Impact CUL-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources or Subsurface Historical Resources
  - Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources

## BIOLOGICAL RESOURCES

- Impact BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modifications (Insects and Other Terrestrial Invertebrates - Bumble Bees)
  - Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities)

## GREENHOUSE GAS EMISSIONS

- Impact GHG-2: Generate GHG Emissions through Treatment Activities
  - Mitigation Measure GHG-2: Implement GHG Emission Reduction Techniques During Prescribed Burns

## TRANSPORTATION

- Impact TRAN-3: Result in a Net Increase in VMT for the Proposed CalVTP
  - No feasible mitigation is available.

## PUBLIC SERVICES, UTILITIES AND SERVICE SYSTEMS

- Impact UTIL-2: Generate Solid Waste in Excess of State Standards or Exceed Local Infrastructure Capacity
  - No feasible mitigation is available.

## CUMULATIVE

### Aesthetics

- Cumulative Aesthetics Impact related to Degradation of a Scenic Vista or Visual Character or Quality of Public Views, or Damage to Scenic Resources in a State Scenic Highway
  - Mitigation Measure AES-3: Conduct Visual Reconnaissance for Non-Shaded Fuel Breaks and Relocate or Feather and Screen Publicly Visible Non-Shaded Fuel Breaks

### Air Quality

- Cumulative Air Quality Impact related to On-Road Vehicle and Off-Road Equipment Exhaust Emissions
  - Mitigation Measure AQ-1: Implement On-Road Vehicle and Off-Road Equipment Exhaust Emission Reduction Techniques



## Archaeological, Historical, and Tribal Cultural Resources

- Cumulative Archaeological, Historical, and Tribal Cultural Resources Impact related to Inadvertent Discoveries of Unique Archaeological Resources
  - Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources

## Biological Resources

- Cumulative Biological Resources Impact related to Bumble Bees
  - Mitigation Measure BIO-2g: Design Treatment to Avoid Mortality, Injury, or Disturbance and Maintain Habitat Function for Special-Status Bumble Bees (All Treatment Activities)

## Transportation

- Cumulative Transportation Impact related to Vehicle Miles Travelled
  - No feasible mitigation is available.

## Public Services, Utilities and Service Systems

- Cumulative Public Services, Utilities, and Service Systems Impact related to Disposal of Biomass
  - No feasible mitigation is available.

## STATEMENT OF OVERRIDING CONSIDERATIONS<sup>1</sup>

As set forth in the Board's adopted Findings, the Board determined that the CalVTP will result in significant adverse environmental effects that cannot be avoided even with the adoption of all feasible mitigation measures, and there are no feasible project alternatives that would mitigate or substantially lessen the impacts. Despite these effects, however, the Board, in accordance with CEQA Guidelines Section 15093, chose to approve the CalVTP because, in its view, the benefits to life, property, and other resources, and the other benefits of the CalVTP, will render the significant effects acceptable.

In the Board's judgment, the CalVTP and its benefits outweigh its unavoidable significant effects. The Board's Findings were based on substantial evidence in the record. The Board's Statement of Overriding Considerations identified the specific reasons why, in the Board's judgment, the benefits of the CalVTP as approved outweigh its unavoidable significant effects.

Exercising its independent judgment and review, the Project Proponent concurs that the benefits of the CalVTP and the treatment project outweigh the significant environmental effects and hereby incorporates by reference and adopts the Board's Statement of Overriding Considerations for the CalVTP.

Any one of the reasons listed in the Statement of Overriding Considerations is sufficient to justify approval of the treatment project. Thus, even if a court were to conclude that not every reason is supported by substantial evidence, the Project Proponent would stand by its determination that each individual reason is sufficient. The substantial

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<sup>1</sup> If the PSA indicates that the project proponent's treatment project will not contribute to or cause any of the significant and unavoidable impacts determined in the PEIR, the proponent need not adopt a statement of overriding considerations.

evidence supporting the various benefits can be found in the preceding findings, which are incorporated by reference into this section, and the documents found in the Record of Proceedings, which are described and defined in Section 5, above.

- ▶ The CalVTP will reduce dire risks to life, property, and natural resources in California.
- ▶ The CalVTP reflects the most current and commonly accepted science and conditions in California and allows for adaptation in response to potential evolution and changes in science and conditions.
- ▶ The CalVTP reflects the Board's and CAL FIRE's goals. The CalVTP will help the Board and CAL FIRE achieve their central goals for reducing and preventing the impacts of fire in the state, as outlined in the *2018 Strategic Fire Plan for California*. The CalVTP will help to establish a natural environment that is more resilient and built assets that are more resistant to the occurrence and effects of wildland fire.
- ▶ The CalVTP will help implement Executive Orders, including:
  - EO B-42-17: Governor Brown's order issued to bolster the state's response to unprecedented tree die-off through further expediting removal of millions of dead and dying trees across the state;
  - EO B-52-18: Governor Brown's order to improve forest management and restoration, provide regulatory relief, and reduce barriers for prescribed fire; and
  - EO N-05-19: Governor Newsom's order directing CAL FIRE to recommend immediate-, medium-, and long-term actions to help prevent destructive wildfires.
- ▶ The Board is required by law to comply with SB 1260, signed into law by Governor Brown in February 2018, which improves California forest management practices to reduce the risk of wildfire in light of the changing climate and includes provisions for the CalVTP PEIR to serve as the programmatic CEQA coverage for prescribed burns within the SRA. The CalVTP will bring the Board into compliance with these requirements.
- ▶ The Board is required by law to comply with SB 632, signed into law by Governor Newsom in October 2019, which requires the Board to certify a Final PEIR, pursuant to CEQA, for the vegetation treatment program filed with the State Clearinghouse under Number 2019012052 in January 2019. The CalVTP will bring the Board into compliance with this requirement.
- ▶ The CalVTP will help to meet California's GHG emission goals consistent with the California Forest Carbon Plan, California's 2017 Climate Change Scoping Plan, *Fire on the Mountain: Rethinking Forest Management in the Sierra Nevada*, and California 2030 Natural and Working Lands Climate Change Implementation Plan.



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# **Attachment C**

## Cultural Report



**An Archaeological Survey Report for the  
Montecito Fire VMP Project  
Santa Barbara County, California**

by:

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September 2022

**Part 1: Project Information**

**Project Number:** 14311/Board of Forestry Project ID - 2022-12

**Name of Montecito Fire Department Project Managers:** Nic Elmquist and Maeve Juarez

**Project Size (acres):** 1144 Acres

**Name of 7.5' USGS Quad Map:** Santa Barbara and Carpinteria Quadrangles

**Name of Landowners:** from west to east – TBD

**Legal Location and Proximity:**

Township 4N / Range 26W/ Sections 3,4,5,6,7,8,9,10,11,15,16,17,18

Township 4N / Range 27W / Sections 1,2,3,11,12,35,36

The Montecito Fire Protection District's Montecito Vegetation Management Project (proposed VMP Project) is proposed to occur within the unincorporated community of Montecito located in the southern extent of Santa Barbara County, approximately 90 miles northwest of Los Angeles. The Montecito Planning Area generally lies between the Pacific Ocean to the south and the foothills of the Santa Ynez Mountains to the north and the City of Santa Barbara to the west and the unincorporated community of Summerland to the east.

**Funding Information:** TBD

**Project Description:**

The proposed VMP Project is designed to conduct vegetation treatment activities in the Montecito Fire Protection District (MFPD) to reduce flammable vegetation, improve environmental conditions (e.g., forest health), and provide a strategic location between the Santa Ynez Mountain Range and the City of Montecito where firefighting ground and air resources can gain access and provide firefighters the ability to safely reduce the intensity, slow down or stop the spread of a wildfire that may occur on the southern side of the ridge. The project site consists of an approximately 1,238.7-acre area (see Figure 1 and 2-A1, -

A2, -A3, -B1, B2, B3), including approximately 922.1-acres of mixed manual treatments and 316.6-acres of prescribed herbivory as defined below.

- **Herbivory Treatment.** The Project includes 23 prescribed herbivory treatment areas occurring within a total of approximately 922.1 acres of steep and rugged terrain. These areas provided for limited access by hand crews or mechanical equipment, making prescribed herbivory the only realistic vegetation management treatment activity in the proposed project areas. The prescribed herbivory treatment activities would utilize temporary electric fences to contain the animals, which would be constructed along existing road and trail systems. During project implementation, there would be a need to construct narrow (approximately 3-foot) saw lines to facilitate fence construction.

For the prescribed herbivory treatments, animals would be confined within small (1-10 acre) paddocks using portable electric fencing until the agreed-upon level of grazing in the paddock is completed. Prior to being brought to the site, the herd will be sequestered for at least 3 days where feed utilized does not contain unwanted seed/plant material. Grazing activities will be conducted in a manner which keeps all animals under herdsman's control and appropriately confined. Measures would be taken to ensure no grazing animals or herd control animals cause noise which disturbs adjoining neighbors, and to remove animals that cause a noise nuisance. Within each paddock, the goal will be a 75% reduction of herbaceous fuels (grasses), trampled or consumed, and a 50% reduction of palatable vegetation on the ladder fuels on all other vegetation (shrubs) up to 3.5 feet in height. Combined effects will create a 12"-3' spacing between 50% of the vegetation. The animals will then be moved to the next paddock.

Ground Disturbance: Limited to fence installation expected to extend no greater than approximately two feet below current ground surface where ¼-inch diameter PVC temporary fence posts will be pressed into the ground in approximately 12-foot intervals along the perimeter of the grazing area in order to suspend the animal containment wire system.

- **Mixed Manual Treatment Activities.** The Project includes 29 mixed treatment areas consisting of manual treatment activities (hand crews using chain saws) occurring within a total of approximately 316.6 acres. Hand crews would remove dead trees, ladder fuels on mature trees, surface dead woody material, decrease the number of standing shrubs by approximately 50 percent, and reduce the height of annual grasses. Crews would drag the cut vegetation by hand, or utilize a winch attached to a small tractor, to pull it to a chipper stationed at an adjacent road. The vegetation would be chipped into a dump truck, and the chips would be hauled away to the local green waste facility. The proposed mixed treatments would generally occur within 100-feet of a road system and therefore no new roads would be constructed.

Ground Disturbance: Limited to the transportation of a small tractor when needed resulting in disturbances extending no greater than approximately 6 inches below current ground surface due to occasional tire tracks depending on condition of existing roads. Note: no grubbing or removal of vegetation at the root is included in this treatment plan and all transportation of machinery will occur within existing roads.

Treatment activities are further detailed in the project description provided in the Project Specific Analysis (PSA).

## Part 2: Archaeological Records Check Information

**Date of Records Check Conducted by Information Center:** May 18; June 30; and September 7, 2022

**Information Center File Number:** 22-087

### **Summary of Records Check Results:**

On May 18, 2022, Dudek received the results of a California Historical Resources Information System (CHRIS) database records search conducted by the Central Coast Information Center (CCIC), located on the campus of Santa Barbara Museum of Natural History. The search included any previously recorded cultural resources and investigations within a 0.125-mile radius of the proposed VMP Project site. The CHRIS search also included a review of the NRHP, the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. Confidential Attachment A provides the records search results.

### **Previously Recorded Cultural Resources**

Results of the CHRIS database records search indicate that thirteen (13) cultural resources have been previously recorded within 0.125-mile of the proposed VMP Project site, five (5) of which are located within the proposed VMP Project site. The identified cultural resources include seven (7) prehistoric archaeological sites, two (2) historic archaeological sites, one (1) multicomponent (prehistoric and historic) site and four (4) built environment resources. Table 1 summarizes all previously recorded cultural resources identified within the records research radius followed by summaries of each cultural resource located within the proposed VMP Project site and all prehistoric archaeological resources located within the records search radius.

**Table 1. Cultural Resources Within 0.125-Mile of the Proposed VMP Project**

Designation	Age & Type	Resource Description	Recorded By	NRHP/CRHR Status	Approximate Proximity to Proposed Project Site
CA-SBA-000504 (P-42-000504)	Prehistoric Site	Same site as CA-SBA-000507	1929 (Steward)	7: Not Evaluated	97 meters (318 feet)
CA-SBA-000505 (P-42-000505)	Prehistoric Site	Prehistoric site consisting of a sandstone boulder with painted petroglyphs	1890 (Mallery)	7: Not Evaluated	32 meters (104 feet)
CA-SBA-000507 (P-42-000507)	Prehistoric Site	Prehistoric site consisting of a sandstone boulder with painted petroglyphs	1929 (Steward); 1979 (William D. Hyder and C. Mark Oliver)	7: Not Evaluated	97 meters (318 feet)
CA-SBA-001423 (P-42-001423)	Prehistoric Site	Sandstone boulder with approximately 72 cupules	1976 (Lee)	7: Not Evaluated	Within
CA-SBA-001581 (P-42-001581)	Prehistoric Site	Low density shell and lithic scatter	1978 (Erlandson/Heinzen)	7: Not Evaluated	Within
CA-SBA-	Prehistoric Site	Prehistoric site	1985 (Brenda)	7: Not	30 meters



001918 (P-42-001918)		consisting of a moderate density lithic scatter and bedrock mortars	Bowser & L. Wilcoxon)	Evaluated	(100 feet)
CA-SBA-001919 (P-42-001919)	Historic Site	trash scatter of bottles, ceramics, license plates, wheel rim, rusty wire circa 1930s	1985 (Brenda Bowser & L. Wilcoxon)	7: Not Evaluated	30 meters (100 feet)
CA-SBA-001920 (P-42-001920)	Historic Site	historic midden with glass, ceramic sherds, cut animal bone and marine shell scatter	1985 (B. Bowser & L. Wilcoxon)	7: Not Evaluated	180 meters (590 feet)
CA-SBA-002380 (P-42-002380)	Prehistoric Site	shell midden with lithic scatter and bone	1990 (L. Santoro)	7: Not Evaluated	130 meters (426 feet)
P-42-002766	Multicomponent Site	New Cold Springs Trail circa 1903, following route between ethnographic village of Siujt and the Cuyama Valley then to Central Valley	1995 (R. Milliken)	7: Not Evaluated	Within
CA-SBA-003622H (P-42-003622)	Historic Structure/Built Environment Resource	Section of Highway 192, circa 1926	1999 (M. Darcangelo, S. Mikesell); 2005 (B. Larson, A. Walters, A. Rischel)	7: Not Evaluated	125 meters (410 feet)
CA-SBA-003792H (P-42-003792)	Historic Structure/Built Environment Resource	State Route 192, Feature J – a flat headwall that caps a 36” metal pipe culvert	2005 (B. Larson, A. Walters, A. Rischel)	6Z – found ineligible for NR, CR or local designation through survey evaluation	Within
CA-SBA-003793H (P-42-003793)	Historic Structure/Built Environment Resource	State Route 192, Feature I – L-shaped headwall at inlet of double barrel corrugated metal culvert	2005 (B. Larson, A. Walters, A. Rischel)	6Z – found ineligible for NR, CR or local designation through survey evaluation	70 meters (229 feet)
P-42-041018	Historic Structure/Built Environment Resource	SCE Santa Clara-Ojai-Santa Barbara 66kV Transmission Line circa 1932	2012 (Wendy L. Tinsley Becker)	6Z – found ineligible for NR, CR or local designation through survey evaluation	Within

***CA-SBA-000504 and CA-SBA-507(P-42-000504)***

CA-SBA-000504 and CA-SBA-000507 is a prehistoric rock art feature (painted petroglyphs) present on a sandstone boulder measuring six meters high by nine meters in diameter (20 feet high and 30 feet in diameter) located at an elevation of 550 feet above mean sea level (amsl) approximately 97 meters (318 feet) 130 meters east of the proposed VMP Project area at its closest point. CA-SBA-504/507 is documented as consisting of one sandstone boulder upon which rock art, measuring approximately 30 inches x 30 inches, is present and was originally formally recorded by Steward in 1929. However, the site was documented informally by Dr. Lorenza Gordin Yates in an April 25, 1885, article in *The Weekly Independent* titled *Painted Rock of Montecito* in which he asserts that according to Indian tradition the rock art is known as “the bad Indian cave”. The site record for CA-SBA-507 attributes additional recordings to Hoffman in 1886, Garrick Mallery in his contribution in the *Tenth Annual Report of the Bureau of Ethnology to the Secretary of the Smithsonian Institution, 1888-89* and his 1893 book *Picture-Writing of the American Indians*, and Campbell Grant in 1960. All describe or depict the site as an isolated boulder with a slight cavity within which rock art is illustrated and Mallery distinguishes the art as “in general form to others in Santa Barbara”. Subsequent recordings occur in 1979 by William Hyder and Mark Oliver and John Johnson in 1988 in a letter to UCSB’s Department of Anthropology explaining that the resources recorded as CA-SBA-504 and CA-SBA-507 are the same resource. Contemporary recordings describe the resource to be in a deteriorating state due natural and man-induced environmental circumstances. Based on the site record, this site has not been subjected to subsurface testing nor evaluated for listing on CRHR or the NRHP.

***CA-SBA-000505 (P-42-000505)***

CA-SBA-000505 is a prehistoric rock art feature present on a sandstone boulder that measures six meters high by nine meters in diameter (20 feet high and 30 feet in diameter) located at an elevation of 550 feet amsl approximately 32 meters (104 feet) west of the proposed VMP Project area at its closest point. CA-SBA-505 is documented as consisting of one sandstone boulder upon which rock art (painted petroglyphs) is present located approximately 0.5-mile east of CA-SBA-504 and was originally recorded by Mallery in the 1890s and by Steward in 1929 (first names unknown), who described the site as an isolated boulder with a slight cavity on the west side within which rock art is illustrated “in general form to others in Santa Barbara”. Based on the site record, this resource has not been subjected to subsurface testing nor evaluated for listing on CRHR or the NRHP.

***CA-SBA-000507 (P-42-000507)***

See description for CA-SBA-000504.

***CA-SBA-001423***

CA-SBA-001423 is a prehistoric cupule rock feature present on a rock outcrop that measures approximately 3.5 meter by 3.5 meter (12 by 12 feet) located at an elevation of 550 feet amsl located within the western portion of the proposed VMP Project where mixed manual treatment activities are proposed to occur but outside of any proposed ground disturbance. CA-SBA-1423 is documented as consisting of a boulder upon which several cupules (approximately 72) are present within an approximate 90 by 107 cm (3 by 3.5 feet) area. The resource was originally formally recorded by Georgia Lee in 1976 who described the cupules as both circular and ovoid averaging 4 by 3 cm to 6 x 3 cm in size and that more cupules may be present under surrounding soils. Lee also noted that the daughter of the owner of the property where the resource is located had found a basel-notched projectile point nearby and that a bedrock mortar site is located approximately 1,000 yards from CA-SBA-1423. Based on the site record,

this resource has not been subjected to subsurface testing nor evaluated for listing on CRHR or the NRHP.

***CA-SBA-001581***

CA-SBA-001581 is a prehistoric resource measuring approximately 200 meters southwest to northeast by 100 meters east to west (656 by 328 feet) located at an elevation of approximately 575 feet amsl and is located partially within the western portion of the proposed VMP Project site where mixed manual treatment activities are proposed to occur but outside of any proposed ground disturbance. CA-SBA-1581 is documented as consisting of a low-density shell and lithic scatter including chert and quartzite flakes and debitage as well as shell fragments of varied species (Chione predominate). The resource was originally formally recorded in 1978 by Jon Erlandson and Robert Heinzen through pedestrian survey. Erlandson and Heinzen explain in the site record that their survey was limited by visibility and restriction of boundaries of the county-owned land and that the site might extend further along a natural bench located within privately-owned land. Based on the site record, this resource has not been subjected to subsurface testing nor evaluated for listing on CRHR or the NRHP.

***CA-SBA-001918***

CA-SBA-001918 is a prehistoric resource measuring approximately 171 meters north to south by 164 meters east to west (560 by 540 feet) at an elevation of approximately 200 feet amsl and is located approximately 30 meters (100 feet) east of the southeastern portion of the proposed VMP Project site. CA-SBA-1918 was identified by pedestrian survey and documented as consisting of a moderate density scatter of chipped stone including three biface fragments, two projectile points and one drill of Monterey, Franciscan and Temblor cherts and obsidian; groundstone artifacts including four manos and 1 metate; two bedrock mortar boulders; land mammal bone; and fossilized whale bone. The resource was originally formally recorded in 1985 by Brenda Bowser and Larry Wilcoxon who describe the resources as appearing to be associated with the Millingstone Horizon and potentially from the late part of the Early Period of the Early Middle Period. Based on the site record, this resource has not been subjected to subsurface testing nor evaluated for listing on CRHR or the NRHP.

***CA-SBA-001919***

CA-SBA-001919 is a historic resource measuring approximately 5 meters north to south by 12 meters east to west (16 by 39 feet) at an elevation of approximately 215 feet amsl and is located immediately adjacent to the southwestern portion of the proposed VMP Project site where herbivory is proposed to occur. CA-SBA-1919 was identified by pedestrian survey and documented as consisting of bottles, most with maker's marks; 1930s license plates; wheel rim; rusty wire, drain tile fragments; and ceramic sherds including enamel ware. The resource was originally formally recorded in 1985 by Brenda Bowser and Larry Wilcoxon who describe the resource as a 20<sup>th</sup> Century trash dump. Based on the site record, this resource has not been subjected to subsurface testing nor evaluated for listing on CRHR or the NRHP.

***CA-SBA-002380 (P-42-002380)***

CA-SBA-002380 is a prehistoric resource measuring approximately 32 meters north to south by 16 meters east to west (10 by 5 feet) at an elevation of approximately 100 feet amsl and is located approximately 180 meters (590 feet) south of the southeastern portion of the proposed VMP Project site. CA-SBA-2380 was identified by observation of a trench wall excavated during road construction activities and documented as a lens of shell, burned fish bone and chert flakes at a depth of 60 cm (2 feet). The resource was originally formally recorded in 1990 by Loren Santoro who asserted the site had potentially been destroyed by construction activities. Based on the site record, this resource has not been

subjected to subsurface testing nor evaluated for listing on CRHR or the NRHP.

***P-42-002766/H***

CA-SBA-002766/H is a multicomponent linear resource measuring approximately 580 feet at varied elevations from 750 to 1,250 feet amsl and is located partially within the western portion of the proposed VMP Project site where mixed manual treatment is proposed to occur. CA-SBA-2766 was identified by pedestrian survey and documented as consisting of both a historic trail segment and potential ethnohistoric and prehistoric trail segment. The resource was originally formally recorded in 1995 by R. Milliken who described the resource as The Cold Springs Trail as determined from 1903 and 1905 topographic maps. Although the entirety of the Trail has lost integrity, segments like CA-SBA-2766/H have retained some physical traits. Additionally, Milliken asserts that the Trail “follows the most logical route from the ethnographic village of *Siuju* (located at the mouth of Mission Creek) over the mountain to the Santa Ynez River and on up Mono Creek to the Cuyama Valley, and from there along the Highway 166 route into the Central Valley”. Based on the site record, this resource has not been subjected to subsurface testing nor evaluated for listing on CRHR or the NRHP.

***CA-SBA-3622H***

CA-SBA-003622H is a historic linear resource measuring approximately 21 miles at varied elevations from 250 to 550 feet amsl and immediately adjacent to the western portion of the proposed VMP Project site where herbivory is proposed to occur. CA-SBA-3622 was identified by pedestrian survey and documented as a historic roadway. The resource was originally formally recorded in 1999 by M. Darcangelo and S. Mikesell who described the resource as a historic road dating to the early 20<sup>th</sup> Century that traverses the foothills of Santa Barbara and Montecito between the 154 and 101 highways. The road has been referred to as “Valley Road” and “Highway 192” and includes historic features associated with the road such as markings, bridges and culverts. Based on the site record, this resource has not been evaluated for listing on CRHR or the NRHP.

***CA-SBA-003792H***

CA-SBA-003792H is a historic resource measuring approximately 1.25 meters (4 feet) long and 1 meter (4 feet) high at an elevation of approximately 125 feet amsl and is located within the southwestern portion of the proposed VMP Project site where herbivory is proposed to occur. CA-SBA-3792H was identified by pedestrian survey and documented as a historic feature consisting of a “flat headwall that caps the outlet of the 36-inch corrugated metal pipe culvert located on the north side of the road and includes four courses of dressed sandstone set in mortar”. The resource was originally formally recorded in 1999 by Far Western and again in 2005 by B. Larson, A. Walters and A. Rischel who describe the resource as a dressed sandstone culvert on State Route 192. Based on the site record, this resource has not been evaluated for listing on CRHR or the NRHP.

***P-42-041018***

P-42-041018 is a historic linear resource measuring approximately 35 miles at varied elevations from 1,000 to 1,550 feet amsl and overlaps a few small portions of the proposed VMP Project site where herbivory and mixed manual treatment activities are proposed to occur. P-42-041018 was identified by pedestrian survey and documented as a historic transmission line. The resource was originally formally recorded in 2012 by Wended Tinsley Becker who described the resource as the Santa Clara-Ojai-Santa Barbara 66kV Transmission Line constructed in 1932 of steel lattice towers, tubular steel poles and wooden poles. Based on the site record, this resource has been evaluated for listing on CRHR or the NRHP and found ineligible.

### Previous Cultural Resource Studies

Results of the CHRIS database records search indicate that 61 cultural resource studies have been conducted within the records search area between 1974 and 2015. Of these studies, 38 are mapped as having addressed portions of the proposed VMP Project. Table 2 summarizes all previous cultural resources studies followed by a brief summary of those reports that address portions of the proposed VMP Project site and were made available by the CCIC.

**Table 2. Cultural Resources Studies Conducted Within 0.125-Mile of the Proposed VMP Project**

CCIC ID	Year	Author	Report Title
SR-00007	1979	Coombs, G.	An Archaeological Field Reconnaissance of a Parcel of Land North of Summerland, California.
SR-00039	1980	Brown, S., Grijalva, J., Ringer, D., and Whitney, B.	Cultural Resources Overview for the Santa Barbara Regional Wastewater Reclamation Study.
SR-00102	1974	Brandoff, J.	Archaeological Reconnaissance for Camino Cielo Lateral Fuelbreak Routes Santa Barbara District.
SR-00431	1977	Meacham, C.	An Archaeological Survey of Proposed Culvert Improvements in Santa Barbara County, California 05-SB-114, 192 0.7/2.0, 5.4/6.6 05201 - 252001.
SR-00435	1976	Perez, M.	Archaeological reconnaissance of six areas to be affected by installation of water mains in the Montecito County Water District.
SR-00509	1983	Stone, D.	Phase I Archaeological Assessment, APN 5-020-20, 30, 48.
SR-00605	1983	Waldron, W.	Negative Archaeological Report State Highway 192
SR-00612	1985	Wilcoxon, L.	A Cultural Resource Evaluation for the Boeske Ranch, Montecito, California
SR-00614	1986	Wilcoxon, L.	A Phase 2 Cultural Resource Evaluation Boeske Ranch, Montecito, California
SR-00680	1988	Snethkamp, P. and Michaels, G.	Letter report: Phase I prehistoric archaeological survey, 305 West Mountain Drive, Santa Barbara, CA.
SR-00681	1987	Brooks, S.	Oak Creek Canyon Ranch Archaeological Survey
SR-00682	1987	Berry, S.	Letter Report, County of Santa Barbara Resource Management Department: 350 East Mountain Drive surface survey
SR-00696	1988	Wells, H. and Martz, P.	Phase I cultural resources investigation of Lovik Memorial Field, Final Report
SR-00704	1989	Wilcoxon, L., Haley, B., Imwalle, M., and Harmon, J.	A Phase 1 Archaeological Resource Evaluation Westmont College Faculty Housing Project Montecito, California

CCIC ID	Year	Author	Report Title
SR-00793	1989	Wilcoxon, L. and Harmon, J.	A Supplemental Phase 1 Archaeological Resource Evaluation for the Westmont College Faculty Housing Project Water Pipeline, Montecito, California
SR-00825	1988	Conard, R.	Ennisbrook, Montecito, California: Phase III Documentation of Historic Resources.
SR-00858	1991	Science Applications International Corporation, Rudolph, J., and Sheets, R.	Phase 1 cultural resource survey; Proposed pump station and water main replacement project, SB, CA
SR-00864	1989	Billman, B. and Snethkamp, P.	Letter report: Phase I prehistoric archaeological survey, 1002 Coyote Road, Santa Barbara, CA.
SR-01141	1991	Treiberg, K. and Wheeler, G.	Draft: Negative Declaration, Buena Vista Creek Flood Control Maintenance
SR-01202	1991	Santa Barbara County Flood Control and Water Conservation District and Resource Management Division	Draft: Negative Declaration Sycamore Creek Flood Control Maintenance (91-ND-32).
SR-01203	1991	Taylor, T.	Archaeological Survey Report Electrical Utility Undergrounding at Highway 192 M.P. 10.00 East Valley Road, Montecito, California (Cal Trans Permit No. 0591 6UT 0283).
SR-01424	1993	Stellmacher, A.	Cultural Resource Report for Negative Finding (Short Form) San Ysidro Trail
SR-01451	1993	Wilcoxon, L. and Locke, C.	A Phase I Archaeological Resource Evaluation for the proposed Montecito Cellular Telephone Relay Station in Santa Barbara County, California
SR-01632	1994	Levulett, V. and Pavlik, R.	Negative Archaeological Survey Report: Sycamore Canyon Road Slope Stabilization

CCIC ID	Year	Author	Report Title
SR-01655	1993	Wilcoxon, L.	A Phase I Prehistoric/Native American Archaeological Resource Evaluation for Twelve Proposed Residential Lots and Access Roads on the Shirley C. Burden Property Montecito, California
SR-01746	1967	Chartkoff, J.	Archaeological Resources on Fourteen Stream Channels in coastal Santa Barbara County, California
SR-01759	1994	Anderson, K.	Cultural Resource Report for Negative Findings: Romero Trail
SR-01778	1995	Anderson, K.	Archaeological Reconnaissance Report: Santa Barbara Front Country Trails, Maintenance and Continuing Use: Cold Springs Trail.
SR-01783	1995	Dahl, David	Archaeological Reconnaissance Report: Santa Barbara Front Country Trails: Maintenance and Continuing Use: Cold Springs Trail, Tunnel Trail, Jesusita Trail, Rattlesnake Trail
SR-01896	1995	Bowser, Brenda	Phase 1 Archaeological Study for a Proposed Residence at 328 West Mountain Drive, City of Santa Barbara
SR-01909	1996	Kay, D.	Phase I Cultural Resources Investigation, 244 Camino Del Rosario, APN 155-05-049, Summerland, California
SR-01911	1996	Maki, Mary	A Phase I Cultural Resources Survey of 1.5 Acres for the Skofield Reservoir Replacement Project City of Santa Barbara, Santa Barbara County, California
SR-01931	1995	Anderson, Karin	Archaeological Reconnaissance Report: Maintenance and Continuing Use: Rattlesnake Trail
SR-01986	1997	Fugro West and Mary Maki	Phase I Cultural Resources Survey, Skofield Reservoir Replacement Project, City of Santa Barbara, Santa Barbara County, California
SR-01989	1996	Hazeltine, Timothy and Santoro, L.	Phase I Archaeological Survey, 931 Coyote Road, Santa Barbara, California
SR-02053	1997	Stone, David	Phase 1 Cultural Resource Investigation for the Tentative Parcel Map 811 Romero Canyon Road, Montecito, CA
SR-02243	1998	Pfeiffer, L.	Phase 1 Cultural Resources Investigation Westmont College Master Plan Improvements
SR-02485	1999	Haslouer, Leeann and Stone, David	Phase 1 Archaeological Resources Report Page Driveway and Landscape Repair Project 1651 Sycamore Canyon Road Santa Barbara, California

CCIC ID	Year	Author	Report Title
SR-02578	2000	Stone, David	Phase I Archaeological Resources Report, Tentative Map Lot Line Adjustment 98-LA-013, 960 and 1000 East Mountain Drive, Montecito, CA
SR-02580	2000	Stone, David	Phase I Archaeological Resources Report, APN 021-061-019, 121 West Mountain Drive, Santa Barbara, CA
SR-02616	2000	Joslin, T.	Negative Archeological Survey Report
SR-02624	2000	Schmidt, J.	Sheffield 16kV Distribution Pole Replacement Project, Santa Barbara County
SR-02656	2001	Romani, John F. and Timothy Hazeltine	Results of Phase 1 Cultural Resource Investigation: 355 Ortega Ridge Road, Summerland, Santa Barbara County, CA [APN 005-020-024] (Los Grading Project, Case No. 00-LUS-380 SM)
SR-02667	2001	Santa Barbara County Flood Control and Water Conservation District	Draft Program Environmental Impact Report: Updated Routine Maintenance Program
SR-02962	2002	Carbone, Larry	Phase 1 Archaeological Resource Assessment for Proposed Construction Development at 1633 East Valley Road, Montecito, County of Santa Barbara, CA (APN 007-230-01)
SR-03611	2006	Carbone, Larry A.	Phase 1 Archaeological Resources Evaluation for Proposed Phase IV Development at the San Ysidro Ranch Property, Montecito Area, County of Santa Barbara, California.
SR-04153	2007	Stone, D.	Phase I Archaeological Resources Report. 1651 Sycamore Canyon Road Santa Barbara, California APN: 019-290-001
SR-04224	2008	Romani, G.	Phase I Archaeological Investigation: 40 Acres parcel located at 1017 Hot Springs Road, (APN 011-010-008) Montecito, Santa Barbara County, California
SR-04321	2008	Toren, A. George	DWO 6049-4800; A.I. No. 8-4812: Sheffield16kV Deteriorated Pole Replacement Project, Montecito, Santa Barbara County, California



CCIC ID	Year	Author	Report Title
SR-04435	2009	Gonzalez, Matthew and Garcia, Kyle	Results of Archaeological Survey and Monitoring for Pole Replacement and Access Road Improvements Associated With Southern California Edison's Emergency Response To The Tea Fire; Santa Barbara County, California
SR-04438	2008	James J. Schmidt	Tea Fire: Emergency Transmission Road Grading, Montecito Area, Santa Barbara County
SR-04534	2009	James J. Schmidt	Archaeological Letter Report: WO 6049-4800; 9-4887; TD 402292: Stanwood 16 kV Deteriorated Pole Replacement Project, Santa Barbara County, California
SR-04574	2006	Wee, Stephen and Larson, Bryan	Historical Resources Evaluation Report: Masonry Features within State Right-of-Way Along State Route 192, Santa Barbara County, California
SR-04586	2010	Orfila, Rebecca S.	Archaeological Survey for the Southern California Edison Company: Replacement of Twenty-One Deteriorated Power Poles on the Crowder 12KV, Lucerne 12KV, Maybell 12KV, Muroc 12KV, Museum 12KV, Oban 12KV, Queensland 12KV, Roosevelt 12KV, Santa Clara-Wakefield #2 66KV, and Sheffield 16KV Circuits near Carpinteria (Santa Barbara County), Santa Paula (Ventura County), Covina and Lancaster (Los Angeles County), California (WO 4605-2395, 6026-4800, J4884, 6036-4800 0-4869, and 6049-4800 9-4898)
SR-04846	2012	Schmidt, James J.	Archaeological Survey Report for Southern California Edison Company's Replacement of One Deteriorated Power Pole Structure (Pole #674958E) near the City of Santa Barbara in Santa Barbara County, California
SR-04907	2010	David Stone	Phase 1 Archaeological Resources Investigation, Tentative Parcel Map 14,765, APN 013-050-035, 1050 Coyote Road, Montecito Area, Santa Barbara County, California
SR-04928	2013	Erin A. Enright, Eric S. Nocerino, and Ann M. Munns	Phase 1 and Extended Phase 1 Archaeological Investigations for 1781 Glen Oaks Drive, Montecito, Santa Barbara County, California

CCIC ID	Year	Author	Report Title
SR-05300	2015	McDaniel, Heather and Stone, David	Phase 1 Archaeological Investigation: Gibraltar Peak Radio Tower, 3035 Gibraltar Road, Santa Barbara County, California, APN 153-280-021
SR-05300A	2015	Brian Barbier and Katy Sanchez	Appendix A: CCIC Records Search, Appendix B: Native American Heritage Commission Sacred Land Files Search
SR-05306	2015	David Stone	Phase 1 Archaeological Resources Report Casa Dorinda Master Plan 300 Hot Springs Road Monticito, California APN 009-070-020
SR-05306A	2015	Jessika Akmenkalns	Appendix A: CCIC Records Search

### ***SR-00039***

*Cultural Resources Overview for the Santa Barbara Regional Wastewater Reclamation Study* (Brown, S., Grijalva, J., Ringer, D., and Whitney, B., 1982) documents a literature review overlapping a portion of the current proposed Project site. The purpose of the preliminary review was to assess the potential significance of archaeological, historical, and Native American impacts of three proposed alternative wastewater distribution systems; no field survey was conducted. The literature review did not find any sites recorded in the current proposed Project site. The report includes recommendations that upon implementation of the project, site visits by Native American monitors and archaeologists and an intensive field reconnaissance, due to the archaeological sensitivity of the area.

### ***SR-00102***

*Archaeological Reconnaissance for Camino Cielo Lateral Fuelbreak Routes Santa Barbara District* (Brandoff, 1974) documents the results of a records search, a literature review, and an intensive field survey overlapping a portion of the current proposed Project site. The purpose of the survey was to record archaeological resources of the area and provide recommendations for management pertaining to proposed construction in the areas. Two resources were identified in the records search, but they could not be relocated/revsited during the survey; one new resource was identified: CA-SBA-1313 consisting of two groundstones. The report includes recommendations that upon implementation of the project, hand-clearing of vegetation and notification in the event of further discoveries occur.

### ***SR-00431***

*An Archaeological Survey of Proposed Culvert Improvements in Santa Barbara County, California 05-SB-114, 192 0.7/2.0, 5.4/6.6 05201 – 252001* (Meacham, 1977), documents the results of a literature review and pedestrian survey completed for the San Luis Obispo (SLO) Department of Transportation project proposed to replace, improve, and add to existing culverts in Santa Barbara County. The project was CEQA exempt, due to the emergency nature of the project enacted as a result of the Sycamore Canyon Fire. The project location is in the City of Santa Barbara on Route 144 (Sycamore Canyon Road) from Salinas Street to Route 192 (Stanwood Drive) and on Route 192 from 0.6 mile west to 0.6 mile east of Route 144, located in the Santa Ynez Range foothills. The records search found no resources within the study area. No sites were identified during the survey, however, two locations (culverts #8 and 10) contained potential archaeological material and further assessment was recommended for any development in these areas.

**SR-00509**

*Phase I Archaeological Assessment, APN 5-020-20, 30, 48.* (Stone, 1983) documents a pedestrian survey of a 17.6-acre project site in order to locate and assess any archaeological resources in the study area. No previously unrecorded sites were discovered during the survey, and only one Pismo clam shell fragment was found near Picay Creek. No recommendations were made.

**SR-00605**

*Negative Archaeological Report State Highway 192* (Waldron, 1985) documents the results of a pedestrian archaeological survey and an archival records search. The purpose of the survey was to assess the impact of a guardrail installation by Caltrans. The records search did not identify any previously recorded archaeological sites on the subject property. The survey also did not identify any previously unrecorded cultural resources. It was determined that further development of the area would have no adverse impacts on any cultural resource, though an archaeologist should be contacted if any resources are discovered during the project.

**SR-00612**

*A Cultural Resource Evaluation for the Boeske Ranch, Montecito, California* (Wilcoxon, 1985) documents the results of a Phase I cultural resources records search and intensive field survey of approximately 122 acres of land. The purpose of the survey and records search was to provide an inventory of cultural resources on the subject property so that they could be properly considered for future development. During the course of the survey, nine previously unrecorded cultural resources were identified, including one (1) prehistoric site (CA-SBA-1918), two 20<sup>th</sup> century historic sites (CA-SBA-1919H and -1920H), and six (6) historic architectural sites and/or features. Recommendations for the site included preservation of historic and prehistoric resources or, if not possible, further evaluation and determination of mitigation measures.

**SR-00614**

*A Phase 2 Cultural Resource Evaluation Boeske Ranch, Montecito, California* (Wilcoxon, 1986) documents the results of a Phase II excavation and analysis of three archaeological sites and the evaluation of ten historic structures and/or features on the Boeske Ranch in Montecito, California. The investigation was conducted to evaluate the integrity and significance of each cultural resource in relation to future development on the property. The investigation included hand excavation of thirty-five, 1.0 x .5-meter, excavation units and three backhoe trenches at three previously identified archaeological sites. The report makes the recommendation for the property to be added to the National Register of Historic Places (NRHP).

**SR-00681**

*Oak Creek Canyon Ranch Archaeological Survey* (Brooks, 1987) documents a Phase I Archaeological Survey that included archival research as well as an archaeological field survey of approximately seventy acres of the Oak Creek Canyon Ranch at 1066 Mountain Drive in Montecito, Santa Barbara County. This study was conducted to evaluate the area for residential development. One isolate was encountered during the survey, but no other cultural resources were found. No recorded sites were identified as a result of the study and no recommendations for further archaeological investigations were made.

**SR-00682**

*Letter Report, County of Santa Barbara Resource Management Department: 350 East Mountain Drive surface survey* (Berry, 1987) documents a pedestrian survey on a residential lot located at 250 East Mountain Drive. No cultural remains were found, and no recommendations were made.

**SR-00704**

*A Phase I Archaeological Resource Evaluation Westmont College Faculty Housing Project Montecito, California* (Wilcoxon, Haley, Imwalle, and Harmon, 1989) documents the results of an intensive field survey and background archival research for the purpose of assessing construction impacts and providing appropriate management recommendations. No cultural resources were identified as a result of background research. Although the survey did not identify any Native American or prehistoric resources, several historic structures were identified. However, none of these structures or features were determined to qualify as potentially significant resources under CEQA or eligible for listing as local landmark. No recommendations.

**SR-00825**

*Ennisbrook, Montecito, California: Phase III Documentation of Historic Resources.* (Conard, 1988) documents the historic resources at Ennisbrook/Boeske Ranch and methods, findings and interpretations resulting from a data recovery investigation.

**SR-00858**

*Phase I cultural resource survey; Proposed pump station and water main replacement project, SB, CA* (Science Applications International Corporation, Rudolph, J., and Sheets, R., 1991) summarizes the results of a Phase I archaeological survey for a proposed electric pump station installation and water main replacement project located next to City Reservoir No. 1 at the end of Cedar Lane in Santa Barbara, California. Background research did not find any cultural resources within the project area. However, due to shell found during a nearby survey and the project area's close proximity to another recorded site (CA-SBA-99), archaeological monitoring was recommended for all ground-disturbing activities.

**SR-01141**

*Draft: Negative Declaration, Buena Vista Creek Flood Control Maintenance* (Treiberg and Wheeler, 1991) is an environmental document prepared for the proposed maintenance program for a one-mile segment of Sycamore Creek, located in the Santa Ynez Mountains in Santa Barbara County. Santa Barbara County Division of Environmental Review prepared the document. No measures were recommended.

**SR-01202**

*Draft: Negative Declaration Sycamore Creek Flood Control Maintenance (91-ND-32)* (Santa Barbara County Flood Control and Water Conservation District and Resource Management Division, 1991) is an environmental document prepared for the proposed maintenance program on a 0.83-mile segment of Buena Vista Creek. Santa Barbara County Division of Environmental Review prepared the document. No measures were recommended.

**SR-01424**

*Cultural Resource Report for Negative Finding (Short Form) San Ysidro Trail* (Stellmacher, 1993) is a letter report summarizing a field survey and archival research to determine findings in the Area of Potential Effect (APE) for a trail project in Los Padres National Forest. No resources were found during the survey or the literature review resulting in a finding "no effect".

**SR-01451**

*A Phase I Archaeological Resource Evaluation for the proposed Montecito Cellular Telephone Relay Station in Santa Barbara County, California* (Wilcoxon and Locke, 1993) documents the results of background research and an intensive field survey conducted for the proposed cellular telephone relay

station site, associated access road and utility easement corridor on a 2300-acre lot in the Montecito foothills. A records search revealed no previously recorded cultural resources in the project area and the survey encountered no potentially significant prehistoric or historic archaeological resources. No further investigation or mitigation was recommended.

***SR-01655***

*A Phase I Prehistoric/Native American Archaeological Resource Evaluation for Twelve Proposed Residential Lots and Access Roads on the Shirley C. Burden Property Montecito, California* (Wilcoxon, 1993) documents the results of a cultural resource records search and intensive archaeological field survey for the residential development on East Mountain Drive near the intersection of Cold Springs Road in Montecito. The records search identified three (3) prehistoric sites (CA-SBA-504, -505, and -1423) within a .5-mile radius of the project area. No potentially significant cultural resources were identified during the background research or field survey within the project area. No further investigation or mitigation was recommended.

***SR-01746***

*Archaeological Resources on Fourteen Stream Channels in coastal Santa Barbara County, California* (Chartkoff, 1967) details reconnaissance of a twelve (12)-mile span of coast on the southern side of the Santa Ynez Mountains from Picay Creek to Tecolito Creek to determine whether any prehistoric remains would be endangered by construction and improvements conducted by the Army Corps of Engineers. A records search identified twenty-two archaeological sites on or adjacent to the proposed stream channel and three more cultural resources were identified as a result of the survey. Data recovery efforts were recommended to salvage what data was remaining from the already impacted resources.

***SR-01778***

*Archaeological Reconnaissance Report: Santa Barbara Front Country Trails, Maintenance and Continuing Use: Cold Springs Trail* (Anderson, 1995) summarizes an evaluation of Cold Springs Trail, located in Los Padres National Forest, for the purpose of trail maintenance. A survey identified and recorded two historic sites and two prehistoric sites. Test excavations were recommended to determine the vertical and horizontal extent of subsurface cultural deposits and to determine potential impacts resulting from trail maintenance. No other recommendations were made.

***SR-01783***

*Archaeological Reconnaissance Report: Santa Barbara Front Country Trails: Maintenance and Continuing Use: Cold Springs Trail, Tunnel Trail, Jesusita Trail, Rattlesnake Trail* (Dahl, 1995) documents an archaeological survey of four trails in Santa Barbara County in support of trail use and maintenance. Two sites (0507-54-166 and 0507-54-506P/H) were determined to be impacted by the proposed project. Recommendations were made to reduce the impacts including rerouting the trails and protecting the sites with barricades.

***SR-01911***

*A Phase I Cultural Resources Survey of 1.5 Acres for the Skofield Reservoir Replacement Project City of Santa Barbara, Santa Barbara County, California* (Maki, 1996) details the results of a cultural resources investigation including a records search and an intensive field survey for the proposed replacement of the Skofield Reservoir water tank. No archaeological resources were identified within 0.5 miles of the project area as a result of the records search or survey. The reservoir and associated water lines built/installed in 1929 were identified as historic built resources; however, they were determined ineligible for listing on the

CRHR or the NRHP. No further investigation or mitigation was recommended.

**SR-01986**

*Phase I Cultural Resources Survey, Skofield Reservoir Replacement Project, City of Santa Barbara, Santa Barbara County, California* (Maki and West, 1997) documents a Phase I cultural resources survey of the 1.5-acre project area and a Phase I historical resources report, both conducted for the proposed replacement of the Skofield Reservoir water tank. No archaeological resources were identified within 0.5 miles of the project area as a result of the records search or survey. The reservoir, built/installed in 1929, was identified as a historic built resource; however, it was determined ineligible for listing on the CRHR or the NRHP. No further investigation or mitigation was recommended.

**SR-02243**

*Phase I Cultural Resources Investigation Westmont College Master Plan Improvements* (Pfeiffer, 1998) documents the methods and results of a cultural resource investigation of approximately 10.2 acres of proposed improvements on Cold Springs Road, Montecito, California in accordance with the Westmont College Master Plan. This investigation included a records search, literature review, and surface reconnaissance survey. The record search and fieldwork identified one cultural resource within the proposed project area. This previously recorded prehistoric site could not be revisited/found during the survey. No additional investigations or mitigation measures were recommended.

**SR-02578**

*Phase I Archaeological Resources Report, Tentative Map Lot Line Adjustment 98-LA-013, 960 and 1000 East Mountain Drive, Montecito, CA* (Stone, 2000) documents the methods and results of a cultural resource investigation for a proposed lot line adjustment between five parcels at 960 and 1000 East Mountain Drive in Montecito. The investigation consisted of background research and an intensive archaeological survey. Neither the background research or the field survey identified any potentially significant prehistoric or historic cultural resources. No additional investigations or mitigation measures were recommended.

**SR-02580**

*Phase I Archaeological Resources Report, APN 021-061-019, 121 West Mountain Drive, Santa Barbara, CA* (Stone, 2000) documents the methods and results of a cultural resource investigation for proposed property improvements at 121 West Mountain Drive in Santa Barbara. The investigation included background research and an intensive field survey, neither of which identified cultural resources within the project area. No additional investigations or mitigation measures were recommended.

**SR-02616**

*Negative Archeological Survey Report* (Joslin, 2000) documents a survey of seven (7) acres of land along Route 144 for the purpose of emergency repairs following the Barrow Pit Landslide. Archival research and a pedestrian survey did not identify cultural resources within the proposed project site. No additional investigations or mitigation measures were recommended.

**SR-02624**

*Sheffield 16kV Distribution Pole Replacement Project, Santa Barbara County* (Schmidt, 2000) documents the methods and results of a cultural resource investigation for fifty-six (56) locations for the Sheffield 16kV Distribution Pole Replacement Program for Southern California Edison. A records search identified sixteen archaeological sites within a 0.25-mile radius of the project pole locations. Pedestrian surveys were conducted at twenty-nine project locations resulting in the identification of cultural resources within several

of the project locations. It was determined the proposed project had the potential to adversely impact cultural resources. Recommendations included prohibiting grading within any of the cultural resource boundaries, limited access to culturally sensitive areas, curtailing ground disturbance to hand-digging (rather than mechanical) in culturally sensitive areas, and archaeological monitoring throughout implementation of the project.

***SR-02667***

*Draft Program Environmental Impact Report: Updated Routine Maintenance Program* (Santa Barbara County Flood Control and Water Conservation District, 2001) details the maintenance program for the Santa Barbara Flood Control and Water Conservation District, including CEQA requirements for conducting maintenance in culturally sensitive areas.

***SR-02962***

*Phase I Archaeological Resource Assessment for Proposed Construction Development at 1633 East Valley Road, Montecito, County of Santa Barbara, CA* (Carbone, 2002) documents the methods and results of a cultural resource investigation for potential development of a 40-acre property located at 1633 East Valley Road in Montecito. The investigation included a records search and an intensive field survey resulting in the identification of four archaeological sites within a 0.5-mile radius of the project area: two (2) prehistoric sites (CA-SBA-1918 and -2380) and two (2) historic sites (CA-SBA-1919H and 1920H). No cultural resources were identified within the proposed project and additional investigations, or mitigation measures were recommended.

***SR-04224***

*Phase I Archaeological Investigation: 40 Acres parcel located at 1017 Hot Springs Road, (APN 011-010-008) Montecito, Santa Barbara County, California* (Romani, 2008) documents the methods and results of a cultural resource investigation for a proposed residential construction project on a previously graded 40-acre parcel at 1017 Hot Springs Road in Montecito. The investigation including a records search and an intensive field survey did not result in the identification of no cultural resources within or adjacent to the property. No additional investigations, or mitigation measures were recommended.

***SR-04435***

*Results of Archaeological Survey and Monitoring for Pole Replacement and Access Road Improvements Associated with Southern California Edison's Emergency Response to The Tea Fire; Santa Barbara County, California* (Gonzalez and Garcia, 2009) documents the methods and results of a cultural resource investigation for an emergency response project related to the Tea Fire in Santa Barbara, California. The investigation, including a records search and an intensive field survey, did not result in the identification of cultural resources within or adjacent to the property. Monitoring was recommended for any earthmoving operations within or nearby the project area; cultural resources were not identified as a result of the monitoring effort.

***SR-04438***

*Tea Fire: Emergency Transmission Road Grading, Montecito Area, Santa Barbara County* (Schmidt, 2008) documents the methods and results of a cultural resource investigation for an emergency response project involving road grading related to the Tea Fire in Santa Barbara, California. The investigation, including a records search and an intensive field survey, did not result in the identification of cultural resources within or adjacent to the property. No additional investigations, or mitigation measures were recommended.

**SR-04907**

*Phase I Archaeological Resources Investigation, Tentative Parcel Map 14,765, APN 013-050-035, 1050 Coyote Road, Montecito Area, Santa Barbara County, California* (Stone, 2010) documents the methods and results of a cultural resource investigation for an 8-acre parcel in Montecito, California. The investigation, including a records search and an intensive field survey, did not result in the identification of cultural resources within or adjacent to the property. No additional investigations, or mitigation measures were recommended.

**SR-04928**

*Phase I and Extended Phase I Archaeological Investigations for 1781 Glen Oaks Drive, Montecito, Santa Barbara County, California* (Enright, Nocerino, and Munns, 2013) documents the methods and results of a cultural resource investigation for a proposed residential dwelling project at 1781 Glen Oaks Drive in Montecito. A records search did not identify cultural resources within or adjacent to the proposed Project site, but several sites were identified within the records search radius. No cultural materials were observed during the pedestrian survey or during the subsurface testing. No additional investigations, or mitigation measures were recommended.

- (X) Records Check Request, Map, written reply from the Information Center are attached (Attachment A)
- ( ) Records Check Not Attached

Justification:

**Part 3: Native American Consultation Information**

- (X) Example of a notification letter(s) (including maps) is attached

List of Native American individuals or groups that were provided written notification:

<b>Native American Representative</b>	<b>Tribal Affiliation</b>
Beverly Salazar Folkes	Chumash, Tataviam, Fernandeno
Mariza Sullivan	Coastal Band of the Chumash Nation
Dr. Kote, Lin A-Lul’Koy Lotah, and Qun-tan Shup	Owl Clan Consultants - Chumash
Carol Pulido	Chumash
Mark Vigil Sr., Chief Mark Vigil Jr.	San Luis Obispo County Chumash Council
Kenneth Kahn; Sam Cohen; Nakia Zavalla; Kelsie Merrick	Santa Ynez Band of Chumash Indians
Barbara Lopez	Barbareno Band of Chumash Indians
Eleanor Fishburn (nee Arellanes)	Barbareno Band of Chumash Indians
Julie Lynn Tumamait-Stenslie	Barbareño/Ventureño Band of Mission Indians
Patrick Tumamait	Barbareño/Ventureño Band of Mission Indians
Gilbert M. Unzueta Jr.	Chumash



<b>Native American Representative</b>	<b>Tribal Affiliation</b>
Pete Crowheart Zavalla	Los Padres National Forest Headquarters - Tribal Liaison Program Manager
Joseph Ontiveros	Soboba Band of Luiseno Indians
Raymond Huaute	Morongos Band of Mission Indians
Vincent Salsedo	Mishewal Wappo Tribe of Alexander Valley
Daniel McCarthy	San Manuel Band of Mission Indians
Dale Miller	Elk Valley Rancheria
Vince Whipple	Rincon Band of Luiseno Indians
Steven Hutchason	Wilton Rancheria
Dennis Ramirez	Mechoopda Indian Tribe of Chico Rancheria
Anna Hoover	Pechanga Tribe, Temecula Band of Luiseno Indians
Thomas Torma	Wiyot Tribe
Gene Whitehouse	United Auburn Indian Community
Natalie Forrest-Perez	Pit River Tribe
Beverly Salazar Folkes	Chumash, Tataviam, Fernandeno

**Date of the NAHC Native American Contact List that was used:** May 16, 2022

**Date notification was sent:** May 18, 2022

**Results of Information Request:** negative

- No reply received as of (date):
- Written reply received (copy attached)
- Verbal reply received (summarize reply below):
- Native American archaeological or cultural sites were not identified within the project area
- Native American archaeological or cultural sites have been identified within the project area

**Date Notification Letters were sent to Native Americans (if applicable):** August 11, 2022

**Date copies of notification letters sent to the Director:** N/A

**Results of Notification to Native Americans:**

- No reply received as of (date):
- Written reply received (copy attached)
- Verbal reply received (summarize reply below):

## **Part 4: Pre-Field Research**

**Literature Reviewed:** See Project Area Background Context and References Attachment

**Persons Contacted:** Nic Elmquist and Maeve Juarez

### **Summary of Results of Pre-Field Research:**

See Project Area Background Context and References Attachment

Pre-field research was conducted to provide a comprehensive understanding of the regional and local context in order to identify the appropriate survey strategy as well as determine the types of cultural resources that could potentially be encountered within the Project site and surrounding area. The pre-field research was also employed in this investigation to interpret, record, and evaluate findings within the context of local history and prehistory. In short, in addition to the literature sources provided in the Project Area Background Context and References Attachment the following resources were employed to better understand previous land use within the proposed Project area: historic aerials and topographic maps, General Land Office (GLO) plat maps, CHRIS database, National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), the California Points of Historical Interest lists, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list.

## **Part 5: Training and Experience of Archaeological Surveyors**

**Name of current Archaeological Surveyor(s):** Heather McDaniel McDevitt M.A., RPA, Dana Taggart, M.A., Kira Archipov B.S., Brenda Rogers, B.A., Lanette Renz, B.A.

Archaeological Survey conducted by Professional Archaeologist

Archaeological Survey conducted by person with current CAL FIRE Archaeological Training

CAL FIRE Archaeological Training Course # Date Training Course was completed:

Archaeological Survey for previous project within site survey area previously conducted by (provide name):

## **Part 6: Survey Methods and Procedures**

### **Survey strategy:**

The survey efforts address all areas where ground disturbing treatment activities are proposed to occur; Areas which were too steeply sloped for a pedestrian survey were surveyed visually to the greatest extent possible.

The intensive-level survey methods consisted of a pedestrian survey conducted in parallel transects, spaced no more than 10 meters apart (approximately 30 feet) as appropriate with existing roadways surveyed 10-30 ft on each side. The survey area includes all delineated areas where ground disturbing activities are proposed to occur. Deviations from transects only occurred in areas containing dense vegetation, impassible natural features, or steep slopes greater than 40 percent grade (see below for details). The ground surface was inspected for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, groundstone tools, ceramics, fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions, features indicative of structures and/or structures or remnants of (e.g., standing exterior walls, post holes, foundations), and historic artifacts (e.g., metal, glass, ceramics, building materials). Ground disturbances such as burrows, cut banks, trails and drainages were also visually inspected for exposed subsurface materials. No artifacts were collected during the survey.

Additionally, observation of landscapes in areas surrounding the immediate survey area were considered to anticipate natural features that could contain archaeological remains (such as prominent rock outcroppings, benches, suspicious-looking features, possible artifacts, etc.).

All fieldwork was documented using field notes and an Apple Generation 7 iPad (iPad) equipped with ESRI Collector and Avenza PDF Maps software with close-scale georeferenced field maps of the proposed Project site, and aerial photographs. Location-specific photographs were taken using the iPad's 12-mega-pixel resolution camera. Cultural resources identified during this inventory within the proposed Project site were to be recorded on DPR forms, using the Instructions for Recording Historical Resources (Office of Historic Preservation 1995). All field notes, photographs, and records related to the current study are on file at Dudek's Santa Barbara, California office. All field practices met the Secretary of Interior's standards and guidelines for a cultural resources inventory.

**Time spent conducting archaeological field survey:** 6 days

**Dates the survey was conducted:** June 6, 7, 8, 13; July 18; and August 29, 2022

**Survey coverage intensity:** Intensive-level pedestrian survey

**Ground visibility/other limitations:**

Ground surface visibility within the proposed Project site was variable and as such, in areas of dense ground coverage, surface scrapes were implemented, when necessary, to enhance detection of archaeological materials that may have been obscured on the surface. General survey conditions included: 1) areas of barren ground and exposed subsoils due to burrowing animals provided excellent ground surface visibility (90-100 percent); approximately 15 percent of the proposed Project area can be defined in this manner; 2) moderate or sporadic vegetation and areas with minimal duff/vegetation debris provided fair to very good ground surface visibility (50-90 percent); approximately 20 percent of the proposed Project area can be defined in this manner; 3) areas heavily vegetated with annual grasses and Coastal Chaparral inhibiting observation provided poor to fair ground surface visibility (20-50 percent); approximately 20 percent of the proposed Project area can be defined in this manner; 4) areas with 30-40 percent slope or greater and areas with complete ground cover by vegetation and duff, gravel and/or modern debris provided no ground surface visibility (0 percent); approximately 45 percent of the proposed Project area can be defined in this manner. Specific observation or traversing challenges that limited ground surface visibility include but are not limited to the following:

- Large portions of GT-3, GT-4, GT-6, GT-22, GT-23, GT-25, MT-25, MT-26, MT-27, MT-29 were inaccessible due to thick brush and steep slopes.
- Most of GT-24 was inaccessible, due to a combination of thick brush and access being through private property enclosed behind a gate.

Other relevant information: nothing further

## **Part 7: Survey Results**

**List and description of all sites found:**

- ( ) No sites found within the site survey area.
- (x) The following sites have been recorded and completed records are attached:

A new cultural resource measuring 46 meters around (15 meters N/S by 17 meters E/W) within GT-14 was identified as a result of the pedestrian survey. The resource was observed to contain a shell scatter including fragments of various species including but not limited to abalone and Pismo clam.

The nature and origin of the shell scatter was not apparent, and no other previously or newly identified resources have been observed within a close proximity of the newly identified resource. Although the presence of marine shell outside of a marine environment suggests transportation by human means and the potential of food or tool processing, not enough information is presently available to make a definitive determination of temporal or cultural association. The new site was determined to be located in an area that was removed from the Project site and therefore, will not be subjected to ground disturbance of any kind. As such, no further assessment in the form of subsurface testing or evaluation was determined necessary for purposes of this project.

A new cultural historic resource was recorded (commonly known as the Tea Garden and Tea Bowl). The new site was determined to be located in an area that will not be subjected to ground disturbance of any kind nor activities that may adversely impact the elements of the cultural resource located above ground. As such, no further assessment in the form of subsurface testing or evaluation was determined necessary for purposes of this project.

- (x) The following sites were previously recorded, updates not prepared (attach copy(ies)):

CA-SBA-1423  
CA-SBA-1581  
CA-SBA-1919  
CA-SBA-2766  
CA-SBA-3792H  
P-42-041018

- ( ) The following sites were previously recorded, updates prepared (attach copy(ies)):  
( ) The following sites will not be recorded, justification provided below:

No sites were in need of update either because no change in condition was observed since last recording or because the sites, although located within the general proposed Project site, are not located within areas where ground disturbance will occur and were not revisited.

## **Part 8: Evaluation of Significance**

**Preliminary determination of significance of listed sites (if required): none required**

## **Part 9: Protection Measures**

### **Specific enforceable protection measures:**

MFPD has evaluated the proposed treatments for CEQA compliance as later activities covered by the California Department of Forestry and Fire Protection (CAL FIRE) California Vegetation Treatment Program (CalVTP) Program Environmental Impact Report (PEIR), using the Project-Specific Analysis (PSA). The PEIR identified the range of environmental impacts associated with vegetation treatment projects and required implementation of standard project requirements (SPRs) and mitigation measures (MMs) to address and minimize these impacts. Five (5) cultural resources (prehistoric and historic) are known to be located within the general VMP area but none of the resources are located within areas where activities that may adversely impact the elements of the cultural resource located above or below the ground are proposed to occur.

In accordance with the PEIR, all relevant SPRs and MMs shall be incorporated into the project and are outlined below. As a result of tribal consultation in accordance with SPR CUL-6 Treatment of Tribal

Cultural Resources, the MFPD has developed effective protection measures for important cultural resources located within treatment areas. These measures and specific implementation methods have been included in the description of SPRs and MMs and in Part 10: Implementation of Protection Measures.

- Cultural Resource Briefing, constant.
- Cultural Resource Avoidance, if feasible.
- Cultural Monitoring, when applicable.
- Response to Inadvertent Discoveries, when applicable.
- Cultural Resource Awareness Training, constant.

## **Part 10: Implementation of Protection Measures**

### **Discuss actions taken to carry out protection measures:**

- **SPR CUL-6 Cultural Resource Training:** Project Incident Commander and Overhead shall be briefed prior to Project implementation as to the location of any previously identified cultural resources within the Project site and measures, as outlined below, to avoid disturbance of these cultural resources shall be made while still ensuring feasible protection from fire. In conformance with SPR CUL-8 Cultural Resource Training - The MFPD shall train all VMP crew members and contractors implementing treatment activities on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers shall be trained to halt work, in accordance with Mitigation Measure CUL-2, if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance).
- **SPR CUL-5 Treatment of Archaeological Resources: Cultural Resource Avoidance.** In the case that Project activities are required within 50 feet of a known archaeological resource that contains only surface or subsurface deposits, a qualified archaeologist, meeting the Secretary of Interior Standards, shall be retained. The qualified archaeologist shall oversee the identification of the resource boundary and place a visible delineating fence 50 feet from the resource in each direction and maintain the fencing until the project activities have been completed in that area at which point, the fencing shall be removed so as not to draw attention to the resource.
- **MM CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources:**
  - **Cultural Monitoring.** If avoidance of Project activities within 50 feet of a known or newly identified cultural resource is not feasible, a qualified archaeologist shall be retained by the MFPD to conduct archaeological monitoring when activities occur within 50 feet of a cultural resource. Additionally, if the known or newly discovered cultural resource is of Native American origin, as determined by the qualified archaeologist, the MFPD shall retain a Native American monitor from a culturally affiliated tribe to observe Project activities within 50 feet of the cultural resource.
  - **Response to Inadvertent Discoveries.** In conformance with Mitigation Measure CUL-2: Protect Inadvertent Discoveries of Unique Archaeological Resources or Subsurface Historical Resources, if any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil (“midden”), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources shall be halted and a qualified archaeologist shall assess the significance of the find. The qualified archaeologist shall work with the MFPD to develop a primary records report that shall comply with applicable state or local agency procedures. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan shall 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 shall work with MFPD 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 shall be recorded standard DPR Primary Record forms (Form DPR 523) shall be submitted to the appropriate regional information center.

### Part 11: Other Applicable Information

#### Additional Information:

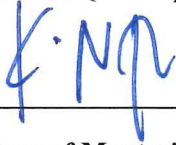
If any new resources are discovered during project activities, all work will cease within 100 feet of the find and a qualified archaeologist contacted and retained. Work cannot resume until the archaeologist has assessed the find and implemented appropriate protection measures.

### Part 12: List of Attachments

- |   |  |
|---|--|
| <input type="checkbox"/> Archaeological Records Check Request   | <input type="checkbox"/> Archaeological Coverage Map (1:1 scale of USGS 7.5' quad) |
| <input type="checkbox"/> Archaeological Records Check Request Map   | <input type="checkbox"/> Additional Archaeological coverage map(s)                 |
| <input checked="" type="checkbox"/> Information Center Reply: Attachment A                                | <input checked="" type="checkbox"/> Project Vicinity Map – Attachment E            |
| <input checked="" type="checkbox"/> Example of Notice(s) to Native Americans:<br>Attachment B             | <input type="checkbox"/> Written Reply from Native Americans                       |
| <input type="checkbox"/> USFS or other Agency Correspondence:   | <input checked="" type="checkbox"/> Site Records – Attachment F                    |
| <input checked="" type="checkbox"/> Other: Native American Heritage Commission<br>Response – Attachment C | <input type="checkbox"/> Photographs   |
| <input checked="" type="checkbox"/> Other: Project Area Background Context/References<br>Attachment D     |  |

### Part 13: Professional Review and Approval

The final survey report shall be signed by the District confirming the content of the report are accurate and complete. Final project approval is obtained when the District or designee provides signature on the final CEQA compliance documentation.



\_\_\_\_\_  
**Signature of Montecito Fire Department**

**Project Manager**

Date Signed: October 25, 2022

Printed name: Kevin Taylor

Title: Fire Chief

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# **Appendix A**

CHRIS Records Search Results

CONFIDENTIAL - NOT FOR PUBLIC VIEW

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# **Appendix B**

## Tribal/Native American Notification Letter Example



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August XX, 2022

[TRIBAL ENTITY]  
[NAME OF TRIBAL REPRESENTATIVE, TITLE]  
[STREET ADDRESS OR PO BOX]  
[CITY/TOWN, CA, ZIP]

**Subject:** *Formal Notification, Pursuant to Assembly Bill 52, for the Montecito Fire Protection District's Montecito Vegetation Management Program Project*

Dear [PREFIX] [TRIBAL REPRESENTATIVE NAME],

The Montecito Fire Protection District (MFPDis providing you with informal notification of the Montecito Vegetation Management Program Project (potential Project), located in Santa Barbara County, California. The 2019 Program Environmental Impact Report (PEIR) evaluated the environmental impacts of the California Vegetation Treatment Program (CalVTP) with California Department of Forestry and Fire Protection (CAL FIRE) Board serving as CEQA lead agency. As required by PRC Section 21080.3.1, the CAL FIRE Board sent formal notification letters on February 9, 2019 notifying 12 Native American tribes (who had submitted requests to the Board to be notified of applicable projects as defined by AB-52). The PEIR, including the Archaeological, Historical and Tribal Cultural Resources sections, are available for public review at <https://bof.fire.ca.gov/projects-and-programs/calvtp/calvtp-programmatic-eir/>.

**Potential Project:** Montecito Vegetation Management Program Project

**Project Location:** The potential Project is located in Montecito, unincorporated Santa Barbara County within public land survey system (PLSS) Sections 3-11, and 15-18, Township 4 North, Range 26 West on the *Santa Barbara*, California 7.5-minute USGS Quadrangle and Sections 1-3, 11, 12, 35 and 36, Township 4 North, Range 27 West on the *Carpinteria* California 7.5-minute USGS Quadrangle (see Figure 1). The potential Project site locations are located within undeveloped areas surrounded by both developed and undeveloped properties.



**Project Understanding:** CAL FIRE is in charge of preventing and extinguishing wildfires within the State Responsibility Area (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, such as the MFPD, 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. A Project Specific Analysis (PSA) is currently being conducted for the potential Project to determine whether later vegetation treatment projects in the treatable landscape have been covered in the PEIR allowing 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).

**Project Description:** The Program Environmental Impact Report (PEIR) for the California Vegetation Treatment Program CalVTP evaluates the environmental impacts of the CalVTP. 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 of which the potential Project is included and assessed using the Project-specific Analysis (PSA).

The potential Project would consist of manual treatment activities (hand crews using chain saws) occurring within a total of approximately 316 acres throughout the entire potential Project and herbivory treatments (grazing animals) totaling approximately 938 acres throughout the entire potential Project site. Hand crews would remove dead trees, ladder fuels on mature trees, surface dead woody material, decrease the number of standing shrubs by approximately 50 percent, and reduce the height of annual grasses. Crews would drag the cut vegetation by hand, or utilize a winch attached to a small tractor, to pull it to a chipper stationed at an adjacent road. The potential mixed treatments would generally occur within 100-feet of a road system and therefore no new roads would be constructed.



The potential Project would also consist of prescribed herbivory treatments, which would occur on steep and rugged terrain. The prescribed herbivory treatment activities would utilize temporary electric fences to contain the animals, which would be constructed along existing road and trail systems. During Project implementation, there would be a need to construct narrow (approximately 3-foot) saw lines to facilitate fence construction.

**Potential Project Disturbances:** Ground disturbances associated with the potential Project are limited to the installation of temporary electrical fences to contain animals conducting herbivory treatments and the transportation of tractors for removal of hand-cut vegetation, are not expected to extend deeper than 1 foot below current grade and will only occur within limited locations.

**Project Implementation Schedule:** Treatment activities would be implemented over the next 10 years (2022-2032)

**Lead Agency Contact Information:**

Nic Elmquist  
Wildland Fire Specialist  
Montecito Fire Department  
595 San Ysidro Road  
Santa Barbara, CA 93108  
Phone: (805) 969-3598  
Email: [nelmquist@montecitofire.com](mailto:nelmquist@montecitofire.com)

The MFPD welcomes any information regarding the presence of tribal cultural resources (as defined in Public Resources Code § 21074) within the potential Project as well as requests for potential Project related information. To ensure expeditious consideration of information and potential consultation, MFPD greatly appreciates all formal requests for consultation be received within 30 days of receipt of this notice. Please include the name of a designated lead contact person in all correspondence to ensure an efficient response. The MFPD carefully adheres to provisions of Public Resources Code section 21082.3, subd. (c)(2)(A) to maintain the confidentiality of the information provided by Tribes.



MONTECITO FIRE DEPARTMENT

An Independent Fire District

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Your comments and concerns are very important to the MFPD, and we welcome the opportunity to consult with the [TRIBAL ENTITY BEING CONTACTED], if it is so desired. If you have any questions regarding the potential Project, please do not hesitate to contact me at the contact information provided above.

Sincerely,

Nic Elmquist

Wildland Fire Specialist

595 San Ysidro Road, Santa Barbara, CA 93108

(805) 969-3598

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# Appendix C

## Native American Heritage Commission Sacred Land Files Results

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## NATIVE AMERICAN HERITAGE COMMISSION

May 16, 2022

Jennifer De Alba  
Dudek

Via Email to: [jdealba@dudek.com](mailto:jdealba@dudek.com)

**Re: 14311 California Vegetation Management for Montecito Fire Dept Project, Santa Barbara County**

Dear Ms. De Alba:

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 tribes 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: [Cody.Campagne@nahc.ca.gov](mailto:Cody.Campagne@nahc.ca.gov).

Sincerely,

*Cody Campagne*

Cody Campagne  
Cultural Resources Analyst

Attachment



CHAIRPERSON  
**Laura Miranda**  
Luiseño

VICE CHAIRPERSON  
**Reginald Pagaling**  
Chumash

PARLIAMENTARIAN  
**Russell Attebery**  
Karuk

SECRETARY  
**Sara Dutschke**  
Miwok

COMMISSIONER  
**William Mungary**  
Paiute/White Mountain  
Apache

COMMISSIONER  
**Isaac Bojorquez**  
Ohlone-Costanoan

COMMISSIONER  
**Buffy McQuillen**  
Yokayo Pomo, Yuki,  
Nomlaki

COMMISSIONER  
**Wayne Nelson**  
Luiseño

COMMISSIONER  
**Stanley Rodriguez**  
Kumeyaay

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](mailto:nahc@nahc.ca.gov)  
NAHC.ca.gov

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# **Appendix D**

## Project Area Background Context

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# Project Area Background Context

## Prehistoric Setting

California has one of the best studied archaeological records in the world, and the Santa Barbara Channel is among the most studied regions of California. The basic regional culture historical patterns (i.e. what life was like at different points in time) have been articulated for many decades, and in spite of the ever increasing intensity of archaeological work in the region, our understanding (or at least our definition) of these general patterns has changed only slightly in part because our understanding of how to distinguish them has been compromised by conflicting data and interpretations; notable exceptions include our understanding of the earliest inhabitants, which keeps getting earlier and better defined (Erlandson et al., 2011, Erlandson et al., 2007b), and our perspectives on the late prehistoric evolution of socio-political complexity, which have matured and expanded rapidly since the late 1980s (e.g. Erlandson and Jones, 2002, Arnold, 2001, Arnold, 2004).

The cultural history of the Santa Barbara Channel has seen many iterations, and much of our understanding of change through time is based on foundational research by Rogers (1929) and Warren (1968), both of whom conducted substantial primary research on the mainland coast. Higher resolution periodization was later established by King (1990) who used a combination of stylistic change in shell beads and absolute ages from radiocarbon dates. This bead-based chronology dovetails well with a more recent chronology based on lower-resolution changes in human behavior and material culture (Arnold, 1992a), and this has been further refined with a larger set of absolute age estimates pegged to a background of regional environmental change matched with more accurate radiocarbon calibration (Kennett, 2005).<sup>1</sup> Note that the temporal span of each period in the sequence is approximate, and naming conventions for them vary across different authors; the cultural patterns (e.g., subsistence and settlement) and temporal markers (shell bead styles, for example) used to define them, also vary across temporal boundaries by region.

## Paleoindian/Paleocoastal Period (The Earliest Inhabitants): 13,000 – 11,000 BP

Though the earliest appearance of people in the New World is a contentious issue with new data generating new ideas every few years about who they were and how they got here, the evidence from the California Bight is relatively straightforward: cultural deposits and human remains from a series of sites on Santa Rosa and San Miguel islands date from 13,000-11,500 years ago and suggest that people at the time were well-adapted to life on the sea but also had connections to people who lived much further east, deep in the

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1 Note that all dates provided herein are rounded and drawn from the literature. We attempt to maintain consistency by using calendar, calibrated, years before present (cal BP) which are essentially the same as saying “years ago.” However, most authors prior to the mid-1990s (e.g., Glassow 1996) typically report in uncalibrated radiocarbon years before present, uncorrected for marine reservoir offsets, therefore their cultural chronologies can differ from current age estimates for the same site (or cultural period) by 200 – 1500 years, depending on the age and material dated. This is a general problem for the interpretation of California culture history as even current authors use a mixture of differently reported dates. We’ve tried to account for this, as much as possible, herein, but it further suggests the need to maintain a large, fully vetted, and corrected radiocarbon database, preferably shared across multiple research teams and authors.

American continent (Erlandson et al., 2011). While this isn't the earliest evidence of human activity in the New World (which, at most is somewhere between 16,000 and 15,000 years old), this early evidence from the West Coast gives credit to the idea that (at least some of) its earliest inhabitants were a marine-adapted people able to move skillfully and quickly between islands and near-shore environments across the southern landmass of the (now submerged) continent of Beringia, down the entire Pacific Coast of North America, and eventually to the southern tip of South America in only a few thousand years (Erlandson et al., 2007a, Fladmark, 1979, Dixon, 2001). Though these "Paleocoastal" sites from the islands are the earliest we know of, we may never find evidence for the earliest coastal inhabitants as the shorelines they lived on are now submerged under more than 50 m of water (Masters and Aiello, 2007). Indeed, sites of this antiquity are unknown on the mainland, though the occasional isolated – and undated – fluted projectile point (for example from Gaviota State Park CA-SBA-1951) may be suggestive (Erlandson et al., 1987).

### **Early Holocene / Milling Stone Horizon: 11,000 – 5500 BP**

Many scholars of North American archaeology separate the Paleoindian / Paleocoastal period from the succeeding Archaic period on the rough (and now debatable) observation that the earlier people were more focused on large game while the later people exploited a broader range of resources and required a different set of tools to do so. On a continent-wide scale, the Archaic therefore sits in the middle of a trajectory of increasing technological and social intensity, somewhere between big-game hunting and fully-fledged farming; in California, this crude trajectory has little value as farming was never part of the pre-Columbian picture, yet use of the term "Archaic" persists (cf. Meighan, 1959). Colloquially, it applies to everything from the Early Holocene to the end of the Middle-Late Period transition (ca. 11,000 – 1000 years ago), distinguished only by the late prehistoric intensification of economy, technology, population, and political complexity (though see Glassow 1992 for a slightly different interpretation). Here, the division between Paleoindian and Early Archaic is somewhat arbitrary, but follows current convention; likewise, we combine the earliest known settlements on the mainland coast in this period with those of the more well-documented Milling Stone Horizon because they exist in many of the same places, show evidence for the intensive use of shellfish, use many of the same tools (albeit in different proportions), and overlap in time.

One of the reasons these sites are so visible, stratified, and well-preserved is they contain the remains of shellfish, leading many to suggest that this early Holocene occupation of the region was heavily oriented towards the intensive and persistent exploitation of marine resources. The material remains (and perhaps adaptations) of these earliest Holocene<sup>2</sup> inhabitants of the mainland occasionally differ however, from their predecessors on the islands, but also from their successors on the mainland. However, some of these early sites also differ from the later coastal (and Coast Range interior) occupants as they do not contain millingstones, which become increasingly common after about 8500 years ago. However, it's important not to overstate the differences, as there are clearly sites dating to the early Holocene where groundstone dominates the formal lithic assemblage, both on the coast (Fitzgerald, 2000) and deep into the interior (McGuire, 1993). Contemporaneous variability in site types and artifact assemblages may point to variability in mobile foraging strategies, or reveal that very different groups exploited an otherwise sparsely

---

2 Note that the Holocene is set at the end of the Younger Dryas, ca. 11,500 years ago (+/-).

inhabited coastal region at slightly different times. These alternatives demand interrogation, as do the relationships between the evidence for human activity on the coast and that of the California interior and the more distant Desert West (Koerper et al., 1991).

While the emergence of an adaptation tuned to marine resources seems beyond question (particularly if the first people to come to coastal California brought this ability with them from somewhere else), the emergence of a processing technology centered on the use of groundstone slabs and handstones (i.e. the hallmarks of the Milling Stone Horizon) has been the focus of investigation for decades (see Warren, 1968, Basgall and True, 1985). Like shell middens, grinding tools, especially in high frequencies, are highly visible in the archaeological record and at face value can bias (indeed have biased) interpretation of their relative economic importance (see Nelson and Lippmeier, 1993). Recent efforts to understand the highly visible “Milling Stone” sites focus on patterns of groundstone manufacture and use. Following Basgall and True (1985), Hale (2001) analyzed groundstone (millingstones and handstones) and battered stone (scraper planes, cobble tools, etc.) tools from well-known Milling Stone sites across southern California, including CA-SBA-142 (Glen Annie Canyon) on the Santa Barbara mainland, and found that Milling Stone sites were places that people visited repeatedly, over hundreds to thousands of years to conduct similar economic activities, perhaps for only short periods of time. The large numbers of reused or expedient groundstone tools at these sites speak to food processing. Indeed, regular use of milling tools for processing seeds and other plant foods, such as roots and tubers, does not preclude using them to process rodents, reptiles, and other animals (which might be more easily cooked or dried with less costly tools). Costs associated with acquiring and transporting raw materials suitable for milling, and investments in shaping them to accomplish specific tasks may be modest (depending on local geology), but significant enough to suggest they were essential for survival; investing in them would make them available for use in less essential tasks, like pulverizing non-essential foods or pigments, that might otherwise be processed in other ways. Therefore, while millingstones may have been used for many things, their prominence indexes their importance to a specific adaptive strategy, and archaeological research should be geared towards understanding that relationship.

Hale (2001) interprets Milling Stone sites as places of seasonal occupation for intensive processing, but not as sedentary villages as Wallace (1955) and others envision. Large, well-used assemblages in single locations (as is typical of the classic Milling Stone identity) result from recurrent seasonal visits to specific locations for food processing over multiple years. The milling equipment in these kinds of sites are typically made from locally abundant stone (encountered either in its raw form or as previously discarded tools). Therefore, analysis of tool shaping and maintenance as well as use-wear reveal much about the nature and intensity of occupation and activity.

Hale (2001) also laments the rarity of other kinds of sites linked both temporally and socioeconomically to those of the Milling Stone period, as they would help to illustrate the full picture of the Archaic in California, and help us to move beyond simple definitions of it as a period marked by economic drudgery imposed by marginalizing climatic regimes (e.g. the Altithermal - see Antevs, 1948). Herein lies an important research avenue: assembling well-dated archaeological site data across broad regions to better

understand socioeconomic nuance during the Archaic and abandon the site-specific interpretation of the Milling Stone period that is itself an artifact of early archaeological research.

Generally speaking, adaptations attributed to the Archaic (including the Milling Stone phenomenon) involved small groups of people who moved regularly throughout the year to exploit a broad range of resources using a very flexible tool kit that could be made relatively easily or expediently and applied to a wide range of scenarios (Hale, 2001, Fitzgerald and Jones, 1999, Lantis, 1938, Basgall and True, 1985). Here, and elsewhere throughout the California Bight and central coast, the full suite of material attributes aligned with the classic Milling Stone horizon is found in a relatively small number of archaeological sites; together with evidence for somewhat different activities at other kinds of sites, presumably within the spatial catchment of annual, or even generational human activity, the Milling Stone pattern reveals a “highly successful strategy of mobility, flexibility, and emphasis on low-risk, moderate-return resources, such as small game, shellfish, and certain plants... (that) seems downright practical” for the environmental and cultural context of the age (Stevens, 2013: 54).

### **The Early Period: 5500 – 2500 BP**

The identity of the California “Early Period” in Santa Barbara (in both definition and timing) differs from that of other parts of California. The problem is really about the naming conventions assigned to trends (i.e. the “Periods”) in the production and use of shell beads which vary around the state (Bennyhoff and Hughes, 1987, Groza, 2002, Groza et al., 2011) rather than local conditions or broader patterns of behavior.<sup>3</sup> Instead, here it helps to imagine the shift here in quasi-adaptive terms, initially characterized by both Rogers (1929) and Greenwood (1972) as a “Hunting” people or period, marked quite notably by an increase in the abundance of projectile points and a decline in the relative abundance of millingstones. On the central coast, Jones and colleagues (Jones, 1992, Jones and Codding, 2019, Jones et al., 2007) put the division somewhere between 5500 and 5100 BP, though others (Glassow et al., 2007, Lebow and Moratto, 2005) see this transition happening around the northern California Bight at 7500-7000 BP; yet the use of millingstones continues here, and elsewhere in California, into the late Holocene (Erlandson, 1997a, Erlandson, 1997b, Sutton et al., 1993).

Beyond the bead-based periodization, temporal distinctions are hazy, as identification of the Early Period as a clear-cut behavioral or cultural shift at a specific point in time is less obvious. In the literature from the mainland of the California Bight, some authors identify change in patterns of settlement, specifically a shift away from a practice of relocating the entire residential settlement multiple times throughout the year (i.e. a “residentially mobile” pattern), to a pattern that entails moving the residential base only a few times a year (i.e. a “logistically mobile” pattern). For example, Glassow (1990, 1996) saw this shift happening at approximately 8500 years ago for the broader region (prior to the dates he uses for the end of the Milling Stone Horizon) while research from the far northern end of the California Bight puts this shift much later, at approximately 3000 years ago (Lebow et al., 2006). Unfortunately, the differences in interpretation make

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3 By contrast, archaeologists in other parts of the state have abandoned this confusion in favor of chronologies based on a broader range of material culture anchored to absolute dates (Rosenthal 2011; Rosenthal et al., 2007) Either way, these names and boundaries are all somewhat arbitrary, imprecise, and/or artificial.

it difficult to identify or define temporal periods for the region on the basis of cultural behavior alone.

Use of milling equipment persists through this period, though the form and variety of the manos and metates change (Gamble and King, 1997), while mortars and pestles were “added to the milling repertoire” around 6000 years ago (Glassow et al., 2007:197). At CA-SBA-53 on the Goleta Slough, millingstones and mortars in roughly the same proportions (and in greater numbers than in most any other excavated sites in the region) come from deposits dating to 5650-5050 BP (Harrison and Harrison, 1966, Rick and Glassow, 1999). Whether any of these things point to a change in diet is still an open question. Importantly, mortars are costly to make and signal an investment in processing technology much greater than the use of millingstones (Hale, 2001, Hale, 2010). Such an investment was likely made to increase processing efficiency of pulpy nut meat such as acorns (Hale, 2009). Glassow (1997) suggests that they could have been used to process bulrush and other estuarine resources, though millingstones would have offered similar efficiency in processing such things. It is certain, however, that the addition of mortars marks a socioeconomic shift that placed emphasis on intensive resource extraction and/or processing beyond that which could be accomplished using a basined millingstone. Perhaps this is the economic shift that identifies the onset of the Early Period. The extent to which this change in economy reflects change in the density and distribution of subsistence resources as a function of regional environmental change at the end of the Mid-Holocene warm period, or “Altithermal” (Glassow, 1997, Rick and Glassow, 1999, Glassow et al., 1988), along with a decline in marine productivity associated with warming sea-surface temperatures (Kennett et al., 2007) is an important but unresolved issue.

A broad range of evidence regarding subsistence diversification, increasing sedentism, status differentiation, ritual activity, rock art, and population growth have all been marshalled to suggest that the second half of this interval (after 4000 years ago, or what Lebow and Moratto call the “Late Early Period”) contains some of the earliest evidence for the evolution of cultural complexity in the region (Glassow et al., 2007, Erlandson and Rick, 2002), though dramatic, fundamental change did not happen until the end of the Middle Period and into the Late Period.

### **The Middle Period: 2500 – 800 BP**

Glassow (1996: 22) suggests that the defining feature of this period is the elevated importance of fish and marine mammals in the subsistence budget. Appearance of the single-piece shell fishhook around 2900 BP, along with increasing importance of notched stone sinkers corroborates this and may have been essential to the intensification of the marine-based economy on the mainland as well as on the islands (Rick et al., 2002, Erlandson, 1997b). Indeed, intertidal resources (namely shellfish) remained important to everyone living within walking distance of the coast. And though it seems clear that people in some places acquired more of their protein from large terrestrial and marine mammals during the Middle Period than did people in earlier periods (Lebow et al., 2007) shellfish was still the dominant source of protein throughout the region (Glassow, 1992).

During this time, the old groundstone food processing slabs of the early and middle Holocene are mostly absent throughout the region, while mortars become more common, and with increasing effort invested in their production (Glassow, 1996, Hale, 2009). Whether or not this shift from millingstones to mortars points



to the rising importance of the acorn to the subsistence economy, as it is thought to do elsewhere in California (Hale, 2010, Basgall, 1987), is a question that demands further attention. Answering it depends, in part, on establishing a solid understanding of the distribution of different kinds of oak trees in different parts of the region. For example, oak trees are rare, or entirely absent from the landscape within about 10 km of the coastline throughout the northern end of the California Bight (see Glassow, 1996: 6). Where oak trees were scarce, mortars were either used for processing other things, or acorns were transported from considerable distance – a pattern well documented from other parts of California (Morgan, 2007).

Land use patterns observed to the west, in the Vandenberg region (Lebow et al., 2006), suggest that these changes in resource use were accompanied by a shift in settlement patterns: though the shift to a logistical pattern of residence began around 3000 years ago, it was fully in place throughout the Middle Period. If the patterns observed from the compilation of radiocarbon dates, both from Vandenberg (Lebow et al., 2010, Lebow et al., 2011) and the surrounding region (Glassow, 1996) can be used to evaluate change in human population, then the Middle Period is the first episode of measurable and sustained demographic increase in the history of the region, increasing noticeably approximately 2800-1800 years ago, and then dramatically after that. Thereafter, life across the Channel on the Islands starts to change markedly: the number of settlements starts to increase and people start to live in those settlements for longer periods of time while commanding more rigid territories and controlling the natural resources within them; at the same time, the incidence of inter-personal violence increases while human health and stature start to decline (Kennett, 2005, Lambert and Walker, 1991, Lambert, 1997, Lambert, 2002, Walker, 1989). Together, these things mark the beginning of a trend that continues into the Late Period where it intensifies dramatically. The extent to which these patterns obtained on the mainland and the adjacent interior, or how people in any given area were affected by the dramatic change on the Islands, are open questions.

### **The Late Period: 800 B.P. – European colonization (ca. A.D. 1780)**

For most of this periodization, the exact starting and ending dates are mostly inconsequential, but the Late Period is different, in part because the bead-based chronology is more precise, the archaeological record is better preserved, change in that record is more pronounced, and because change in the cultural record seems to match dramatic change in well-dated, high-resolution paleo-environmental archives from the Santa Barbara Basin that are also reflected in written records from other parts of the world (Kennett and Kennett, 2000, Kennett, 2005, Raab and Larson, 1997, Jones and Kennett, 1999, Arnold et al., 1997). Setting it at 800 B.P. follows King's (1990) bead-based chronology, and includes the period of dramatic environmental change (ca. 800-650 BP) along with its purported role in rapid Late Period cultural change. However, one could easily define this cultural period by everything that happens after that environmental change, as Arnold (1992) does, or alternatively by putting it at 1300 BP – the beginning of Lebow and Moratto's (2005) Late Middle Period – by which time many of the material hallmarks of Late Period cultural complexity (the sewn-plank canoe, the bow and arrow, exotic raw materials, intensive fishing, standardized *Olivella* shell beads, status differentiation, skeletal evidence for interpersonal violence, stable primary villages) were all in place, and the pace of cultural change began to increase (Kennett, 2005).

Hale (2010) argues that the rate-limiting factors on cultural evolution are socioeconomic, rather than techno-environmental. Therefore, the archaeological signatures of culture change (namely, the types and uses of artifacts, including food remains) that appear to be more rapid during the Late Period are more important when viewed in the light of major socioeconomic shifts, rather than seeing them simply as a rapid accumulation of variability. More to the point, a time-limited strategy would actively resist change while an energy-limited strategy would actively pursue it, and would accumulate material representation in the archaeological record accordingly simply through technological improvements to make tools more efficient or specialized, and in specialized subsistence (Bettinger, 1999). The causal relationship between the archaeologically visible increase in material diversity over shorter periods of time, and socioeconomic strategy (i.e. time- or energy-limited) on the one hand, or demographic increase on the other (see below), merits further investigation throughout the region (particularly at sites with rich artifact assemblages).

Since the mid-1980s an enormous body of literature has accumulated on the origins of cultural, social, and political complexity in the Santa Barbara Channel. Much of this has been dedicated to the Late Period and most of that has been done on the Islands. The archaeology of this is spectacular, and dovetails dramatically with the written accounts of European explorers, Mission colonists, and 20<sup>th</sup> century ethnographers. In addition to basic archaeological reconnaissance, there has been focused attention on understanding subsistence (e.g. Bernard, 2004, Martin and Popper, 2001) the context of shell bead money production (Arnold and Munns, 1994), the production of tools (i.e. microlithic drills) used to manufacture that money (Arnold, 1987, Arnold, 2001), the differential access to exotic goods (Arnold and Graesch, 2001), the presence of trade centers (Arnold, 2001, Gamble, 2008), the production and control of sea-worthy watercraft (Gamble, 2002, Arnold, 1995), and established patterns of exchange (Arnold, 1995, Fauvelle, 2011).

By 650 BP the full suite of attributes that early European chroniclers noticed of the Chumash were in place on the Islands: sedentary villages of permanent semi-subterranean architecture, high dietary diversity that also included prestige items like pelagic fish, a monetized market economy, specialized craft production, inter-village and island-mainland exchange networks, political control of natural resources, numerous forms of personal adornment, and an unequal distribution of wealth. Presumably, these things also index the social order documented of the Chumash, including elite offices, formal religious systems, hereditary power and prestige (i.e. the “Dynasty of Nobility”), a ranked social order, institutional inequality, and chiefly control (e.g. Blackburn, 1976, Gamble, 2008, Harrington, 1942, Hollimon, 2004, Johnson, 1988).

### **Ethnohistoric Setting**

Immediately prior to the arrival of the Spanish in A.D. 1542, the people living in the Santa Barbara region collectively known today as the Chumash, consisted of a set of related ethnolinguistic groups occupying a territory that spanned from Morro Bay in the north, south to Malibu on the coast, and inland to encompass the interior South Coast Range and the northwest Transverse Range, including the Santa Ynez River Valley, the Carrizo Plain, the Cuyama Valley, and the San Emigdio Hills. The language these people spoke is considered an isolate (Goddard 1996), distinct from the languages spoken by their neighbors, the Salinan,

Yokuts, Kitanemuk, Tataviam, and Gabrielino (Tongva). Internally there was considerable diversity, such that not all of the regional dialects were mutually intelligible. Today, the names for these different ethnolinguistic groups come mainly from their associations with different Mission territories: the Obispeño in the north were notably distinct from a group called the Central Chumash, which consisted of the Purisimeño, Ynezeño, Barbareño, and Ventureño. Both of these groups (Obispeño and Central Chumash) spoke languages that were in turn distinct from those spoken on the northern Channel Islands, typically grouped together under the heading of Island Chumash. Even this linguistic taxonomy masks some of the historically documented internal diversity that would include regional dialectic differences such as the Emigdiano, Castec, Matilija, Mugu, and Malibu of the Central Chumash, and the Cruzeño, Roseño, and Migueleño of the Island Chumash (see Kroeber, 1925, Grant, 1978b, Grant, 1978a, Golla, 2011).

What we know of these people comes, in part, from the rich written accounts of a variety of sources, the earliest of which are those of the Spanish explorers to the Santa Barbara Channel and mainland, namely Cabrillo in 1542 and Vizcaíno in 1602 (Wagner, 1929, Brown, 1967). These observations were expanded by the accounts written during early efforts to establish evangelical Missions (and therefore Royal territory) in Alta California, namely by Portolá in 1769, de Anza in 1776, and to a lesser degree, Garcés in 1776 (Coues, 1900, Bolton, 1927, Gamble, 2008, Priestley, 1937). These accounts were further expanded by the observations and managerial records of the Mission administrators for a period of about 60 years (Geiger, 1969, Geiger and Meighan, 1976, Johnson, 1988, Johnson, 1982). After that, Euroamerican interest in Native American life made it possible for the Native views of their own history and culture to enter into the written record, primarily in this case through ethno-historic documentation of Chumash beliefs, folk tales, music, customs, and lifeways (e.g. Blackburn, 1975, Hudson et al., 1981, Harrington, 1942). This forms perhaps the richest body of information that we have about the Chumash; further development of this understanding continues today.

The written records and accounts of Chumash life reveal a variety of things that have been of paramount importance to archaeologists for many decades. This includes accounts of what people ate and how they acquired it, how they made various elements of material culture, and how they used it (e.g. Hudson and Blackburn, 1983, Hudson and Blackburn, 1979, Hudson and Blackburn, 1985, Hudson and Blackburn, 1986). It also includes ideas about the landscape, knowledge of the plants and animals that live in it, and of how to manage that landscape, as well as accounts of how social life was structured, and how hierarchy and power were perceived, imagined and negotiated by individuals. The ethnohistories also contain a rich account of the structure of hierarchy within Chumash life, including ideas about how money, exchange, and territory, along with the management and manipulation of those elements, fed into the structures of social power.

It is this body of knowledge that commands the lion's-share of archaeological attention, certainly since the 1980s. Of particular importance to archaeologists of the Santa Barbara Channel has been the effort to explain the evolution of the kinds of social and political complexity revealed in the rich ethno-historic records of the Chumash (King, 1976, King, 1969). Attention paid to how people acquired and controlled resources, and how resources from different environments (namely the Islands, the mainland coast, and the interior) were moved

across different boundaries and networks, has been extremely important. This involves a detailed understanding of how goods and services were transported not only between different aspects of the Chumash cultural sphere, but also between the Chumash and the people of the Central Valley, the Sierra Nevada, the South Coast, and the Desert Interior. Considerable ethnographic detail exists about the nature of market-based exchange, the use of shell-bead money, conscious control of inflation, the role of intermediaries in between-group exchange, trading parties from distant lands, and the kinds of goods transported from different areas, all of which play a significant role in both the interpretation of the archaeological record, and the design of archaeological research. Indeed, synthetic accounts of the ethnographic record occasionally offer insights about the archaeological patterns one might expect of the Chumash interaction sphere (Gamble, 2008, King, 1976, Johnson, 1988, Johnson, 1982).

Interests in the evolution of complex society in the Chumash world have therefore played a disproportionate role in the collective efforts of archaeologists over the past many decades. Therefore, it isn't surprising that the majority of archaeological research has been focused mainly on the late prehistoric record and on understanding the evolution of the many things the Europeans were able to observe or record of Chumash life. However, as with any interpretation of the past informed by ethnohistoric observation, interpreters of the Chumash and their ancestors must be cautious about the ethnographer's interpretive agency, conscious or not (Haley and Wilcoxon, 1997, Haley and Wilcoxon, 1999). Contemporary re-analysis of historic observations may stimulate novel insights that engender novel directions in archaeological research.

## **Historic Setting**

The earliest European exploration of California was by sea approximately one generation following the Spanish conquest of the indigenous groups in what is now Mexico. In 1542, ships under the command of former conquistador Juan Rodríguez Cabrillo explored the coast as far north as Monterey. The expedition spent time ashore in the area of contemporary Santa Barbara, including Goleta Lagoon, long enough to record various attributes of Chumash social and political life, as well as the names of three separate villages around the Lagoon (including the villages of *Paltuqaq'* *Alkash*, *Kuwa'al Helo'*, *Anachuc*, and *S'axpilil*), and Dos Pueblos Creek (including the villages of *Mikiw* and *Kuya'mu*), the only sizeable village recorded by the Spanish in the vicinity of the project area was *Syuxtun*, at the mouth of Mission Creek (Gamble, 2008; Harrington, 1928; McDaniel McDevitt, 2013). Cabrillo's entourage named the settlement *Puerto de las Sardinias* and noted that it was the epicenter of a territory overseen by a female chief that spanned from Point Concepcion to downtown Santa Barbara (Johnson, 1986). Though the entourage spent several days in the area and reported that the inhabitants were both hospitable and amicable, Cabrillo eventually died on San Miguel Island after a confrontation with the Chumash while returning from Monterey Bay (Kelsey, 1998). Spanish ships engaged in the Manila Galleon trade regularly sailed south along the California coast beginning in 1565. This resulted in a least two known instances of contact with indigenous groups in California. One instance occurred when Pedro de Unamuno entered Morro Bay in 1587 and traveled inland perhaps as far as what is now the city of San Luis Obispo and made claim to the land in the name of the King of Spain. Later, Sebastian Cermeño visited San Luis Obispo Bay in 1595 in a small boat following the loss of his ship further north at Point Reyes (Greenwood 1978). These voyages did little to strengthen the Spanish presence in the remote province of Alta California. In 1602, Sebastián Vizcaíno sailed north

through the Santa Barbara channel long enough to grant one of the islands (and therefore the region) the name “Santa Barbara.” While in the region, the expedition encountered several Chumash who had come out by canoe to greet and inspect them (Wagner 1929). Vizcaíno’s cosmographer, Jerónimo Martín Palacios, may have paid a return visit to the mainland long enough to comment on the size of the settlements and the quality of its natural resources, though this remains uncertain (Brown 1967).

Following the earliest boat-based exploratory visits to the Santa Barbara Channel, and the subsequent, irregular, and largely undocumented contacts through the Manila Galleon trade, the Spanish Period in the California Bight began with the 1769 overland expedition led by Captain Gaspar de Portolá in an effort to establish a system of missions and fortifications in Alta California. The goal of the Portolá expedition was to found a mission in Monterey, the second mission in Alta California following the mission in San Diego, and to reconnoiter the region for colonization.

Diaries from the Portolá expedition (which visited *Syuxtun* three different times between August 1769 and May 1770) provide the most detailed accounts of the mainland around Santa Barbara, where they made elaborate descriptions of Chumash generosity, ceremony, performance, cuisine, village size, population, and even politics (Herbert Eugene Bolton, 1967; Priestley, 1937; Smith & Teggart, 1909; Teggart, 1909). Notably, the village names recorded by the Portolá expedition did not match those recorded by Cabrillo 227 years earlier, perhaps revealing something about the long term stability and tenure of village locations in the area, possibly associated (at least during the protohistoric era) with shifting socioeconomic interests and political allegiances (Johnson, 1982; C. D. King, 1978). Over the course of their visits, the diarists of the Portolá expedition seemed most impressed by the size of the settlement (estimated variably from between 400 and greater than 700 individuals) and the quantity and quality of the fish that the Chumash provided (Gamble, 2008). A few years later, the de Anza expedition passed through *Syuxtun* in 1776, again commenting on local leaders and the abundance of fish, and in 1782 the Spanish charged with establishing the military Presidio commented on the renown and power of the regional Chumash chief, *Yanonali* (Johnson, 1986).

With the establishment of Mission San Luis Obispo (1772), Mission San Buenaventura (1782), the Presidio of Santa Barbara (1782), and later Mission Santa Barbara (1786), Mission La Purísima (1787), and Mission Santa Ynez (1804), life changed profoundly for the indigenous inhabitants of the region. The root cause of change was Spanish religious and political hegemony brought by the Franciscan missionaries and enforcement of their assumed authority by the Spanish military. Religious conversion, adoption of farming and ranching practices, lethal illnesses, and intermarriage with other groups also contributed to the disintegration of tribal culture. The effect of early Spanish Period on the Native population was dramatic. By 1804, the Chumash population had experienced significant absorption into the Mission system.

The secularization of lands and a focus on cattle raising marked the Rancho Period, where large land grants of Mission lands were ceded to wealthy, prominent Spanish families. Native Americans continued to work as laborers on ranchos during this period. The end of the Mexican War of Independence in 1822 marked the end of 300 years of Spanish colonial influence and Santa Barbara became a city of Mexico. The city

grew under the leadership of notable men for which Santa Barbara's streets, Carrillo and De La Guerra, are named. However, the Mexican period was short-lived. John C. Fremont led a battalion of American soldiers into Santa Barbara on December 27, 1846 as a campaign of the Mexican-American War and with the 1848 Treaty of Hildago, Santa Barbara's 24 years as a city of Mexico came to an end.

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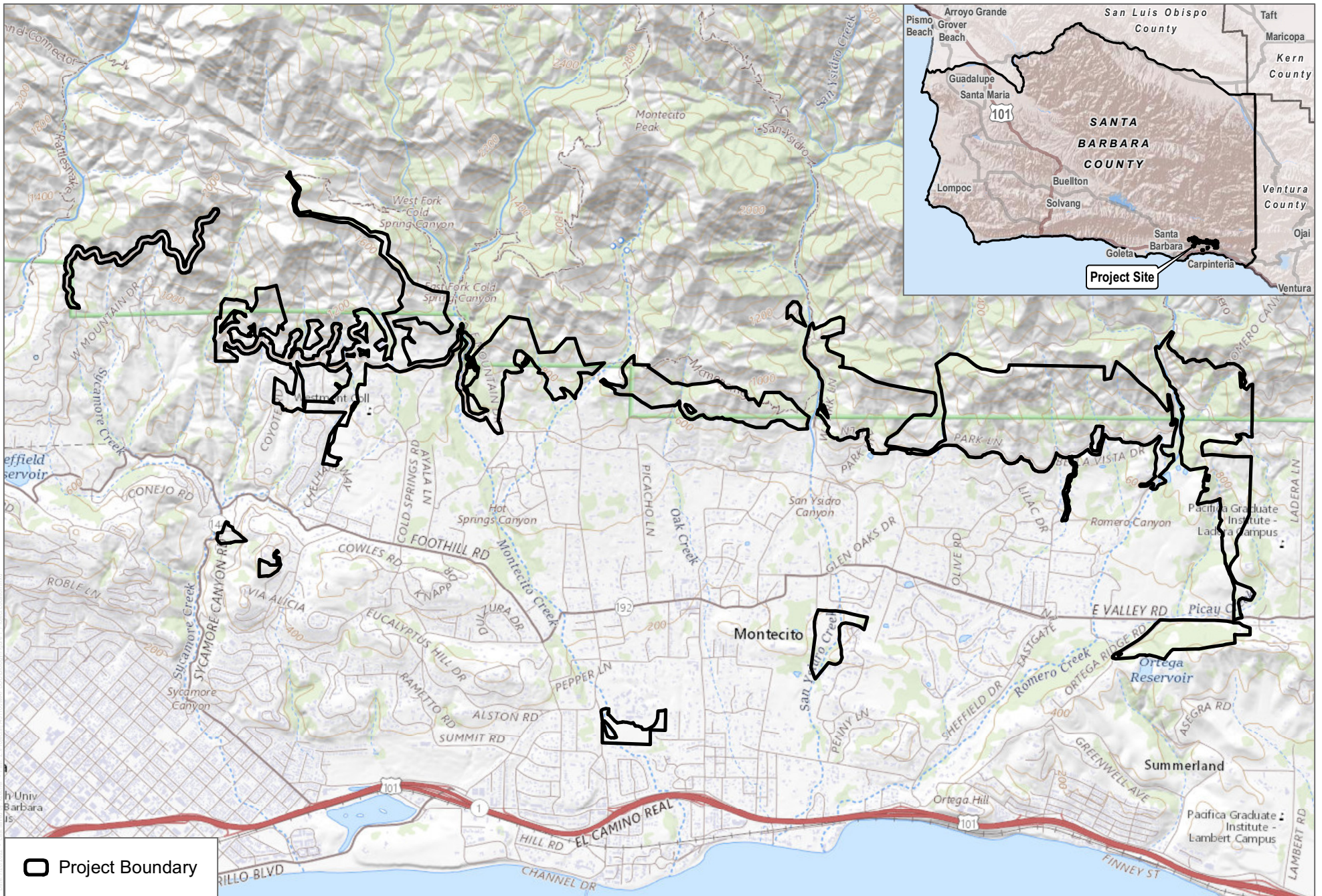
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# **Appendix E**

## Project Vicinity Map



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SOURCE: USGS National Map

**FIGURE 1**

**Project Location**

Montecito Fire Protection District Vegetation Treatment Program



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# **Attachment D**

## Biotechnical Memo



## MEMORANDUM

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**To:** Maeve Juarez, Nic Elmquist, Montecito Fire Protection District  
**From:** Dave Compton, Rachel Swick, Dudek  
**Subject:** Biological Technical Memo for the Montecito Vegetation Management Project  
**Date:** September 9, 2022  
**cc:** Dana Link-Herrera, Scott Eckhardt, Dudek  
**Attachment(s):** A: Figures 1, 2-1 to 2-23, 3-1 to 3-29  
B: Special-Status Plant and Wildlife Species with Potential to Occur in the Treatment Areas  
C: Potentially Occurring Special-Status Plant and Wildlife Species by Treatment Area  
D: California Department of Fish and Wildlife Comments

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This memorandum was prepared in support of the Montecito Fire Protection District's Montecito Vegetation Management Project, in the unincorporated community of Montecito, Santa Barbara County, California. The Project is being proposed under the California Board of Forestry and Fire Protection's California Vegetation Treatment Program, Final Environmental Impact Report, State Clearinghouse #2019012052, Volume II: Program Environmental Impact Report (PEIR), as Revised (CBFFP 2019). The PEIR provides guidelines for impact assessment under California Environmental Quality Act disciplines, including biological resources. This memorandum provides methods and results of analysis for determining resources occurring within the Project site, and makes recommendations for implementing PEIR requirements and mitigation measures.

## 1 Introduction

### 1.1 Project Location

The project site is located in Montecito, which is in southern Santa Barbara County, approximately 90 miles northwest of Los Angeles. The Montecito Planning Area generally lies between the Pacific Ocean to the south and the foothills of the Santa Ynez Mountains to the north, with the City of Santa Barbara to the west and the unincorporated community of Summerland to the east. Mixed (manual) treatment activities are proposed along roads and prescribed herbivory treatment activities would occur within open space areas of steep terrain primarily north of the community, with some scattered treatment areas in hilly areas within the community (see Figure 1 Project Location).

### 1.2 Project Description

The proposed VMP treatment activities aim to reduce fuel loads to create buffers between the wildland vegetation to the north of Montecito as well as reducing fuel loads adjacent to critical roadways. These strategic treatments would help to reduce fire intensity during wildfires in areas directly adjacent to community values and in areas where firefighting resources can safely engage in suppression operations.

The Project includes 23 prescribed herbivory treatment areas (GT-1 through GT-23; Attachment A: Figures 2-1 through 2-23). The proposed prescribed herbivory treatments would occur on approximately 883 acres of steep and rugged terrain. These areas provided for limited access by hand crews or mechanical equipment, making

prescribed herbivory the only realistic vegetation management treatment activity in the proposed project areas. The prescribed herbivory treatment activities would utilize temporary electric fences to contain the animals, which would be constructed along existing road and trail systems. During project implementation, there would be a need to construct narrow (approximately 3-foot) saw lines to facilitate fence construction. Limited ground disturbance is expected to occur on any of the proposed projects.

For the prescribed herbivory treatments, animals would be confined within small (1-10 acre) paddocks using portable electric fencing until the agreed-upon level of grazing in the paddock is completed. Prior to being brought to the site, the herd will be sequestered for at least 3 days where feed utilized does not contain unwanted seed/plant material. Grazing activities will be conducted in a manner which keeps all animals under herdsman's control and appropriately confined. Measures would be taken to ensure no grazing animals or herd control animals cause noise which disturbs adjoining neighbors, and to remove animals that cause a noise nuisance. Within each paddock, the goal will be a 75% reduction of herbaceous fuels (grasses), trampled or consumed, and a 50% reduction of palatable vegetation on the ladder fuels on all other vegetation (shrubs) up to 3.5 feet in height. Combined effects will create a 12"-3' spacing between 50% of the vegetation. The animals will then be moved to the next paddock.

The Project includes 29 mixed treatment areas (MT-1 through MT-29; Attachment A: Figures 3-1 through 3-29). The proposed mixed treatments would consist of manual treatment activities (hand crews using chain saws) and would total approximately 262 acres. Hand crews would remove dead trees, ladder fuels on mature trees, surface dead woody material, decrease the number of standing shrubs by approximately 50 percent, and reduce the height of annual grasses. Crews would drag the cut vegetation by hand, or utilize a winch attached to a small tractor, to pull it to a chipper stationed at an adjacent road. The vegetation would be chipped into a dump truck, and the chips would be hauled away to the local green waste facility. The proposed mixed treatments would generally occur within 100-feet of a road system and therefore no new roads would be constructed.

## 1.3 California Vegetation Treatment Program PEIR

The PEIR (CBFFP 2019) identified potential impacts to biological resources, as follows:

- IMPACT BIO-1: Substantially Affect Special-Status Plant Species Either Directly or Through Habitat Modification
- IMPACT BIO-2: Substantially Affect Special-Status Wildlife Species Either Directly or Through Habitat Modification
- IMPACT BIO-3: Substantially Affect Riparian Habitat or Other Sensitive Natural Community Through Direct Loss or Degradation That Leads to Loss of Habitat Function
- IMPACT BIO-4: Substantially Affect State or Federally Protected Wetlands
- IMPACT BIO-5: Interfere Substantially with Wildlife Movement or Impede use of Nurseries
- IMPACT BIO-6: Substantially Reduce Habitat or Abundance of Common Wildlife, Including Nesting Birds
- IMPACT BIO-7: Conflict with Local Policies or Ordinances Protecting Biological Resources
- IMPACT BIO-8: Conflict with the Provisions of an Adopted Natural Community Conservation Plan, Habitat Conservation Plan, or Other Approved Habitat Plan

The PEIR includes several standard project requirements (SPRs) designed to avoid and/or minimize the above-identified potential impacts. It also includes mitigation measures (MMs) to be implemented where impacts are still potentially significant after implementation of the SPRs. SPR BIO-1 requires data review and a reconnaissance-level biological survey as the first steps to identifying potential impacts. The following sections describe methods and

results of the data review and reconnaissance-level survey, and they provide recommendations for implementing the SPRs and MMs to ensure the Project does not result in significant impacts to biological resources.

## 2 Methods

SPR BIO-1 identifies sources and types of sources to be consulted for the data review, the purposes of the reconnaissance-level survey, and steps to be taken depending on biological resources identified and potential impacts to these resources. This section provides details of the methods for the data review and the reconnaissance-level survey conducted for the Project.

### 2.1 Data Review

SPR BIO-1 requires that the data review includes “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” and “the best available, current data for the area, including vegetation mapping data, species distribution/range information, CNDDDB, California Native Plant Society (CNPS) Rare Plant Inventory, relevant BIOS queries, and relevant general and regional plans.” In addition to reviewing the above-noted information for the Project eco-region (261B, Southern California Coast), Dudek conducted the following database reviews:

- California Natural Diversity Database (CNDDDB) (CDFW 2022a). Query of CNDDDB based on the Project’s U.S. Geological Survey quadrangles and surrounding quadrangles
- CNPS Inventory of Rare and Endangered Plants (CNPS (2022)
- Information for Planning and Consulting (IPaC) (USFWS 2022a)
- National Hydrography Dataset (USGS 2022)
- National Wetlands Inventory (USFWS 2022b)

Dudek also consulted Montecito Community Plan (County of Santa Barbara 1992, updated 1995) for policies and development standards that may apply to the Project, and consulted the County of Santa Barbara’s Oak Tree Ordinance (County of Santa Barbara 2009). Additional sources providing information on local and state-wide occurrences of wildlife, such as Paul Lehman’s Birds of Santa Barbara County, California (Lehman 2022), California Bird Species of Special Concern (Shuford and Gardali 2008), and California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016). In addition to conducting the data review, Dudek coordinated with the California Department of Fish and Wildlife (CDFW), the U.S. Fish and Wildlife Service (USFWS), and the National Marine Fisheries Service (NMFS) with regard to the potential for the Project to affect resources entrusted to these agencies, such as species listed under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA).

To determine lists of potentially occurring special-status plant and wildlife species, Dudek first referred to PEIR Appendix BIO-3 (Eco-Regions). The 9-quad CNDDDB query provided a list of species for further analysis. The final list of species that have potential to occur was determined based on factors such as details of range, elevation range, and habitat suitability (Attachment B).



## 2.2 Reconnaissance-Level Survey

Dudek biologists initially visited the site on April 21, 2022, with the Montecito Fire Protection District (District) to address access issues on the Project site and begin reconnaissance-level surveys (Table 1). Dudek biologists continued surveys on the following day, and conducted several subsequent surveys in early May 2022. During the access visit, Dudek biologists recorded initial observations in some areas and discussed treatment approaches with the District. However, because the focus of the visit was on learning access routes, property access, and related issues, it did not serve the purpose of the field reconnaissance surveys, as required in SPR BIO-1.

After conducting the literature review, Dudek biologists drove or walked to view the entire Project site and determine general vegetation types, presence of sensitive natural communities, presence of potential aquatic resources under the jurisdiction of resource agencies, and habitat for listed and non-listed special-status plant and wildlife species. The surveys focused on resources covered in the PEIR impact analysis (Impacts BIO-1 through BIO-8, listed above), but also considered the potential for impacts not addressed in the PEIR. The survey was conducted so that Dudek biologists were able to view all parts of the Project site, either from a vehicle or by walking. Biologists walked to all areas that were not visible from a vehicle or road. The survey was sufficient for identifying vegetation communities within the Project site, but was not sufficient for mapping all communities. It was also sufficient for identifying where within and immediately adjacent to the Project site aquatic resources may occur. But these resources, including riparian habitat, streams, and aquatic habitat, were not delineated in the field. Although some plant species, including special-status plants, were identified, the survey was not intended to identify all special-status plants. It also did not include protocol or focused surveys to detect special-status wildlife.

**Table 1. Reconnaissance Survey Dates, Personnel, Conditions**

Date/Time	Personnel	Conditions
4/21/2022 1:28 p.m.—3:40 pm	Dave Compton (DC), Rachel Swick (RS)	0% cloud cover (cc), 52–58°F, 4–9 miles per hour (mph) winds
4/22/2022 10:03 a.m.—4:15 pm	DC, RS	20–40% cc, 60–70°F, 0–3 mph winds
5/2/2022 2:30 p.m.—6:30 p.m.	RS	60% cc, 59–60°F, 5–10 mph winds
5/3/2022 7:00 a.m.—5:00 p.m.	RS	0% cc, 55–70°F, 5–10 mph winds
5/4/2022 8:00 a.m.—4:00 p.m.	RS	0% cc, 69–75°F, 5–15 mph winds
5/13/2022 8:00 a.m.—11:30 a.m.	RS	0% cc, 68–79°F, 5–12 mph winds

## 3 Results

The data review and reconnaissance-level survey identified several sensitive resources that could be affected by the Project, including resources identified directly and those that have the potential to occur. Two sensitive communities were identified that have a state ranking of S3 and/or global ranking of G3, and that therefore are considered sensitive. These include California brittle bush scrub alliance and needle grass grassland herbaceous alliance. Coast live oak woodland, considered sensitive under the PEIR and in Santa Barbara County, occurs over

much of the proposed treatment areas. Riparian vegetation, also considered sensitive, occurs along many of the stream courses that cross the treatment areas. Several special-status plant and wildlife species also have potential to occur (see Attachment B, Special-Status Plant and Wildlife Species with Potential to Occur; Attachment C, Potentially Occurring Special-Status Plant and Wildlife Species by Treatment Area). Although it has not been recorded in the immediate project vicinity and was not detected during reconnaissance surveys, seaside bird's beak (*Cordylanthus rigidus* ssp. *littoralis*), listed as endangered under the California Endangered Species Act (CESA), potentially occurs in woodland and coastal scrub in the project site. Several other non-listed special-status plants also have potential to occur (Attachment B).

Among the wildlife species, two federally listed species have potential to occur or are known to occur: California red-legged frog (*Rana draytonii*), listed as threatened under the federal Endangered Species (ESA), and southern steelhead (*Oncorhynchus mykiss*), listed as endangered under ESA and a candidate for listing under CESA. Several California species of special concern also have potential to occur, based on range and habitats present, including California newt (*Taricha torosa*), Blainville's (coast) horned lizard (*Phrynosoma blainvillii*), northern California legless lizard (*Anniella pulchra*), western pond turtle (*Emys marmorata*), coast patch-nosed snake (*Salvadora hexalepis virgulata*), two-striped gartersnake (*Thamnophis hammondi*), olive-sided flycatcher (*Contopus cooperii*), yellow warbler (*Setophaga petechia*), San Diego desert woodrat (*Neotoma lepida intermedia*), and western red bat (*Lasiurus blossevillii*). The only special-status wildlife species observed during surveys was olive-sided flycatcher, which is known to breed along Cold Springs Creek in the vicinity of treatment areas MT-12 and MT-13 (Lehman 2022). No wetland habitat was observed, although wetlands potentially occur within many of the stream courses that traverse the treatment areas, and NWI has mapped various wetlands along creeks, mostly as "freshwater forested/shrub." Results by resource are discussed in more detail below.

The Montecito Community Plan (County 1995) identifies several sensitive resources. The Environmentally Sensitive Habitat (ESH) overlay for the plan area includes several streams and associated riparian vegetation traversing the treatment areas. In addition, the Community Plan identifies the hillside area north of Bella Vista Road and Mountain Drive, and extending north to the plan area boundary, as "particularly valuable because of the presence of chaparral, sensitive native flora and riparian resources," and requires that any development in this area be designed to avoid areas supporting these resources.

### 3.1 Environmental Setting

The Project site occurs largely in the lower foothills of the Santa Ynez Mountains in southern Santa Barbara County. Several treatment areas occur in the coastal plain just outside the Coastal Zone boundary (Figures 2-1 through 2-23; 3-1 through 3-29). Elevations within the treatment areas range from approximately 100 ft up to approximately 2,100 ft above mean sea level (amsl). Most treatment areas occur between approximately 600 ft amsl and 1,500 ft amsl. The lower elevation treatment areas occur in largely developed areas interspersed with undeveloped open spaces, including creeks, oak woodlands, and several groves of eucalyptus trees. The higher elevations are largely undeveloped, located uphill from Mountain Drive, Park Lane, and Bella Vista Drive, and consist mostly of chaparral and scattered oak woodland broken by occasional streams (ephemeral to perennial) and associated riparian vegetation, most of which is considered Environmentally Sensitive Habitat (ESH) under the Montecito Community Plan (County 1995). Several perennial streams support federally designated critical habitat for the federally listed threatened southern steelhead (*Oncorhynchus mykiss*), which is also a state candidate for listing. Steelhead use these streams for both spawning and migration. In addition to the dominant land covers (oak woodland, chaparral, development and associated landscaping, stream/riparian, and the occasional eucalyptus stand), the area supports patches of coastal scrub vegetation, such as California brittle bush scrub, non-native grasslands, and

some patches of invasive herbaceous vegetation. Dominant plant species in the chaparral habitats include laurel sumac (*Malosma laurina*) and big pod ceanothus (*Ceanothus megacarpus*), with other species such as hollyleaf cherry (*Prunus ilicifolia*) also occurring commonly. Coast live oak (*Quercus agrifolia*) is the dominant oak species. The rare Nuttall's scrub oak (*Quercus dumosa*) is known to occur in the area, but is associated with chaparral. Riparian species, in addition to oaks associate with stream courses, include western sycamore (*Platanus racemosa*) and willows (*Salix* spp.).

Land uses surrounding the project vicinity include mostly residential development and some commercial development in areas coastward of the Project site and undeveloped land associated with Los Padres National Forest north of the Project site, in the Santa Ynez Mountains. The adjacent portions of the Los Padres are part of a large block of land supporting a wide variety of natural habitat covering much of the interior of Santa Barbara County and extending into Ventura County and beyond.

## 3.2 Sensitive Biological Resources

Table 2 identifies sensitive resources by treatment area and PEIR biological resource impact. Potentially occurring non-listed special-status plants and wildlife species are listed by treatment area in Attachment C. Figures 2-1 through 2-23 and 3-1 through 3-29 (Attachment A) provide specific locations of some sensitive resources and potential sensitive resources. Because the survey conducted under SPR BIO-1 is only a reconnaissance-level survey, some of the resources identified have not been mapped. Resources that must be avoided should be mapped and marked in the field prior to Project implementation, as described in the SPRs and MMs in the PEIR, and as discussed in Section 4, Recommendations, below.

The following sections provide an overview of the sensitive resources. As the treatment areas do not overlap any Habitat Conservation Plans, no impacts would occur to this resource, and no further discussion of this impact is included.

### 3.2.1 Sensitive Vegetation Communities

Few natural communities designated as rare (with a state ranking of S1 to S3 of a global ranking of G1 to G3) occur in the Project site. However, as noted above, several areas of California brittle bush scrub were mapped across the Project site. In addition, riparian vegetation occurring at various locations around the Project site are (Table 2a, 2b) are mostly mapped as ESH, and riparian not mapped in the Montecito Community Plan as ESH is also protected under provisions of the California Fish and Game Code and considered an aquatic resource under the jurisdiction of the California Department of Fish and Wildlife (CDFW). Finally, the Montecito Community Plan (County 1995) provides protections to oak woodland from development.

### 3.2.2 Special-Status Plant Species

As noted above, several special-status plant species have the potential occur within the treatment areas. One state listed endangered species, seaside bird's beak (*Cordylanthus rigidus* ssp. *littoralis*), has a low likelihood of occurrence. However, due to concerns over an incomplete understanding of the species' distribution, CDFW considers it to have potential to occur on the Project site, in suitable habitat occurring there (coastal scrub, woodland; CDFW 2022c). The potential occurrence of non-listed special-status plants is discussed in detail in Attachment B. Non-listed special-status species that may occur, or that are known to occur, in one or more treatment area, with their California Rare Plant Rank as identified by the California Native Plant Society (CNPS 2022) include:

- Silver slender moss (*Anomobryum julaceum*); 4.2
- Late-flowered mariposa lily (*Calochortus fimbriatus*); 1B.3
- Mesa horkelia (*Horkelia cuneata* var. *puberula*); 1B.1
- Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*); 1B.2
- White-veined monardella (*Monardella hypoleuca* ssp. *hypoleuca*); 1B.3
- Aparejo grass (*Muhlenbergia utilis*); 2B.2
- Chaparral nolina (*Nolina cismontana*); 1B.2
- Mexican earthmoss (*Pleuridium mexicanum*); 2B.1
- Nuttall's scrub oak (*Quercus dumosa*); 1B.1
- Black-flowered figwort (*Scrophularia atrata*); 1B.2
- Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*); 2B.2

Potential for these species to occur in specific treatment areas was determined based on vegetation types identified in the different areas, as well as by elevation. Attachment C showed the potential for each species to occur by treatment area.

### 3.2.3 Special-Status Wildlife Species

Two federally listed wildlife species, California red-legged frog and southern steelhead, were identified as occurring within or near one or more treatment area. The potential occurrence of steelhead is well known, and it is restricted to the following watersheds supporting federal critical habitat: Sycamore Creek, Montecito/Cold Springs/Hot Springs Creek, San Ysidro Creek, and Romero Creek. California red-legged frog is known from two occurrences near the confluence of Hot Springs and Cold Springs Creeks. But it has potential to occur in other areas supporting suitable aquatic habitat, as well as in adjacent upland habitats. Monarch butterfly (*Danaus plexippus*) is a federal candidate species that occurs in several groves of eucalyptus (*Eucalyptus* spp.) and other trees in the Project vicinity, and is known to roost in one of the treatment areas (GP15) and may occur at others. As a federal candidate species, monarch butterfly does not receive protections under the ESA. However, their winter roosts are considered ESH under the Montecito Community Plan (County 1995). The potential occurrence of other non-listed special-status wildlife species is discussed in detail in Attachment B. Other non-listed special-status wildlife species are those identified as California Species of Special Concern (SSC) or California Fully Protected (FP) species Those that are known to occur, or have potential to occur, in one or more of treatment areas, include:

- California newt (*Taricha torosa*); SSC
- Olive-sided flycatcher (*Contopus cooperi*); SSC
- Yellow warbler (*Setophaga petechia*); SSC

- Western red bat (*Lasiurus blossevillii*); SSC
- San Diego desert woodrat (*Neotoma lepidus intermedia*); SSC
- Ringtail (*Bassariscus astutus*); FP
- Northern California legless lizard (*Anniella pulchra*); SSC
- Western pond turtle (*Emys marmorata*); SSC
- Blainville's [coast] horned lizard (*Phrynosoma blainvillii*)
- Coast patch-nosed snake (*Salvadora hexalepis virgultea*); SSC
- Two-striped gartersnake (*Thamnophis hammondi*)

Potential for these species to occur in specific treatment areas was determined based on vegetation types identified in the different areas, as well as by elevation. Attachment C shows the potential for each species to occur by treatment area.

### 3.2.4 Jurisdictional Aquatic Resources

The reconnaissance surveys conducted as part of SPR BIO-1 do not require mapping of aquatic resources under the jurisdictions of the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), or California Department of Fish and Wildlife (CDFW). However, the literature review and field reconnaissance identified the location of riparian habitat wherever it occurs and identified the location of potential wetlands. Streams that would likely be considered waters of the U.S. are relatively well known from data included in the National Hydrography Dataset (NHD; USGS 2022) and the National Wetlands Inventory (NWI; USFWS 2022). Treatment areas supporting riparian vegetation, and those potentially supporting wetlands, are identified in Tables 2a and 2b.

### 3.2.5 Wildlife Movement and Nursery Sites

Because the Project site is located at the edge of a vast area of undeveloped habitats supporting a wide variety of wildlife, and because much of the northern portion of the Project site is sparsely developed, larger wildlife species such as mule deer (*Odocoileus hemionus*) likely move through the area regularly. Some of these species likely use creeks and other narrower areas of habitat extending southward to the coastal plain, to access more southerly portions of the Montecito Community Plan Area. Movement of fish, in particular, is tied to creeks within the Project vicinity. Smaller animals occupying chaparral, oak woodland, and streamside habitats outside the Project area occur along undeveloped corridors extending into the plan area, which provide avenues of gene flow for populations of these less-mobile species, connecting populations in the Los Padres National Forest with those in the Plan Area. Therefore, the treatments areas, with the possible exception of areas such as GT-14 and GT-15, which are closer to the coast and relatively isolated from other treatment areas, likely support wildlife connectivity in the vicinity.

**Table 2a. Sensitive Resource by Treatment Area and California Vegetation Treatment Program PEIR Bio Impact: Prescribed Herbivory Treatments**

Treatment Area #	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)*	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)*	Riparian Habitat	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds	Local Plans, Policies, Ordinances	Conflict with HCP, etc.	
GT-1	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	None	Yes; see Attachment C	Yes	None identified	"Fresh-water Forested/ Shrub Wetland" (NWI)	Yes, due to temporary fencing for grazing	Within riparian/ wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1a, 1b, 2b, 3a, 4, 5
GT-2	seaside bird's-beak	Yes; see Attachment C	Single pass in June	None	Yes; see Attachment C	None	Coast live oak woodland	None	Yes, due to temporary fencing for grazing	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2 3, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1a, 1b, 2b, 3a
GT-3	None	Yes; see Attachment C	Single pass in June	None	Yes; see Attachment C	None	None identified	None	Yes, due to temporary fencing for grazing	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1b, 2b, 3a
GT-4	None	Yes; see Attachment C	Single pass in June	None	Yes; see Attachment C	None	None identified	None	Yes, due to temporary fencing for grazing	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1b, 2b, 3a
GT-5	None	Yes; see Attachment C	Two passes, April and June	None	Yes; see Attachment C	None	None identified	None	Yes, due to temporary	No significant sites, but	LTS impacts	Yes	Consistent, with recommended	None	SPR BIO-2, 3, 5, 7, 9, 10, 11, 12; SPR

**Table 2a. Sensitive Resource by Treatment Area and California Vegetation Treatment Program PEIR Bio Impact: Prescribed Herbivory Treatments**

Treatment Area #	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)*	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)*	Riparian Habitat	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds	Local Plans, Policies, Ordinances	Conflict with HCP, etc.	
									fencing for grazing	see "Non-listed Special-Status Wildlife"			measures implemented		AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1b, 2b, 3a
GT-6	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	None	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub within ESH)	Yes, due to temporary fencing for grazing	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented[ESH]	None	SPR BIO-2, 3, 4, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1a, 1b, 2b, 3a, 4, 5
GT-7	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	None	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub within ESH)	Yes, due to temporary fencing for grazing	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1b, 2b, 3a, 4, 5
GT-8	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	None	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub, within ESH)	Yes, due to temporary fencing for grazing	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1a, 1b, 2b, 3a, 4, 5
GT-9	seaside bird's-beak	Yes; see Attachment C	Single pass in June	None	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	None	Yes, due to temporary fencing for grazing	Within riparian (also see "Non-listed	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR

**Table 2a. Sensitive Resource by Treatment Area and California Vegetation Treatment Program PEIR Bio Impact: Prescribed Herbivory Treatments**

Treatment Area #	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)*	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)*	Riparian Habitat	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds	Local Plans, Policies, Ordinances	Conflict with HCP, etc.	
										Special-Status Wildlife")					GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1b, 2b, 3a, 4, 5
GT-10	seaside bird's-beak	Yes; see Attachment C	Single pass in June	None	Yes; see Attachment C	Yes (within ESH)	Needle grass grassland, riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub, within ESH)	Yes, due to temporary fencing for grazing	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1a, 1b, 2b, 3a, 4, 5
GT-11	None	Yes; see Attachment C	Single pass in June	None	Yes; see Attachment C	Yes (within ESH)	Riparian	Yes (NWI freshwater forested/shrub, within ESH)	Yes, due to temporary fencing for grazing	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1b, 2b, 3a, 4, 5
GT-12	seaside bird's-beak	Yes; see Attachment C	Single pass in June	California red-legged frog, steelhead	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub, within ESH)	Yes, due to temporary fencing for grazing	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
GT-13	seaside bird's-beak	Yes; see Attachment C	Single pass in June	California red-legged frog, steelhead	Yes; see Attachment C	Yes (within and	Riparian, coast live oak woodland	Yes (NWI freshwater forested/	Yes, due to temporary fencing for grazing	Within riparian/wetland (also see	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR



**Table 2a. Sensitive Resource by Treatment Area and California Vegetation Treatment Program PEIR Bio Impact: Prescribed Herbivory Treatments**

Treatment Area #	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)*	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)*	Riparian Habitat	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds	Local Plans, Policies, Ordinances	Conflict with HCP, etc.	
						outside of ESH)		shrub, within ESH)		"Non-listed Special-Status Wildlife")					GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
GT-14	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	California red-legged frog, steelhead	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater pond)	Yes, due to temporary fencing for grazing	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented[ESH, monarch roosting]	None	SPR BIO-2, 3, 4, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
GT-15	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	California red-legged frog	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	None	Yes, due to temporary fencing for grazing	Within riparian (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
GT-16	None	Yes; see Attachment C	Single pass in June	California red-legged frog	Yes; see Attachment C	Yes (within ESH)	Riparian	None	Yes, due to temporary fencing for grazing	Within riparian (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1b, 2a, 2b, 3a, 4, 5
GT-17	seaside bird's-beak	Yes; see Attachment C	Single pass in June	California red-legged frog	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	None	Yes, due to temporary fencing for grazing	Within riparian (also see "Non-listed	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR

**Table 2a. Sensitive Resource by Treatment Area and California Vegetation Treatment Program PEIR Bio Impact: Prescribed Herbivory Treatments**

Treatment Area #	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)*	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)*	Riparian Habitat	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds	Local Plans, Policies, Ordinances	Conflict with HCP, etc.	
										Special-Status Wildlife")					GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
GT-18	seaside bird's-beak	Yes; see Attachment C	Single pass in June	California red-legged frog	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub)	Yes, due to temporary fencing for grazing	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
GT-19	seaside bird's-beak	Yes; see Attachment C	Single pass in June	California red-legged frog	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	None	Yes, due to temporary fencing for grazing	Within riparian (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
GT-20	None	Yes; see Attachment C	Single pass in June	California red-legged frog, steelhead	Yes; see Attachment C	Yes (within ESH)	Riparian	Yes (NWI freshwater forested/shrub)	Yes, due to temporary fencing for grazing	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1b, 2a, 2b, 3a, 4, 5
GT-21	seaside bird's-beak	Yes; see Attachment C	Single pass in June	California red-legged frog, steelhead	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	None	Yes, due to temporary fencing for grazing	Within riparian (also see "Non-listed	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR

**Table 2a. Sensitive Resource by Treatment Area and California Vegetation Treatment Program PEIR Bio Impact: Prescribed Herbivory Treatments**

Treatment Area #	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)*	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)*	Riparian Habitat	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds	Local Plans, Policies, Ordinances	Conflict with HCP, etc.	
										Special-Status Wildlife")					GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
GT-22	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	California red-legged frog, steelhead	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub within ESH)	Yes, due to temporary fencing for grazing	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
GT-23	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	California red-legged frog	Yes; see Attachment C	None	coast live oak woodland	None	Yes, due to temporary fencing for grazing	Within riparian (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 7, 9, 10, 11, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5

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**Table 2b. Sensitive Resource by Treatment Area and California Vegetation Treatment Program PEIR Bio Impact: Mixed Treatments**

Treatment Area #	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds	Local Plans, Policies, Ordinances	Conflict with HCP, etc.	
MT-1	seaside bird's-beak	Yes; see Attachment C	Single pass in June	None	Yes; see Attachment C	None	California brittle bush scrub	None	Yes, but impacts less than significant (LTS)	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2b, 3a, 4
MT-2	seaside bird's-beak	Yes; see Attachment C	Single pass in June	None	Yes; see Attachment C	None	Coast live oak woodland	None	Yes, but impacts LTS	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2b, 3a
MT-3	seaside bird's-beak	Yes; see Attachment C	Single pass, June to July	None	Yes; see Attachment C	Yes (within ESH)	Coast live oak woodland	None	Yes, but impacts LTS	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2b, 3a, 4, 5
MT-4	None	None	N.A.	None	Yes; see Attachment C	None	None identified	None	Yes, but impacts LTS	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 5, 6, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 3, 5; MM BIO-1b, 2b, 3a
MT-5	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	None	Yes; see Attachment C	None	Coast live oak woodland	None	Yes, but impacts LTS	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2b, 3a, 4

**Table 2b. Sensitive Resource by Treatment Area and California Vegetation Treatment Program PEIR Bio Impact: Mixed Treatments**

Treatment Area #	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds	Local Plans, Policies, Ordinances	Conflict with HCP, etc.	
MT-6	None	Yes; see Attachment C	Single pass, May to July	California red-legged frog	Yes; see Attachment C	None	None identified	None	Yes, but impacts LTS	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1b, 2a, 2b, 3a
MT-7	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	None	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub within ESH)	Yes, but impacts LTS	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2b, 3a, 4, 5
MT-8	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	None	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub within ESH)	Yes, but impacts LTS	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2b, 3a, 4, 5
MT-9	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	California red-legged frog, steelhead	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub within ESH)	Yes, but impacts LTS	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
MT-10	None	Yes; see Attachment C	Single pass in June	None	Yes; see Attachment C	None	None identified	None	Yes, but impacts LTS	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1b, 2b, 3a, 4

**Table 2b. Sensitive Resource by Treatment Area and California Vegetation Treatment Program PEIR Bio Impact: Mixed Treatments**

Treatment Area #	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds	Local Plans, Policies, Ordinances	Conflict with HCP, etc.	
MT-11	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	None	Yes; see Attachment C	None	Coast live oak woodland	None	Yes, but impacts LTS	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2b, 3a, 4
MT-12	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	California red-legged frog, steelhead	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub within ESH)	Yes, but impacts LTS	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
MT-13	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	California red-legged frog, steelhead	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub within ESH along Cold Springs Creek)	Yes, but impacts LTS	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
MT-14	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	California red-legged frog	Yes; see Attachment C	Yes (within ESH)	Coast live oak woodland	Yes (NWI freshwater forested/shrub)	Yes, but impacts LTS	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
MT-15	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	California red-legged frog (Hot Springs Creek only)	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub)	Yes, but impacts LTS	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5

**Table 2b. Sensitive Resource by Treatment Area and California Vegetation Treatment Program PEIR Bio Impact: Mixed Treatments**

Treatment Area #	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds	Local Plans, Policies, Ordinances	Conflict with HCP, etc.	
MT-16	seaside bird's-beak	Yes; see Attachment C	Single pass in June	California red-legged frog, steelhead	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub)	Yes, but impacts LTS	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12 SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
MT-17	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	California red-legged frog, steelhead	Yes; see Attachment C	None	Coast live oak woodland	None	Yes, but impacts LTS	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 5, 6, 7, 9, 10, 12 SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4
MT-18	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	California red-legged frog (near Romero Canyon)	Yes; see Attachment C	Yes (within and outside ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub)	Yes, but impacts LTS	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
MT-19	None	Yes; see Attachment C	Single pass in June	None	Yes; see Attachment C	None	None identified	None	Yes, but impacts LTS	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1b, 2b, 3a
MT-20	seaside bird's-beak	Yes; see Attachment C	Single pass in June	None	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub)	Yes, but impacts LTS	Within riparian (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2b, 3a, 4, 5

**Table 2b. Sensitive Resource by Treatment Area and California Vegetation Treatment Program PEIR Bio Impact: Mixed Treatments**

Treatment Area #	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds	Local Plans, Policies, Ordinances	Conflict with HCP, etc.	
MT-21	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	None	Yes; see Attachment C	Yes (through much of treatment area)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub)	Yes, but impacts LTS	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
MT-22	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	California red-legged frog, steelhead	Yes; see Attachment C	Yes (outside ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub; within debris basin)	Yes, but impacts LTS	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
MT-23	seaside bird's-beak	Yes; see Attachment C	Single pass in June	California red-legged frog	Yes; see Attachment C	Yes (within and outside ESH)	Riparian, coast live oak woodland	None	Yes, but impacts LTS	Within riparian (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
MT-24	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	California red-legged frog	Yes; see Attachment C	Yes (within and outside ESH)	Riparian, coast live oak woodland	None	Yes, but impacts LTS	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5
MT-25	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	California red-legged frog	Yes; see Attachment C	Yes (within and outside ESH)	Riparian, coast live oak woodland	None	Yes, but impacts LTS	Within riparian (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2a, 2b, 3a, 4, 5



**Table 2b. Sensitive Resource by Treatment Area and California Vegetation Treatment Program PEIR Bio Impact: Mixed Treatments**

Treatment Area #	Impact BIO-1			Impact BIO-2		Impact BIO-3		Impact BIO-4	Impact BIO-5		Impact BIO-6		Impact BIO-7	Impact BIO-8	Applicable SPRs and MMs
	Potentially Occurring Listed Plants (MM BIO-1a)	Non-Listed Special-Status Plants (MM BIO-1b)	Survey Recommendation (SPR BIO-7, MM BIO-1a, 1b)	Listed Wildlife (MM BIO-2a)	Non-Listed Special-Status Wildlife (SPR BIO-10, MM BIO-2b)	Riparian Habitat	Sensitive Natural Communities (SPR BIO-3, MM BIO-3a)	Wetlands	Wildlife Movement	Nursery Sites (MM BIO-5)	Common Wildlife	Nesting Birds	Local Plans, Policies, Ordinances	Conflict with HCP, etc.	
MT-26	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	None	Yes; see Attachment C	None	Coast live oak woodland	None	Yes, but impacts LTS	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2b, 3a, 4
MT-27	None	Yes; see Attachment C	Single pass, May to July	None	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub)	Yes, but impacts LTS	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12 SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1b, 2b, 3a, 4, 5
MT-28	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	None	Yes; see Attachment C	Yes (within ESH)	Riparian, coast live oak woodland	Yes (NWI freshwater forested/shrub)	Yes, but impacts LTS	Within riparian/wetland (also see "Non-listed Special-Status Wildlife")	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2b, 3a, 4, 5
MT-29	seaside bird's-beak	Yes; see Attachment C	Single pass, May to July	None	Yes; see Attachment C	None	Coast live oak woodland	None (but potentially occur adjacent)	Yes, but impacts LTS	No significant sites, but see "Non-listed Special-Status Wildlife"	LTS impacts	Yes	Consistent, with recommended measures implemented	None	SPR BIO-2, 3, 4, 5, 6, 7, 9, 10, 12; SPR AD-3; SPR GEO 1, 3, 4, 7; SPR HAZ-5, 6; SPR HYD-1, 4, 5; MM BIO-1a, 1b, 2b, 3a, 4, 5

## 4 Recommendations

This section includes recommendations for implementing SPRs and MMs specific to the proposed treatment. For some biological resources SPRs, no additional details are described below, but the measures should be implemented as described in the Project Description and required in the PEIR. These include the following:

- SPR BIO-5: Avoid Environmental Effects of Type Conversion and Maintain Habitat Function in Chaparral and Coastal Scrub
- SPR BIO-6: Prevent Spread of Plant Pathogens
- SPR BIO-11: Install Wildlife Friendly Fencing (Prescribed Herbivory)

Several SPRs for other disciplines also should be implemented to address biological resources impacts:

- SPR AD-3: Consistency with Local Plans, Policies, and Ordinances
- SPR GEO-1: Suspend Disturbance during Heavy Precipitation
- SPR GEO-3: Stabilize Disturbed Soil Areas
- SPR GEO-4: Erosion Monitoring
- SPR GEO-7: Minimize Erosion
- SPR HAZ 5: Spill Prevention and Response Plan
- SPR HAZ 6: Comply with Herbicide Application Regulations
- SPR HYD-1: Comply with Water Quality Regulations
- SPR HYD-3: Water Quality Protections for Prescribed Herbivory
- SPR HYD-4: Identify and Protect Watercourse and Lake Protection Zones
- SPR HYD-5: Protect Non-Target Vegetation and Special-status Species from Herbicides

One biological resources SPR does not apply to the proposed treatment areas, SPR BIO-8: Identify and Avoid or Minimize Impacts to Coastal Zone ESHAs. In addition, SPR BIO-1 has been implemented for all treatment areas, and no further action is required to satisfy this requirement. SPR BIO-11: Install Wildlife Friendly Fencing (Prescribed Herbivory) applies only to the grazing treatment areas, GP1 through GP23.

The recommendations below incorporate those provided by CDFW during coordination (CDFW 2022c; Attachment D). USFWS and NMFS provided no specific recommendations to avoid take of federally listed species at the time of preparation of this memorandum, but the recommendations below include several to avoid take of California red-legged frog and federally listed plants. Any recommendations provided by USFWS or NMFS, or additional recommendations by CDFW, should be incorporated into the final treatment plan.

*SPR BIO-2: Require Biological Resource Training for Workers.* This SPR should be implemented for all treatment areas. Resources to be addressed are those described in this memorandum. The training should highlight the following listed species:

- Seaside bird's beak
- California red-legged frog
- Southern steelhead

It should also address those non-listed plant and wildlife species listed in Section 3.2.

*SPR BIO-3: Survey Sensitive Natural Communities and Other Sensitive Habitats.* Several areas of sensitive communities (based on their rarity) were identified during surveys (California brittle bush scrub in MT-1 and MT-3, native grassland in GT-10). Additional coastal sage scrub, considered sensitive under the Montecito Community Plan (County 1995), was identified in an area where MT-18 and GT-20 overlap. Riparian vegetation, including oak riparian, occurs in most ESH areas, and in several areas outside of ESH (Table 2a, Table 2b, Attachment A; Figures 2-1 through 2-23, 3-1 through 3-29). Where these occur, and where other sensitive communities are identified, including coastal sage scrub and any community designated as an S1 to S3 community in the California Natural Community List (CDFW 2022b), habitat and prescribed buffers should be delineated and avoidance should be implemented, in accordance with SPR BIO-3. Upland oak woodland is protected under the Montecito Community Plan, but avoidance is not necessary, as the project does not propose development or removal of oak woodland.

*SPR BIO-4: Design Treatment to Avoid Loss or Degradation of Riparian Habitat Function.* Locations of riparian habitat, or where riparian habitat potentially occurs, were identified during implementation of SPR BIO-1 and are listed by treatment area in Table 2a and Table 2b. Surveys should be conducted in these areas prior to conducting treatment activities, and avoidance should be implemented in accordance with SPR BIO-4.

*SPR BIO-7: Survey for Special-Status Plants.* Prior to conducting treatment activities, special-status plant surveys should be conducted, and should be timed for each treatment area as outlined in Table 2a and Table 2b. These surveys are required for most areas, and a single-pass survey would be sufficient in most areas where surveys are conducted (Table 2a, Table 2b). Buffers and avoidance of listed special-status plants, including seaside bird's beak, should be implemented in accordance with measures included in MM BIO-1a. Buffers and avoidance of non-listed special-status plants should be implemented in accordance with measures included in MM BIO-1b.

*SPR BIO-9: Prevent Spread of Invasive Plants, Noxious Weeds, and Invasive Wildlife.* Implement this SPR in all treatment areas. Only one larger area of invasive species was identified during implementation of SPR BIO-1, an area dominated by wild oats (*Avena* spp.) in areas GT-12/MT-13 (Figure 2-12, Figure 3-13). Remove invasive species in this area, and any other areas where they are found, in accordance with SPR BIO-9.

*SPR BIO-10: Survey for Special-Status Wildlife and Nursery Sites.* No surveys are required under any established survey protocol. However, to comply with the PEIR and avoidance measures requested by CDFW and USFWS in relation to steelhead and California red-legged frog, and to ensure less than significant impacts to other special-status wildlife species, implementation of this SPR and of MM BIO-2a or MM BIO-2b should include the following:

- *Avoidance of aquatic habitats, riparian vegetation, and wetland.* Avoid treatment within aquatic habitats and wetland, and within 50 feet of these areas, and do not conduct prescribed herbivory within riparian habitats or a 50-foot buffer of these habitats. For mixed treatment, remove only dead material within riparian vegetation. Any removal of live vegetation would require filing a Notification of Lake and Streambed

Alteration in accordance with Section 1602 of the Fish and Game Code, and as requested by CDFW during consultation (Appendix D). In addition, any treatment within the wetted channel of a creek in the treatment areas, or any work within riparian habitat in addition to removal of dead material, would require additional consultation with USFWS with regard to California red-legged frog and NMFS with regard to steelhead. Also, do not stockpile cut vegetation within stream channels or riparian habitat.

- *No work during or after rain events.* To ensure no take to California red-legged frog occurs, no work should be scheduled when rain is forecast or within 48 hours after a rain event.
- *California red-legged frog avoidance.* For work in areas where California red-legged frog potentially occurs (Tables 2a, 2b), a survey should be conducted that would include a search for suitable aquatic habitat in all accessible areas within 100 meters (approximately 330 feet) of the Project site, to the extent accessible. If any California red-legged frogs are observed, consult with USFWS to determine appropriate avoidance measures in accordance with MM BIO-2a.
- *Survey for non-listed special-status wildlife species.* Depending on the potential of each species to occur in a given treatment area (Appendix C, Potentially Occurring Special-Status Species by Treatment Area), conduct pre-activity surveys for California newt, monarch butterfly, San Diego desert woodrat, ringtail, northern California legless lizard, western pond turtle, Blainville's horned lizard, coast patch-nosed snake, and two-striped gartersnake, based on the presence of suitable habitat for each of these species. If any of these species are identified, or if woodrat middens are observed, the locations should be marked in the field, and avoidance should be implemented in accordance with MM BIO-2b. If ringtail is identified, no trees or tree limbs with large cavities should be removed in the vicinity unless the species is confirmed as not occupying the cavities. Avoidance should be implemented in accordance with measures in MM BIO-2a for fully protected species.

Note that surveys under SPR BIO-10 for additional species with potential to occur in the treatment areas are not necessary. Because of avoidance measures being implemented, no surveys are required for southern steelhead. Impacts to yellow warbler and olive-sided flycatcher would be addressed under SPR BIO-12, below. Western red bats have potential to roost in riparian areas, but because impacts within these areas would be limited to removal of dead material, the potential for impacts is very low, and surveys are not necessary.

*SPR BIO-12: Protect Common Nesting Birds, including Raptors.* If treatment is initiated in any new areas between January 15 and August 31, conduct a pre-activity nesting bird survey in accordance with this requirement. If active nests are located or determined to likely be present, implement buffers, avoidance, treatment modifications, and/or treatment deferral in accordance with SPR BIO-1. Also, consider noise-reduction methods, such as use of hand tools instead of power tools, if working near a nest.

### **Other Recommendations**

- If any California condors or arroyo toads are encountered during treatment, stop work in the vicinity of the observation, immediately notify CDFW and USFWS of the occurrence, and consult with these agencies on the course of action. No take may occur to these species without obtaining an incidental take permit under the federal ESA and CESA.
- To remain consistent with the Montecito Community Plan (County 1995), and SPR AD-3, vegetation treatment should not occur within the known monarch butterfly roost within treatment area GT-15 and a 50-foot buffer without review and approval of the Environmental Resource Management Department.

- If any California red-legged frogs are encountered during treatment, stop work in the vicinity of the observation, immediately notify USFWS of the occurrence, and consult with USFWS on the appropriate course of action. No take may occur to this species without obtaining an incidental take permit under the federal ESA.
- If southern steelhead is encountered during treatment, stop work in the vicinity of the observation, immediately notify NMFS, and consult with this agency on the proper course of action. No take may occur to this species without obtaining an incidental take permit under the federal ESA.
- Field data forms for the CNDDDB should be submitted for any observations of special-status species observed during pre-activity surveys or during treatment activities.

Any additional recommendations provided by CDFW, USFWS, or NMFS prior to the implementation of treatment activities should be incorporated into the treatment plan.

## 5 References

- CBFFP (California Board of Forestry and Fire Protection). 2019. *California Vegetation Treatment Program Final Environmental Impact Report*. State Clearinghouse # 2019012052. Volume II: Program Environmental Impact Report, as Revised. Prepared by Ascent Environmental for the California Board of Forestry and Fire Protection.
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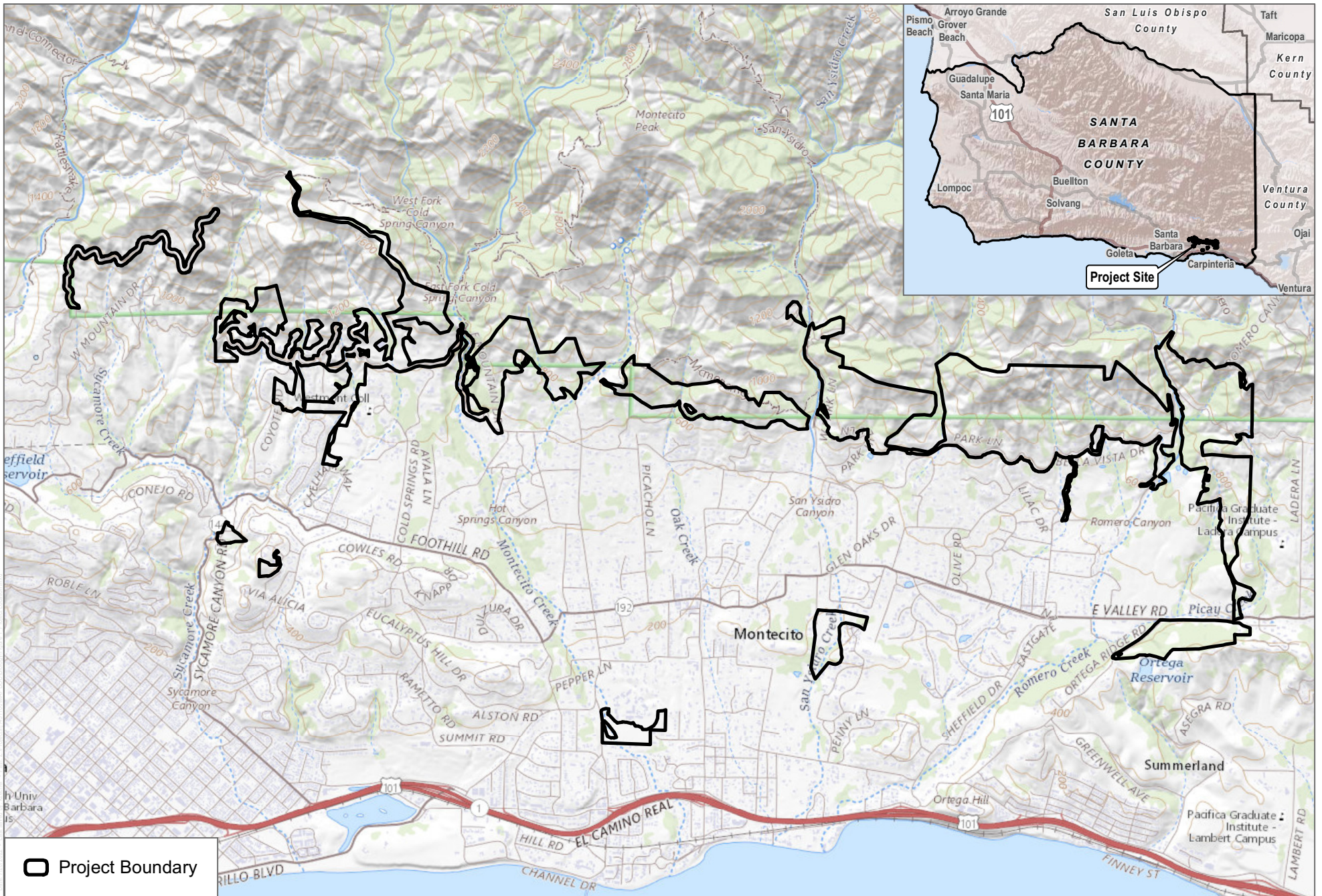
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# **Attachment A**

Figures







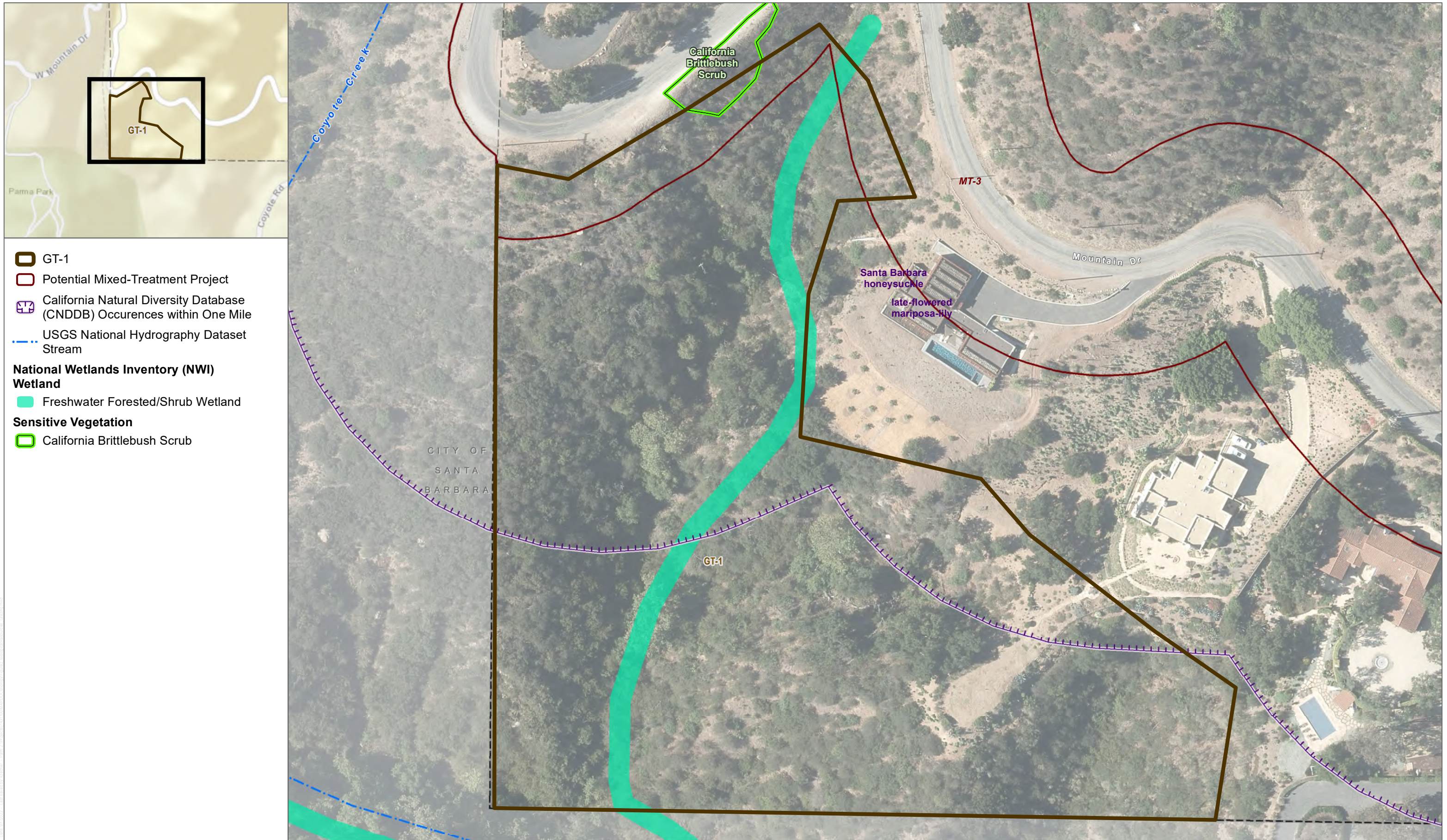
SOURCE: USGS National Map







**FIGURE 1**

**Project Location**

Montecito Fire Protection District Vegetation Treatment Program





-  GT-1
-  Potential Mixed-Treatment Project
-  California Natural Diversity Database (CNDDDB) Occurences within One Mile
-  USGS National Hydrography Dataset Stream
- National Wetlands Inventory (NWI)**
- Wetland**
-  Freshwater Forested/Shrub Wetland
- Sensitive Vegetation**
-  California Brittlebush Scrub

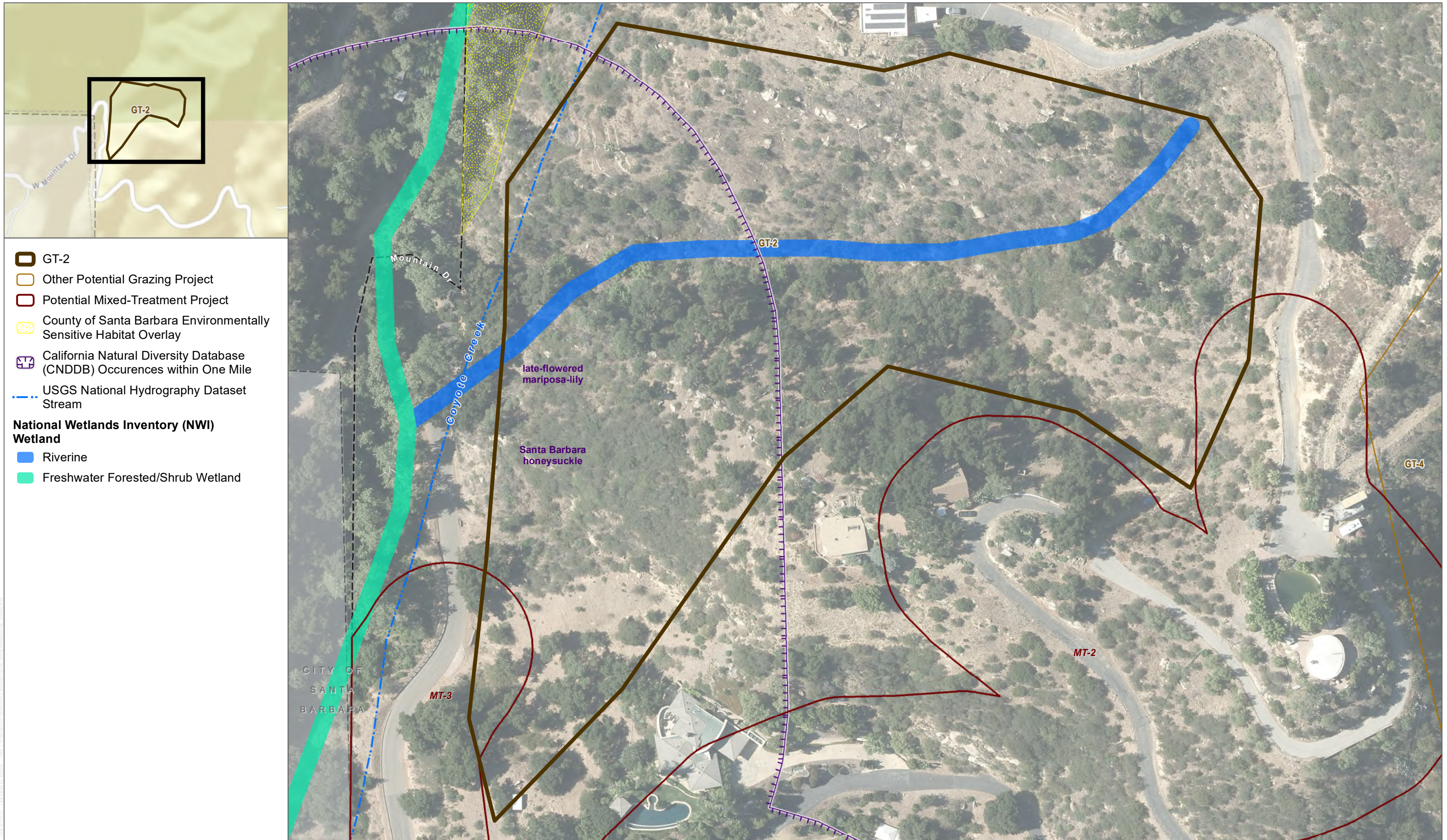
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 2-1

Potential Grazing Treatment Project: GT-1



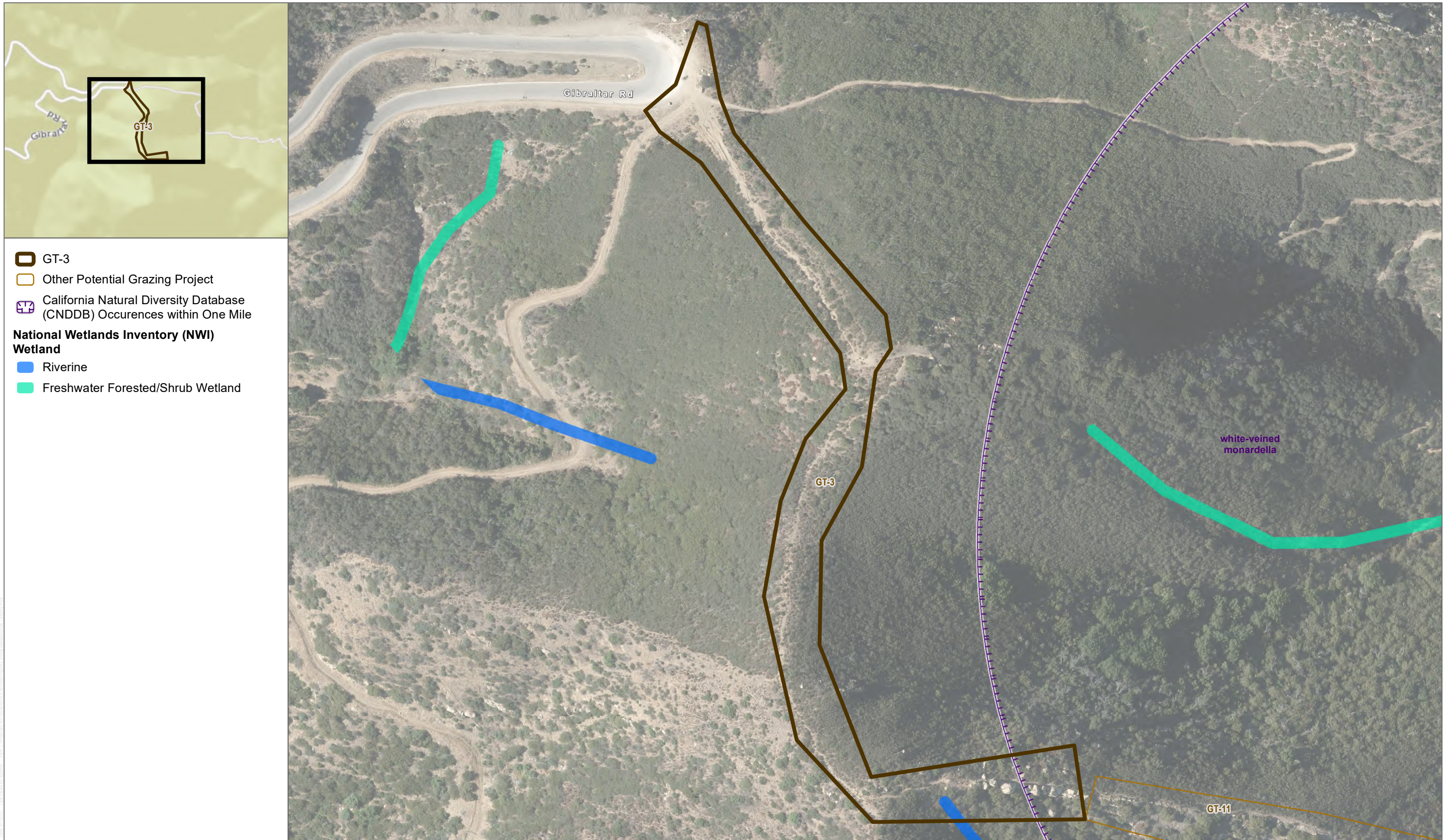


SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE 2-2**

Potential Grazing Treatment Project: GT-2





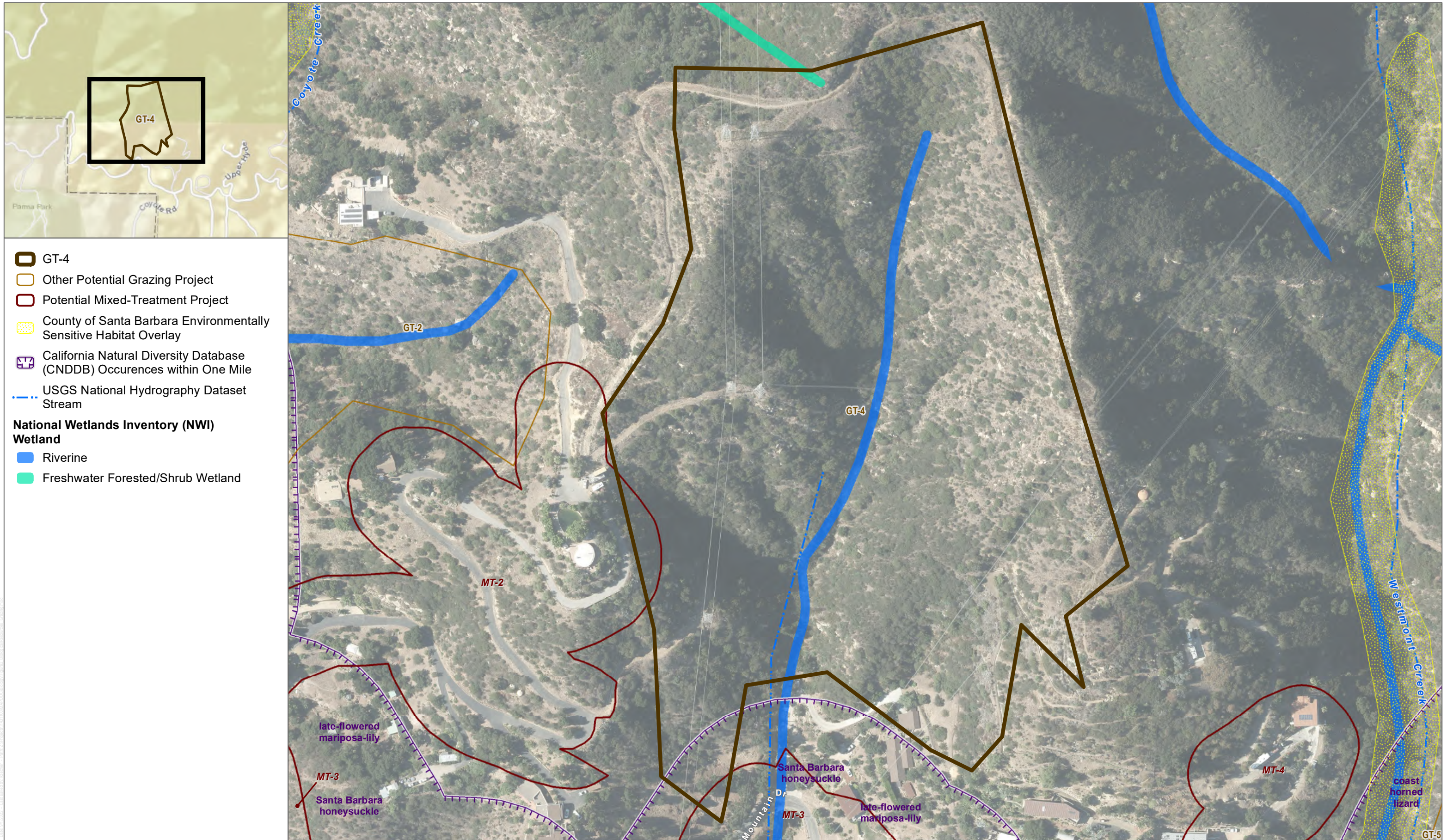
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE 2-3**

Potential Grazing Treatment Project: GT-3







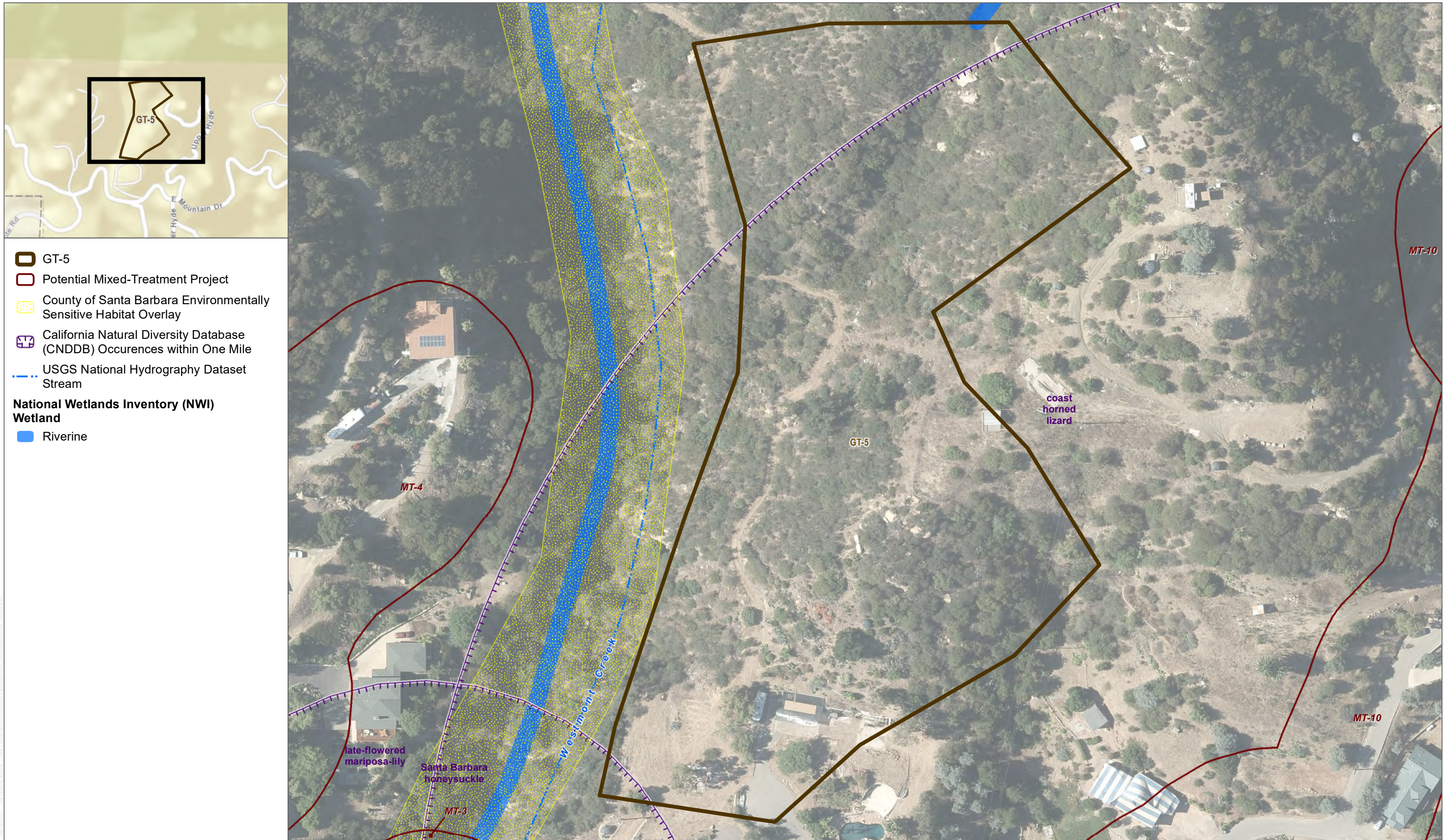
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 2-4

Potential Grazing Treatment Project: GT-4



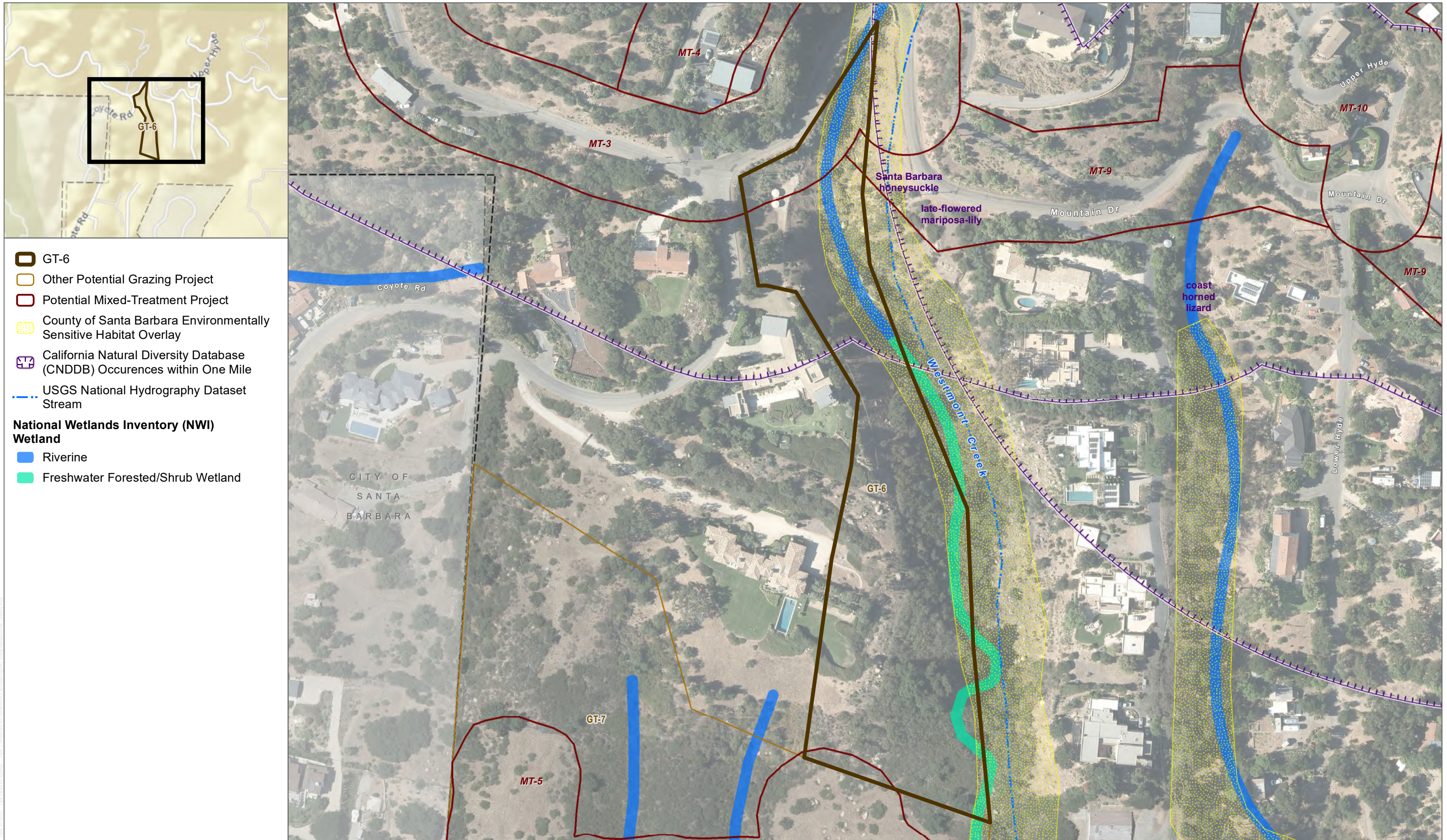


SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE 2-5**

Potential Grazing Treatment Project: GT-5





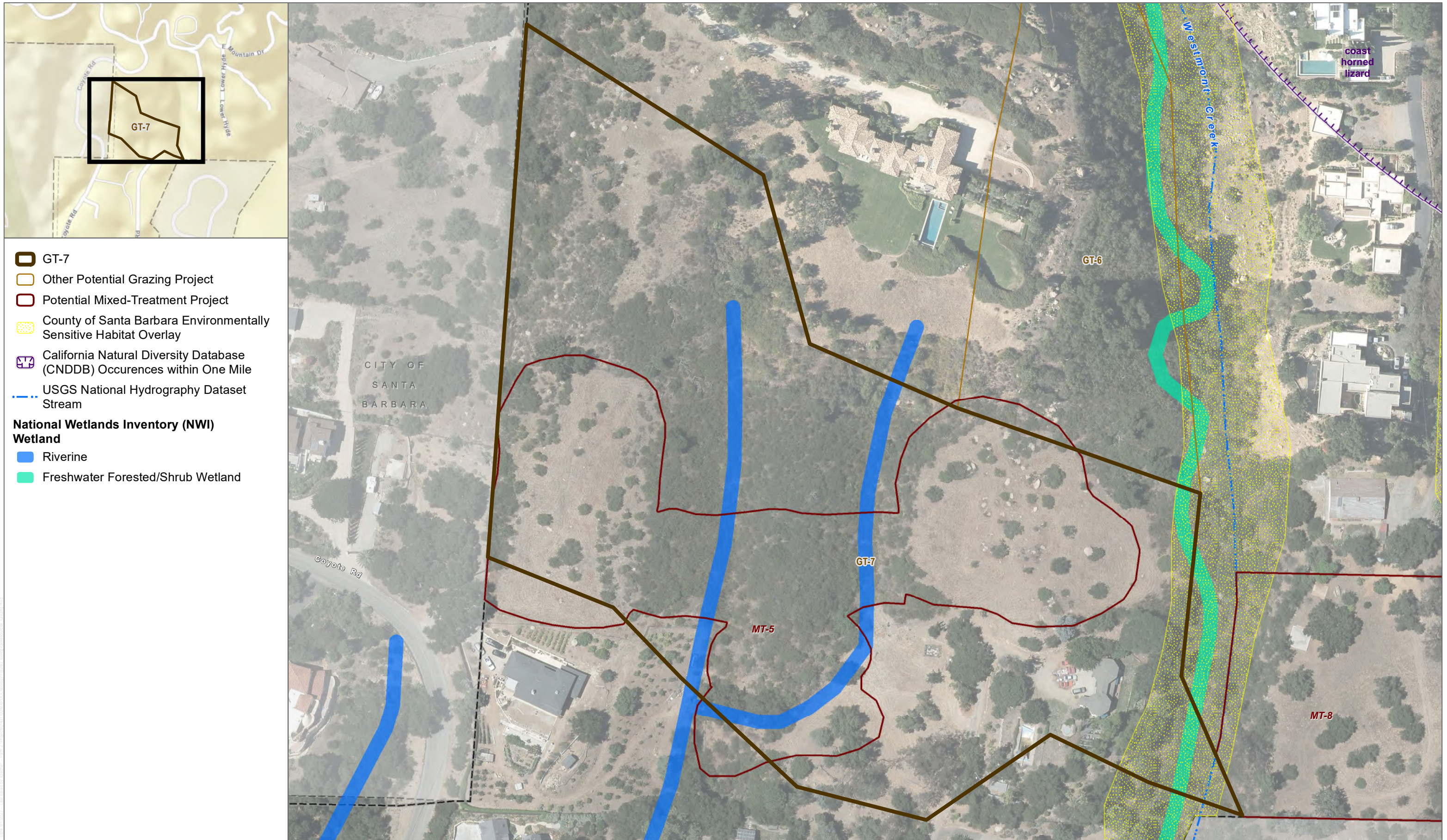
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles











FIGURE 2-6

Potential Grazing Treatment Project: GT-6





-  GT-7
  -  Other Potential Grazing Project
  -  Potential Mixed-Treatment Project
  -  County of Santa Barbara Environmentally Sensitive Habitat Overlay
  -  California Natural Diversity Database (CNDDB) Occurrences within One Mile
  -  USGS National Hydrography Dataset Stream
- National Wetlands Inventory (NWI)**  
**Wetland**
-  Riverine
  -  Freshwater Forested/Shrub Wetland

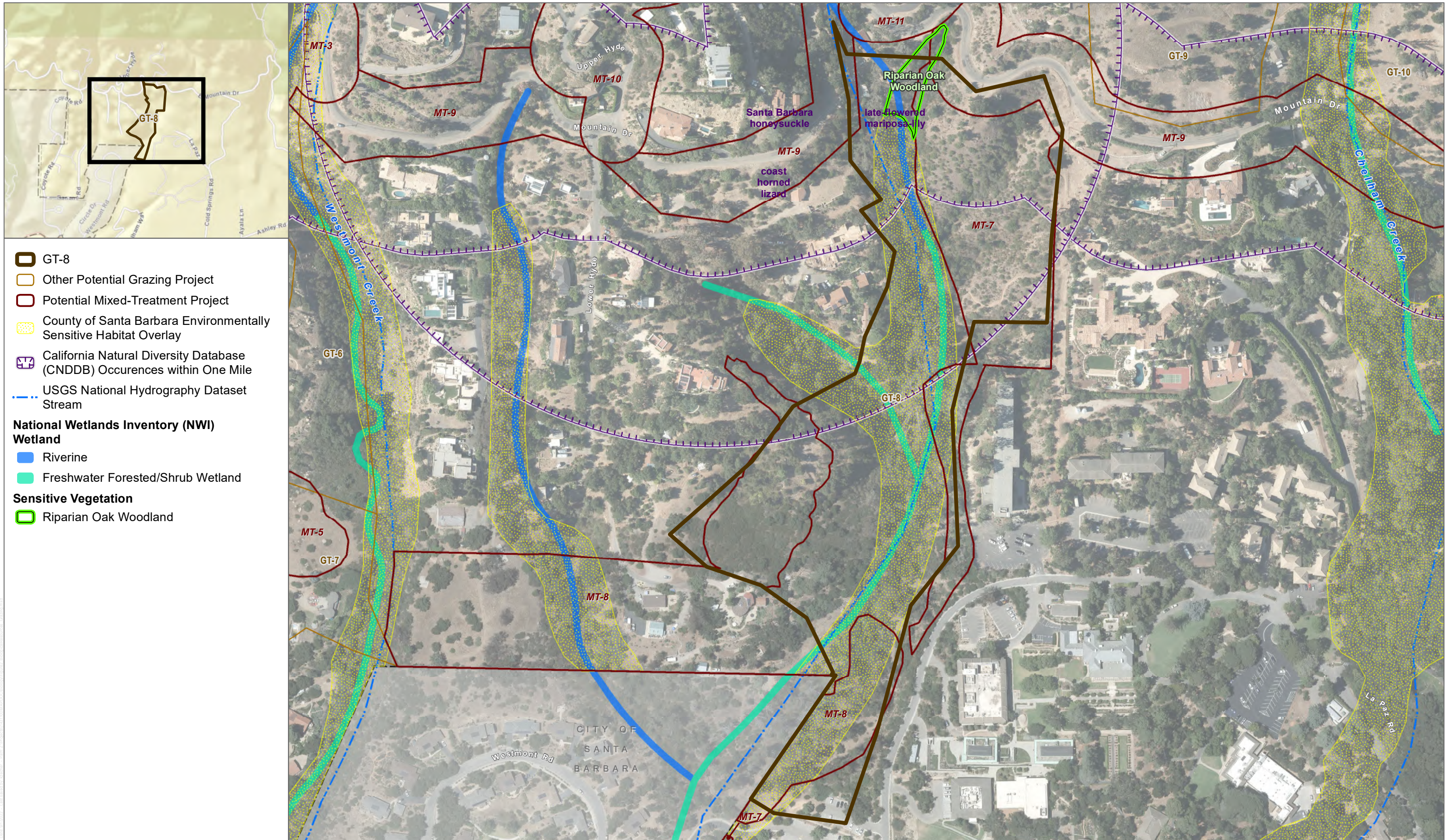
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE 2-7**

Potential Grazing Treatment Project: GT-7







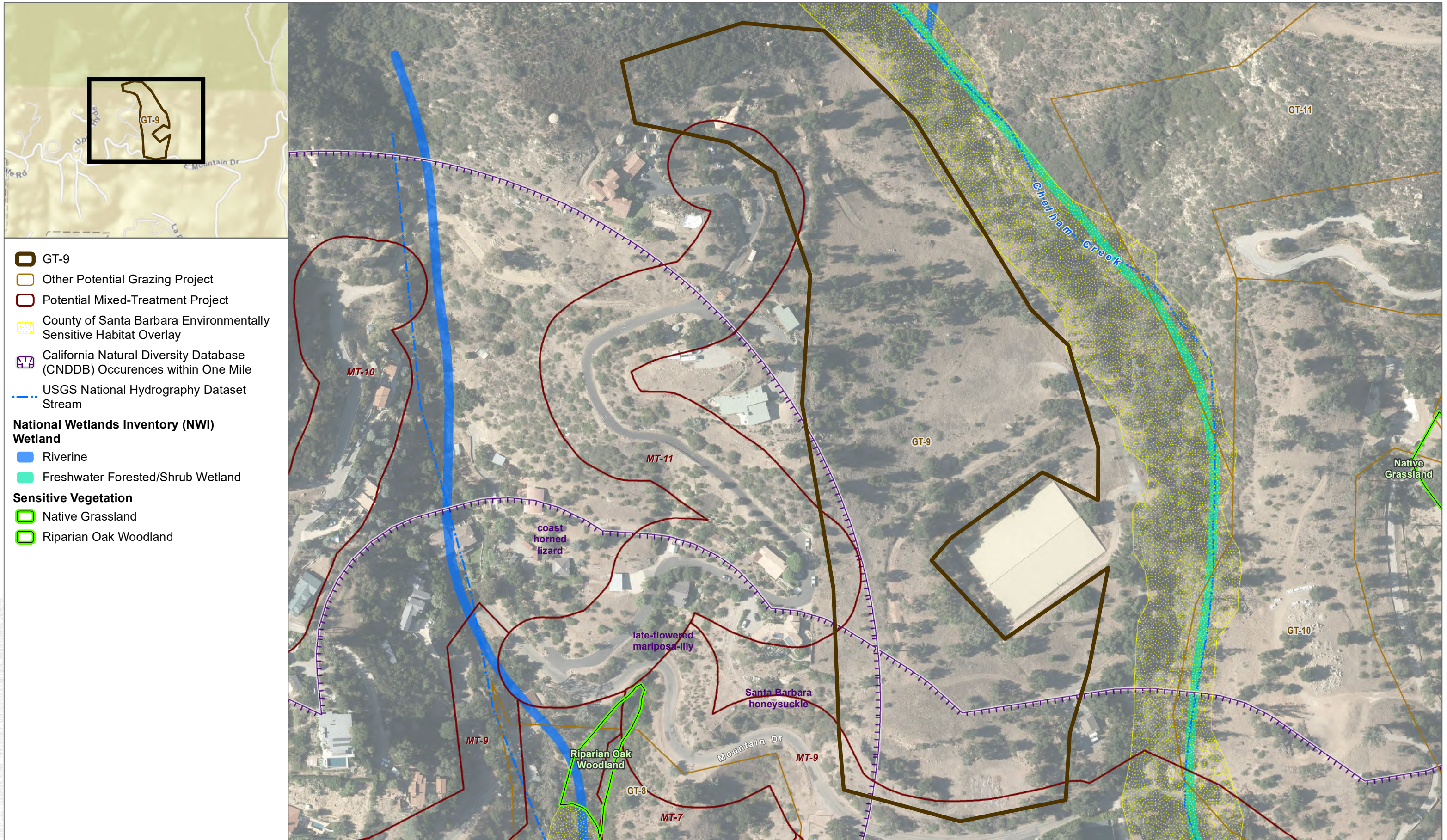
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 2-8

Potential Grazing Treatment Project: GT-8





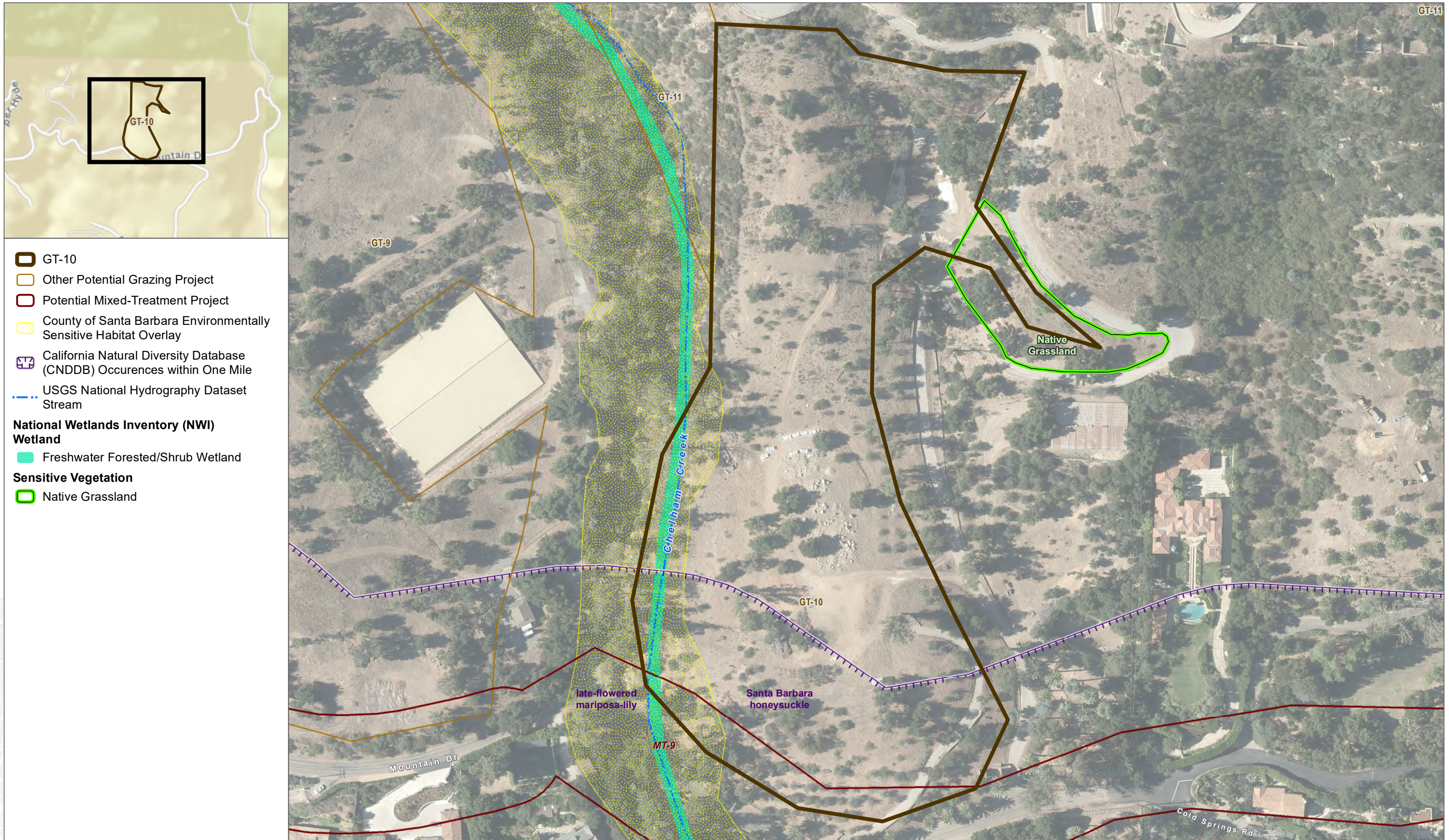
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 2-9

Potential Grazing Treatment Project: GT-9





SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 2-10

Potential Grazing Treatment Project: GT-10





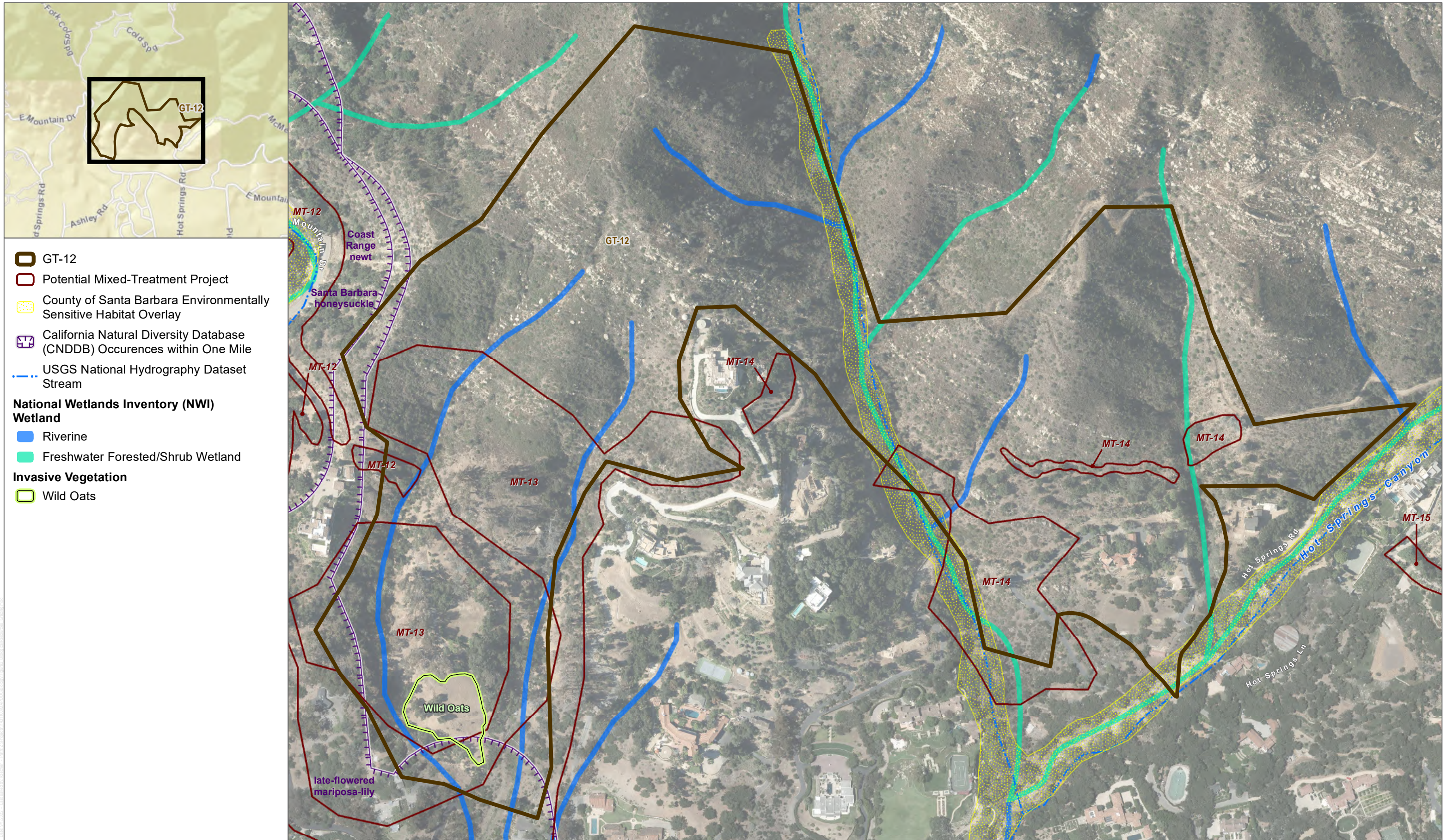
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

FIGURE 2-11

Potential Grazing Treatment Project: GT-11







SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 2-12

Potential Grazing Treatment Project: GT-12





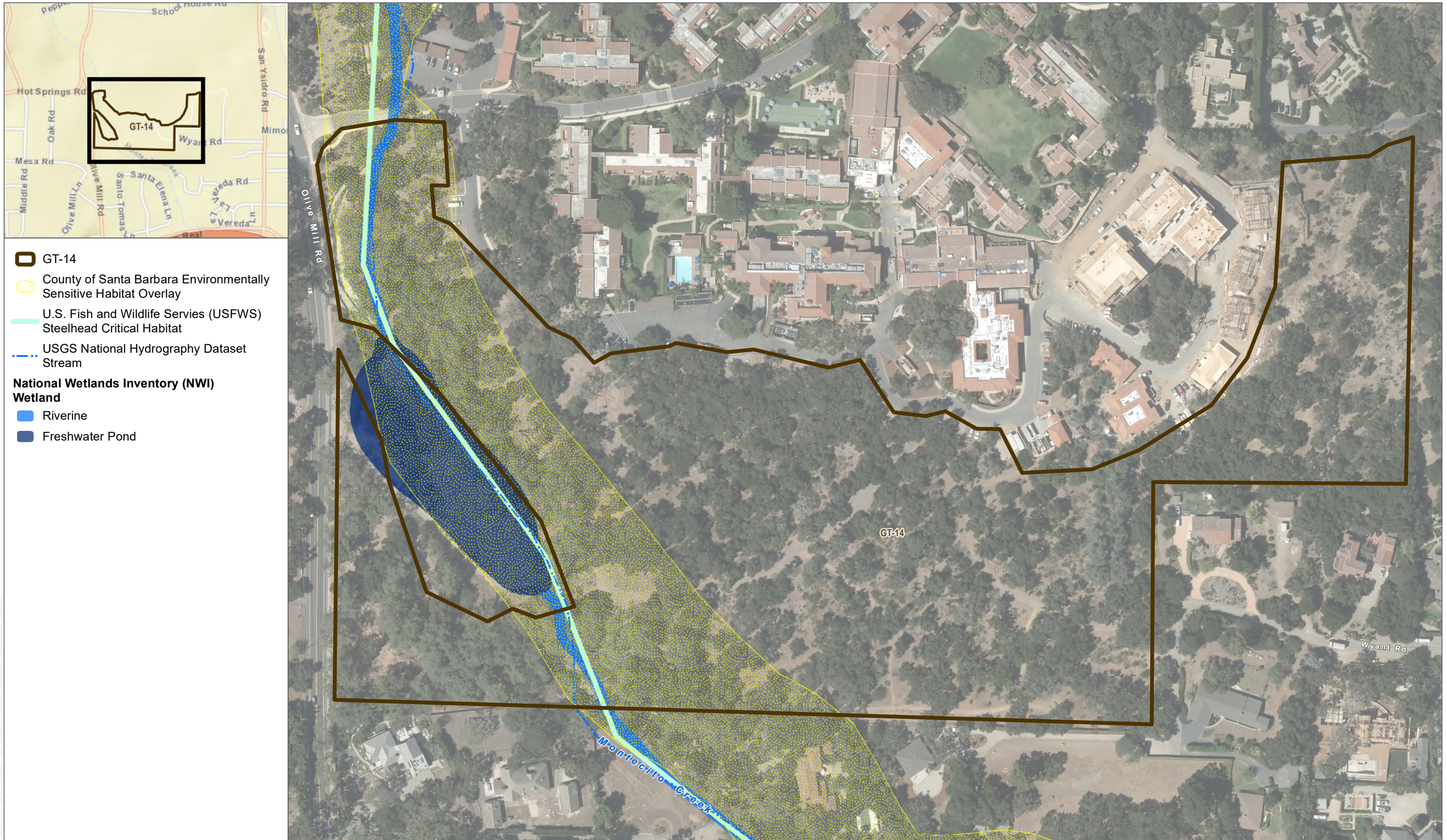
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 2-13

Potential Grazing Treatment Project: GT-13












SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

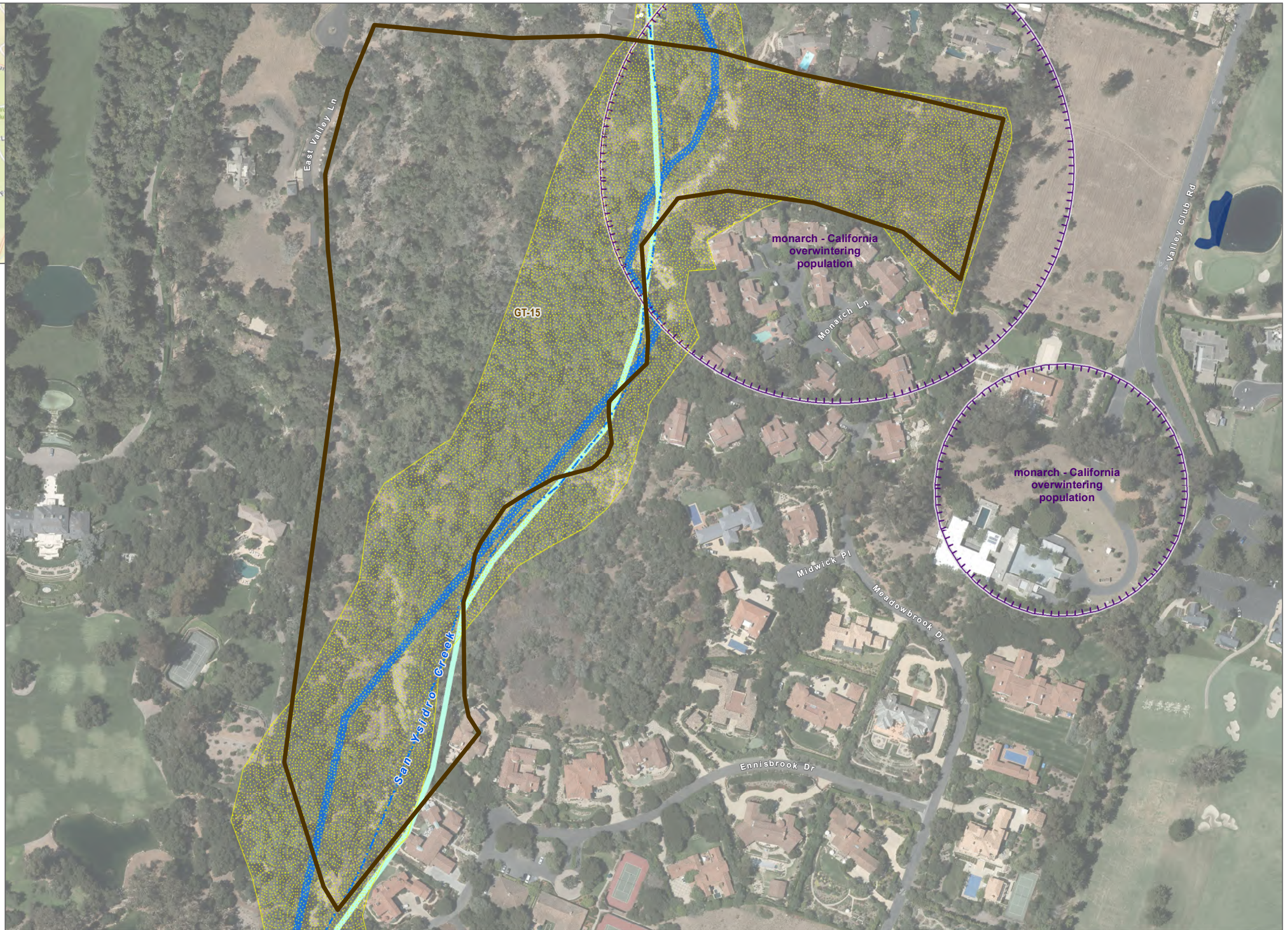
**FIGURE 2-14**

Potential Grazing Treatment Project: GT-14





-  GT-15
  -  County of Santa Barbara Environmentally Sensitive Habitat Overlay
  -  U.S. Fish and Wildlife Services (USFWS) Steelhead Critical Habitat
  -  California Natural Diversity Database (CNDDDB) Occurrences within One Mile
  -  USGS National Hydrography Dataset Stream
- National Wetlands Inventory (NWI)**
- Wetland**
-  Riverine
  -  Freshwater Pond



SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 2-15

Potential Grazing Treatment Project: GT-15

Montecito Fire Protection District Vegetation Treatment Program Biological Resources Technical Memorandum





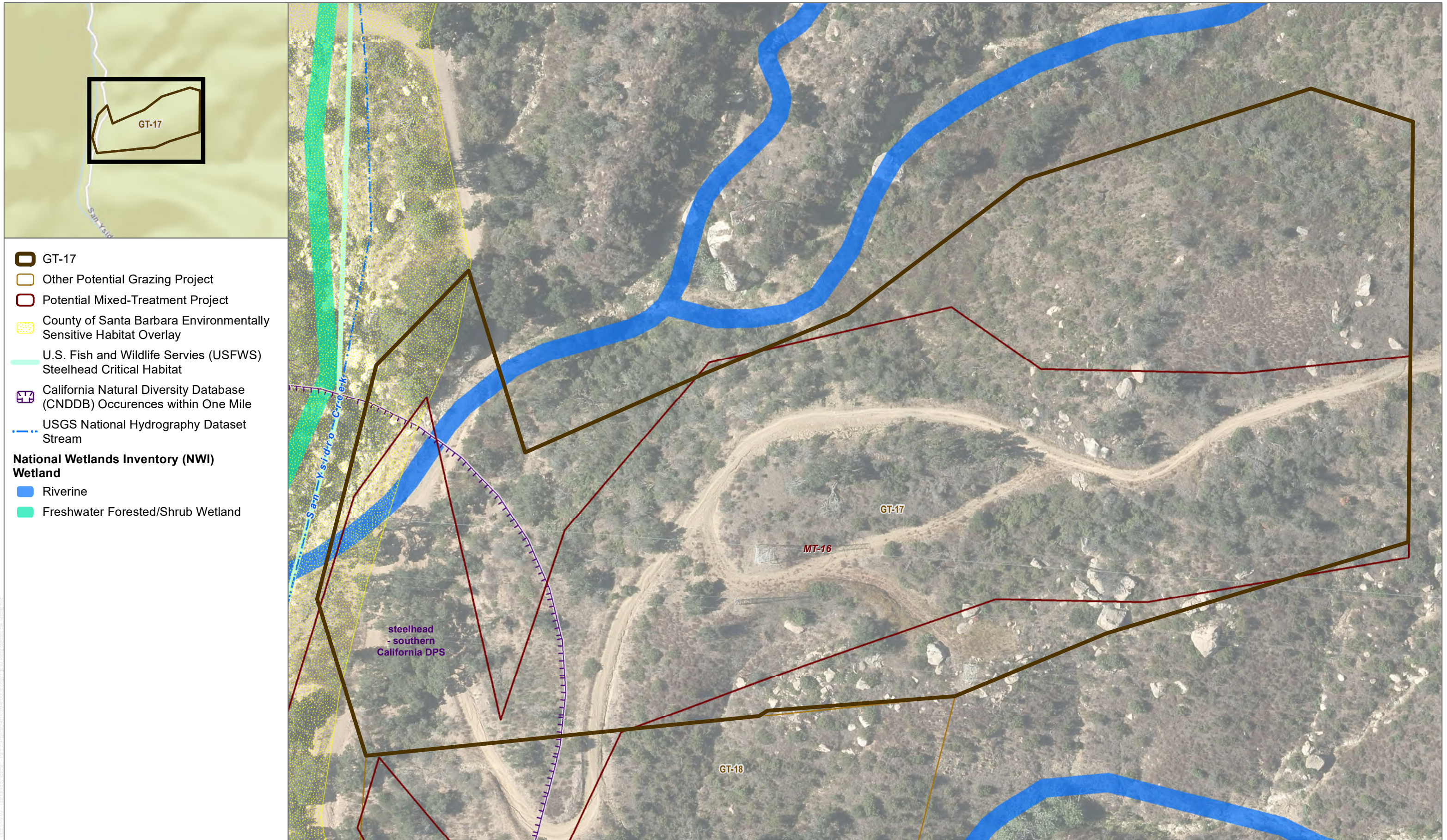


SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE 2-16**

Potential Grazing Treatment Project: GT-16





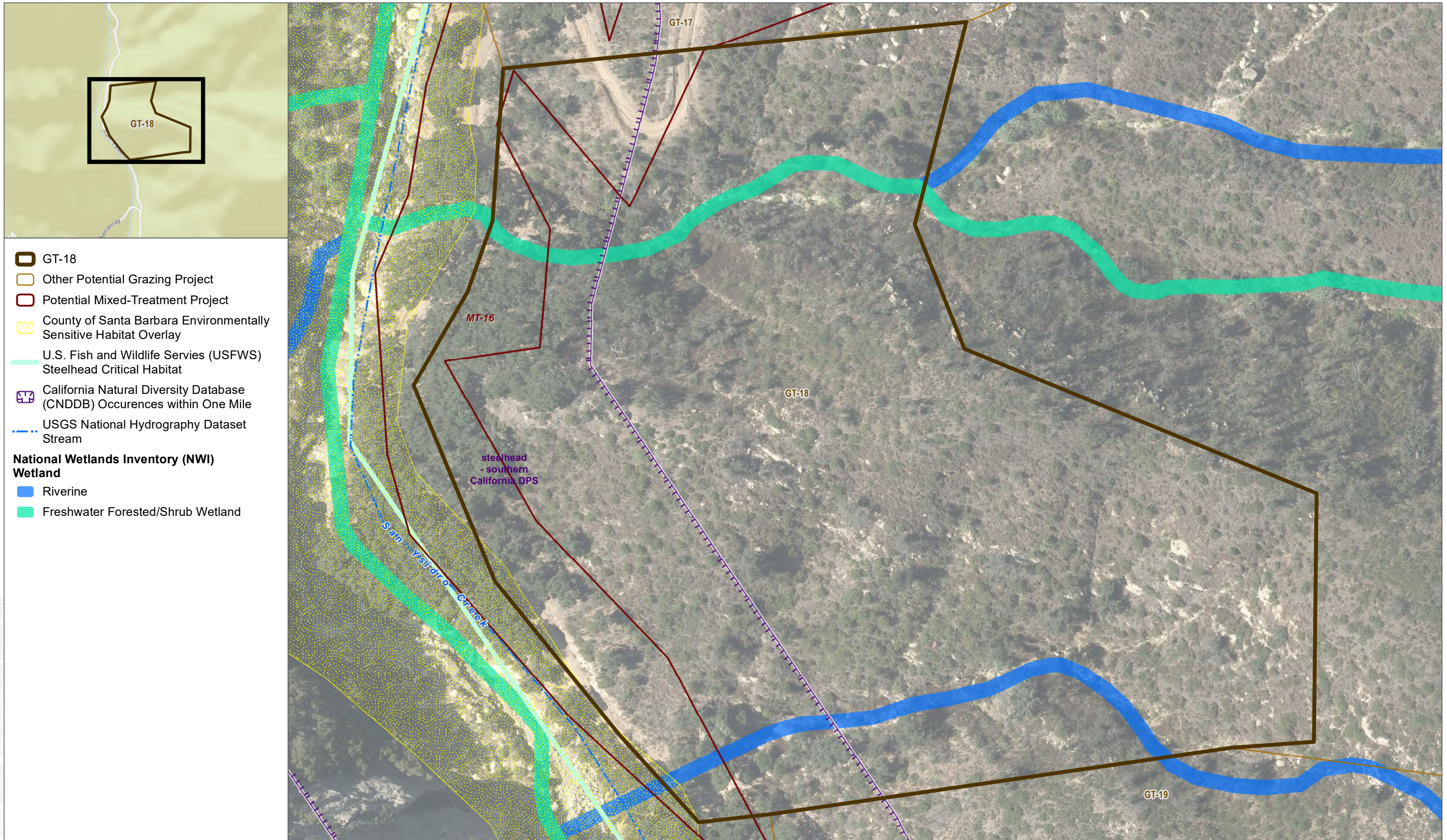
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 2-17

Potential Grazing Treatment Project: GT-17





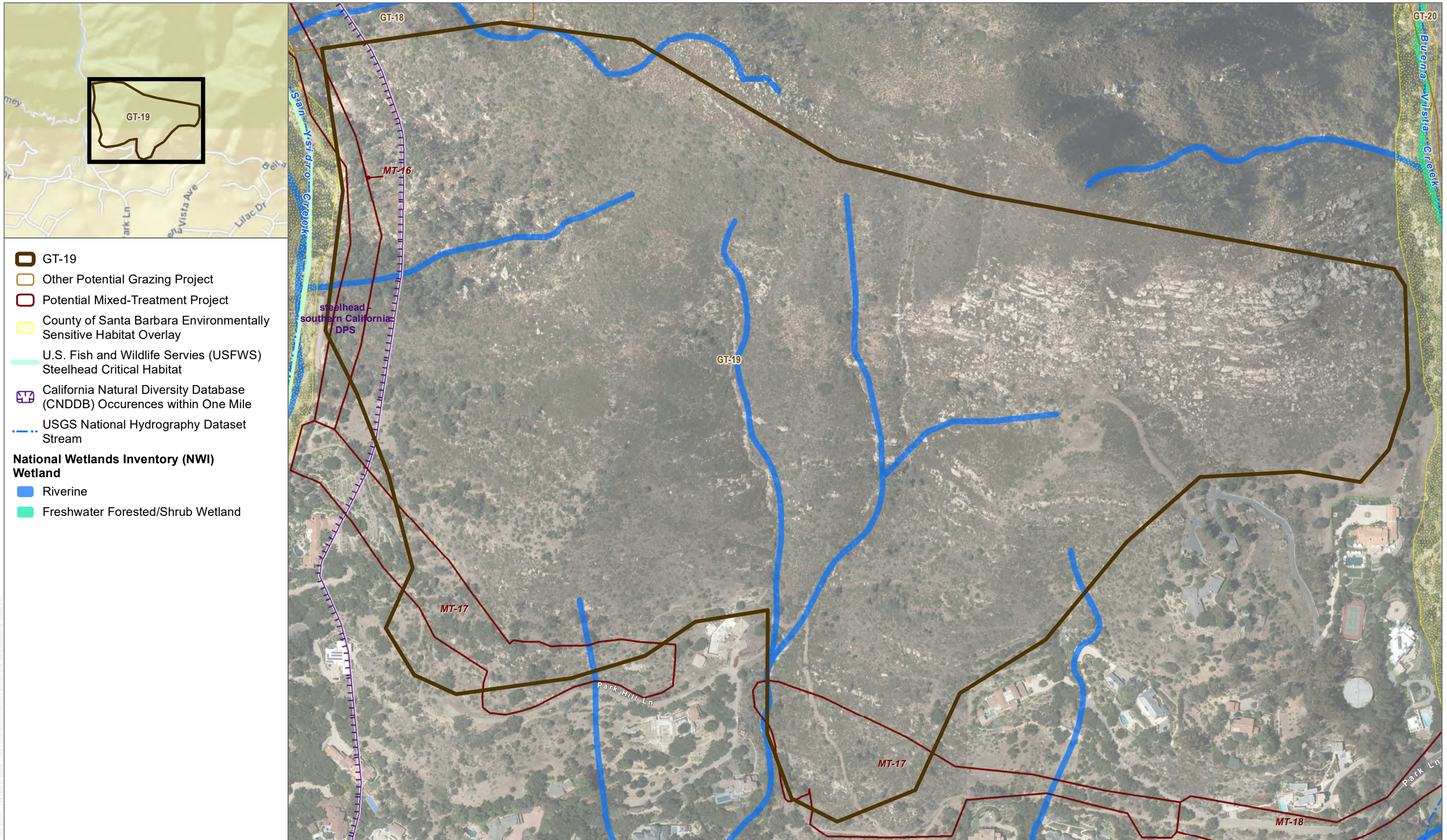
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 2-18

Potential Grazing Treatment Project: GT-18





SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

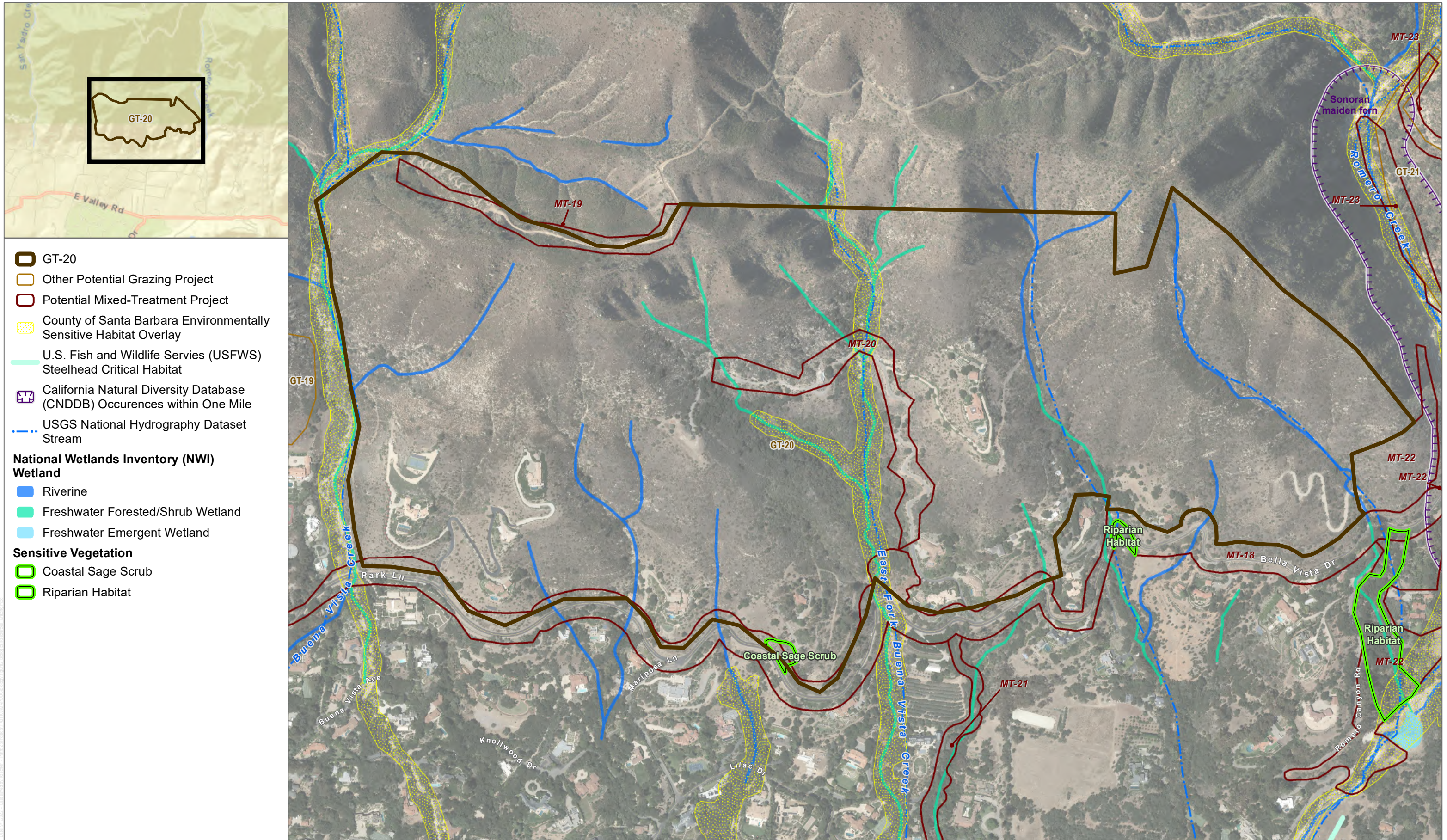


FIGURE 2-19

Potential Grazing Treatment Project: GT-19







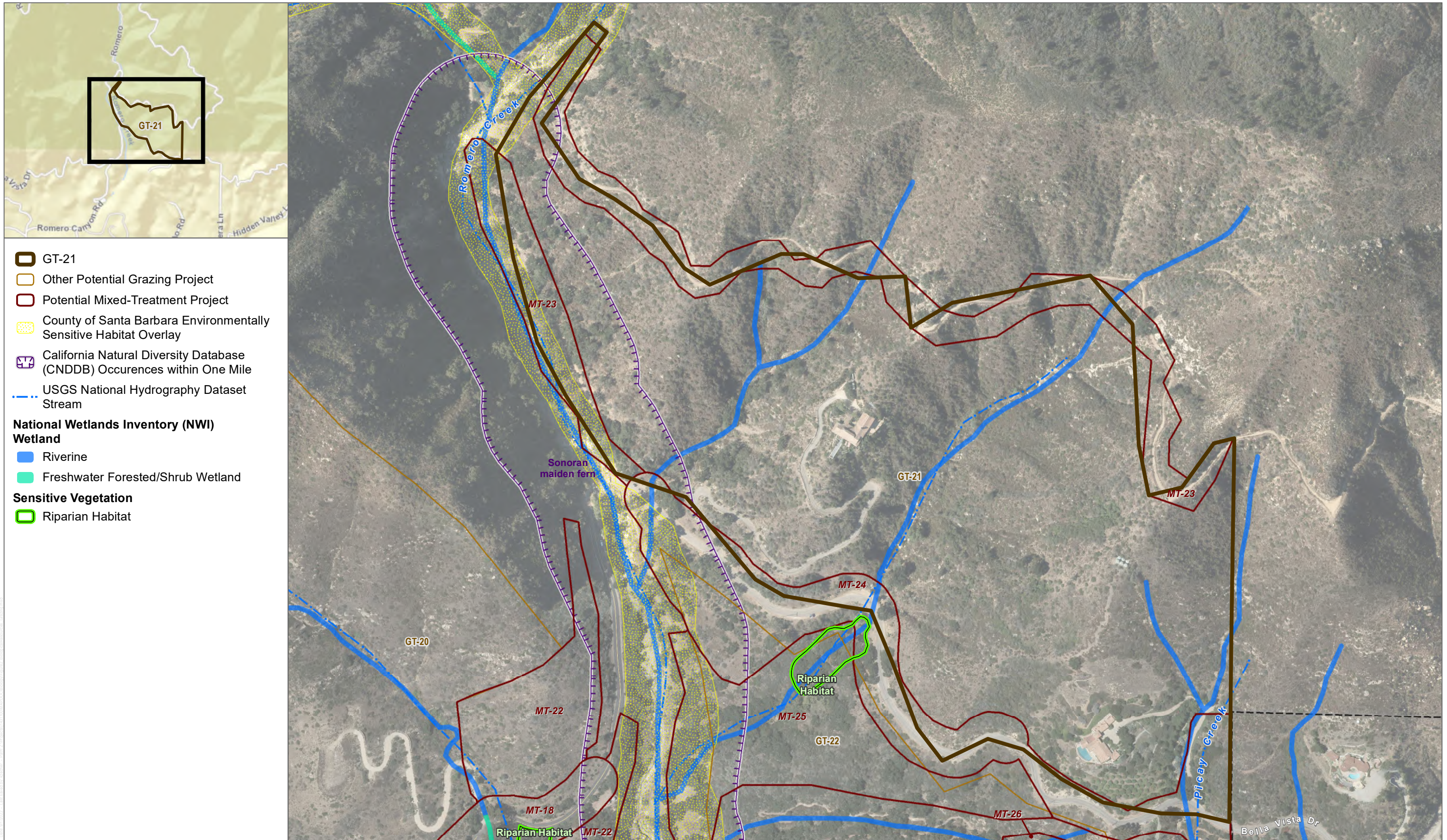
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 2-20

Potential Grazing Treatment Project: GT-20





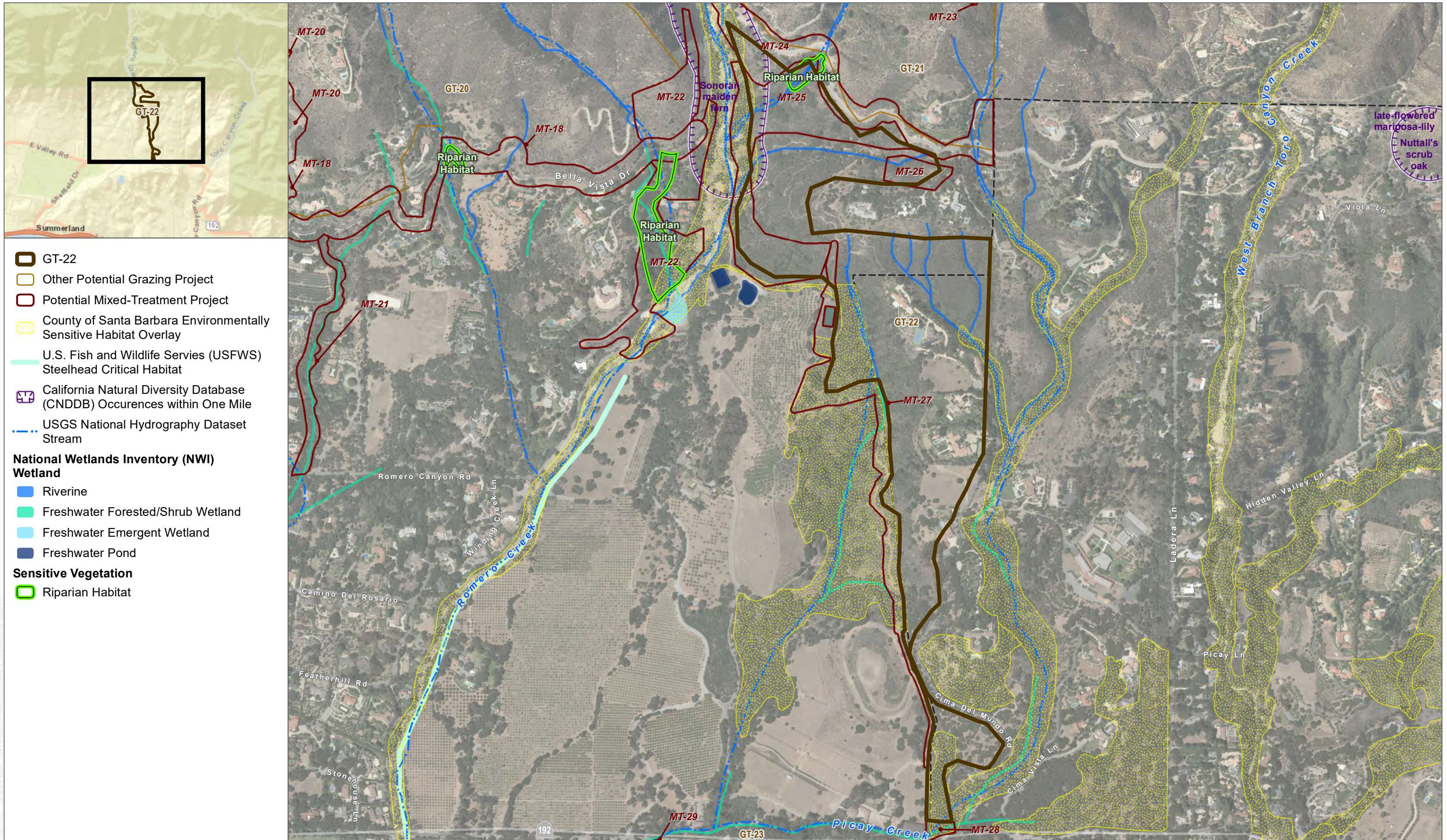
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 2-21

Potential Grazing Treatment Project: GT-21





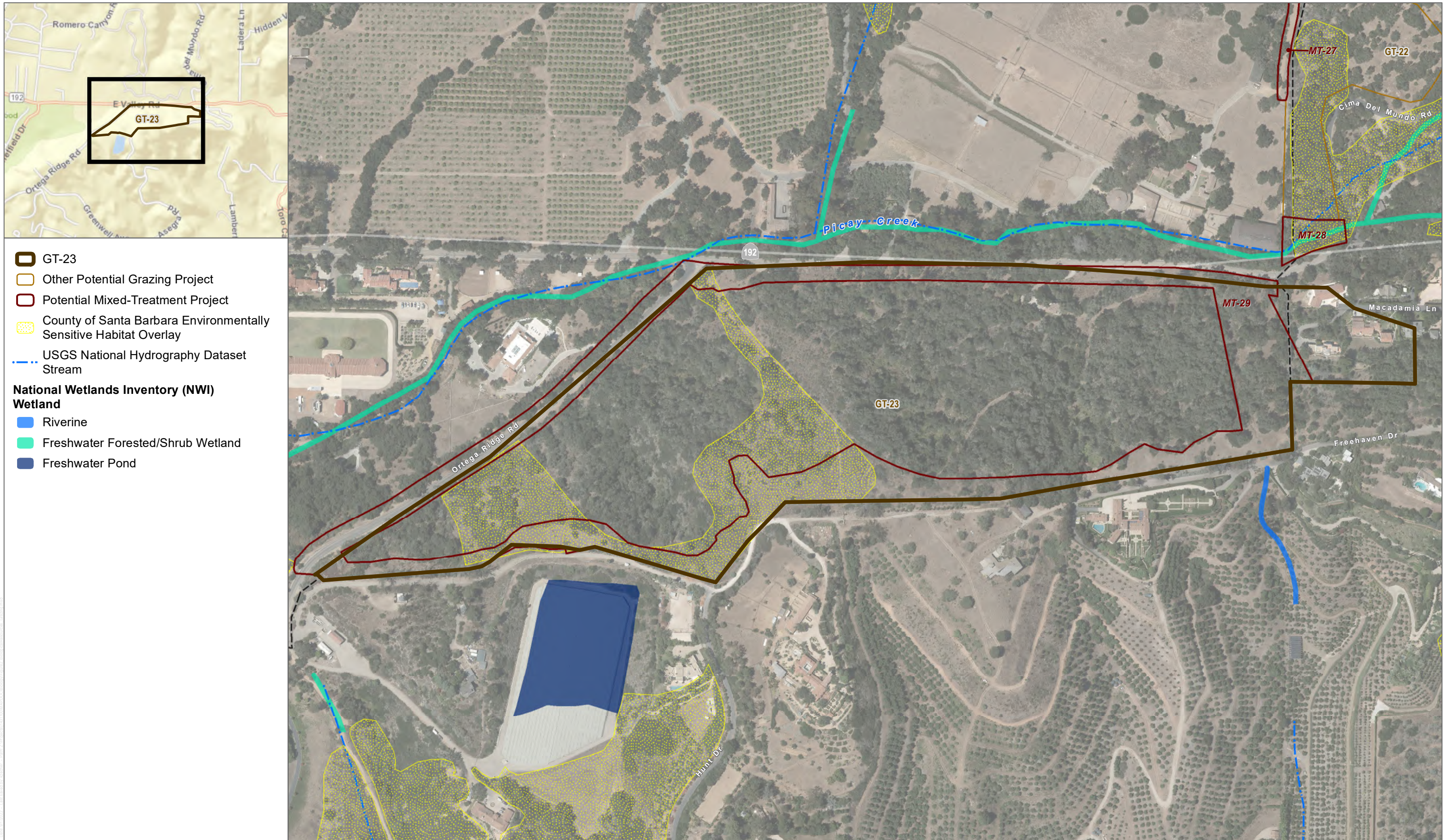
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FIGURE 2-22

Potential Grazing Treatment Project: GT-22





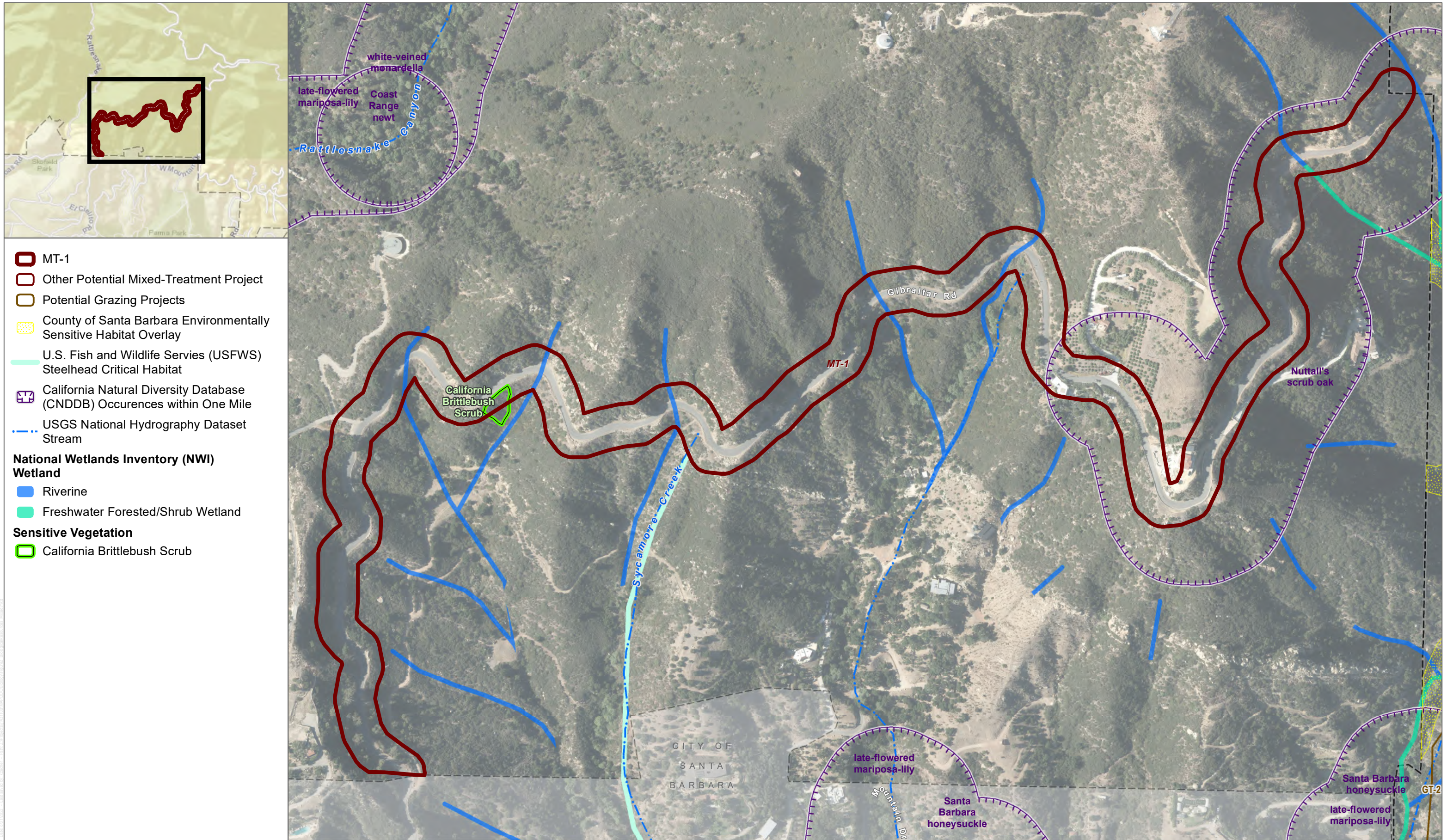
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE 2-23**

Potential Grazing Treatment Project: GT-23







SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE 3-1**

Potential Mixed Treatment Project: MT-1



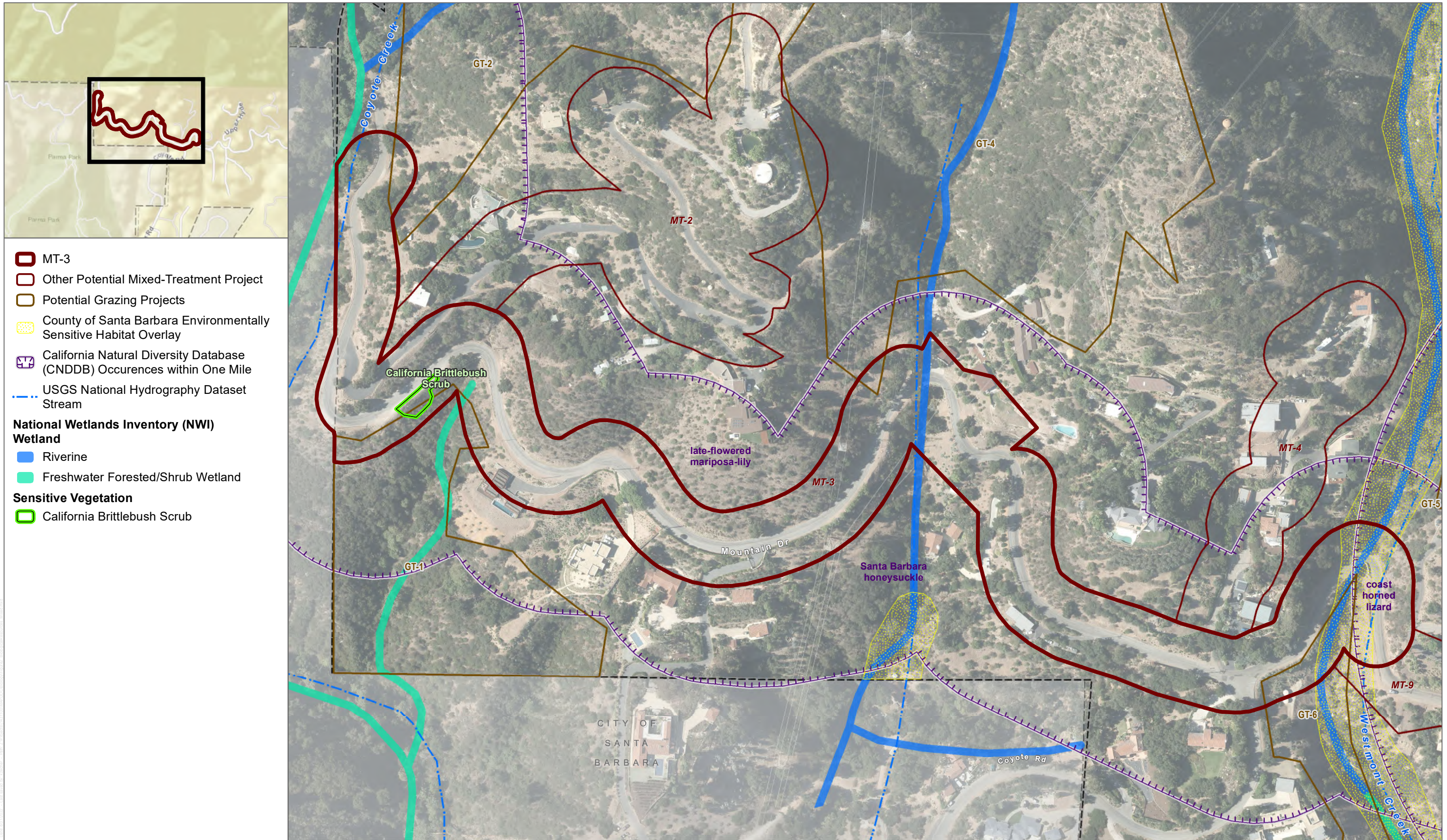


SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE 3-2**

Potential Mixed Treatment Project: MT-2





SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

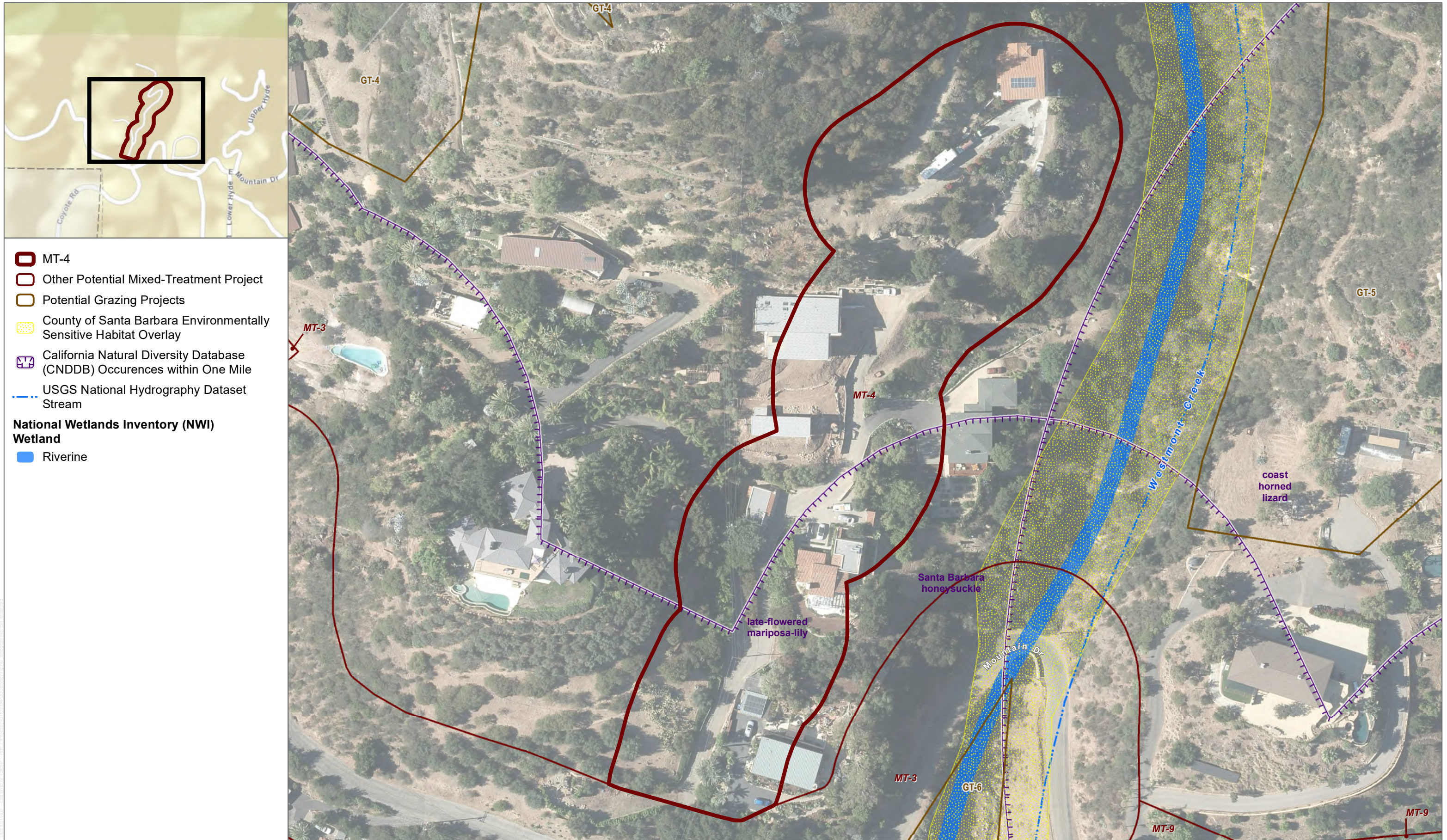


FIGURE 3-3

Potential Mixed Treatment Project: MT-3

Montecito Fire Protection District Vegetation Treatment Program Biological Resources Technical Memorandum





SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 3-4

Potential Mixed Treatment Project: MT-4

Montecito Fire Protection District Vegetation Treatment Program Biological Resources Technical Memorandum







- MT-5
  - Other Potential Mixed-Treatment Project
  - Potential Grazing Projects
  - County of Santa Barbara Environmentally Sensitive Habitat Overlay
- National Wetlands Inventory (NWI)**  
**Wetland**
- Riverine
  - Freshwater Forested/Shrub Wetland

SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

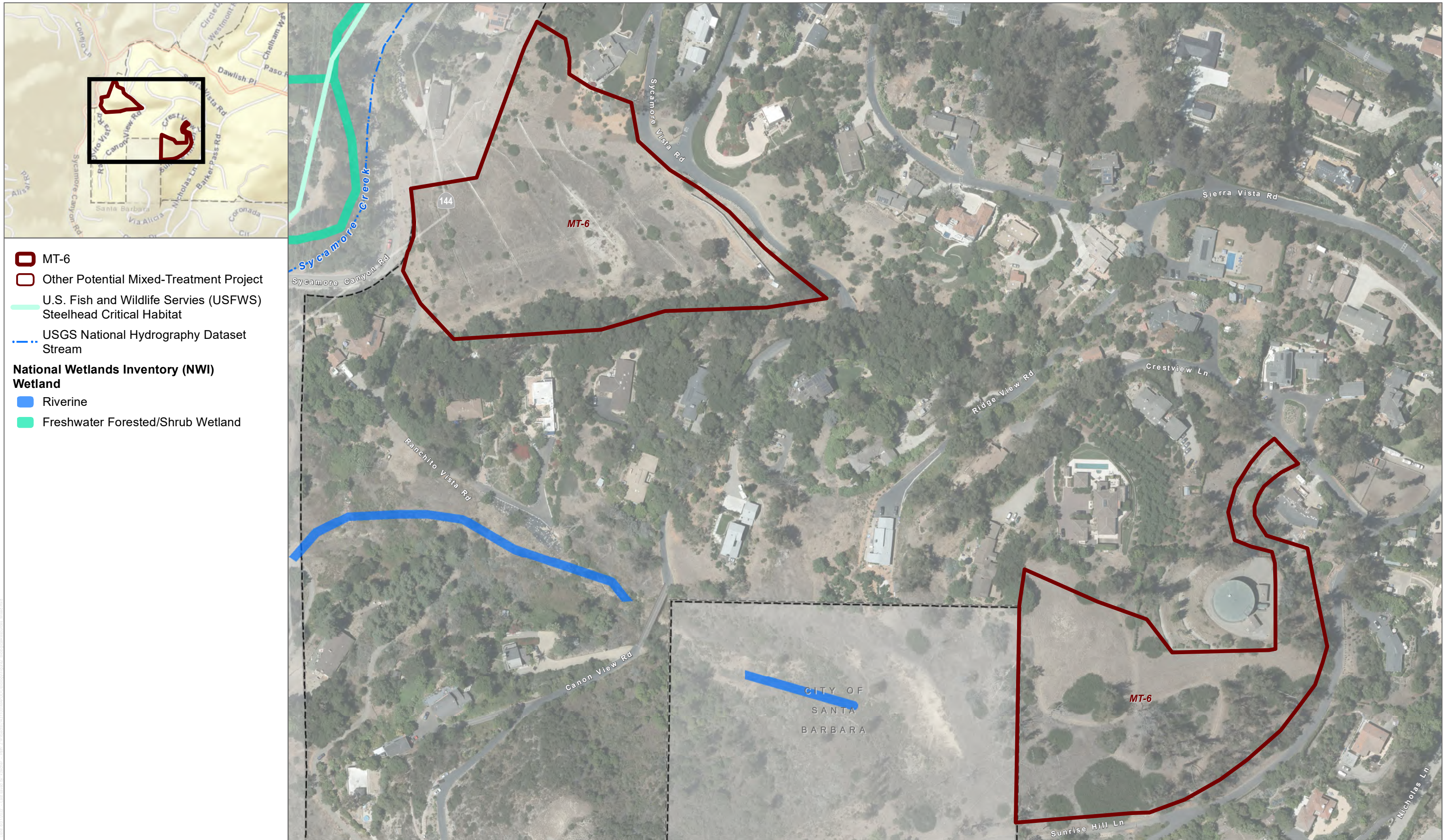


FIGURE 3-5

Potential Mixed Treatment Project: MT-5

Montecito Fire Protection District Vegetation Treatment Program Biological Resources Technical Memorandum



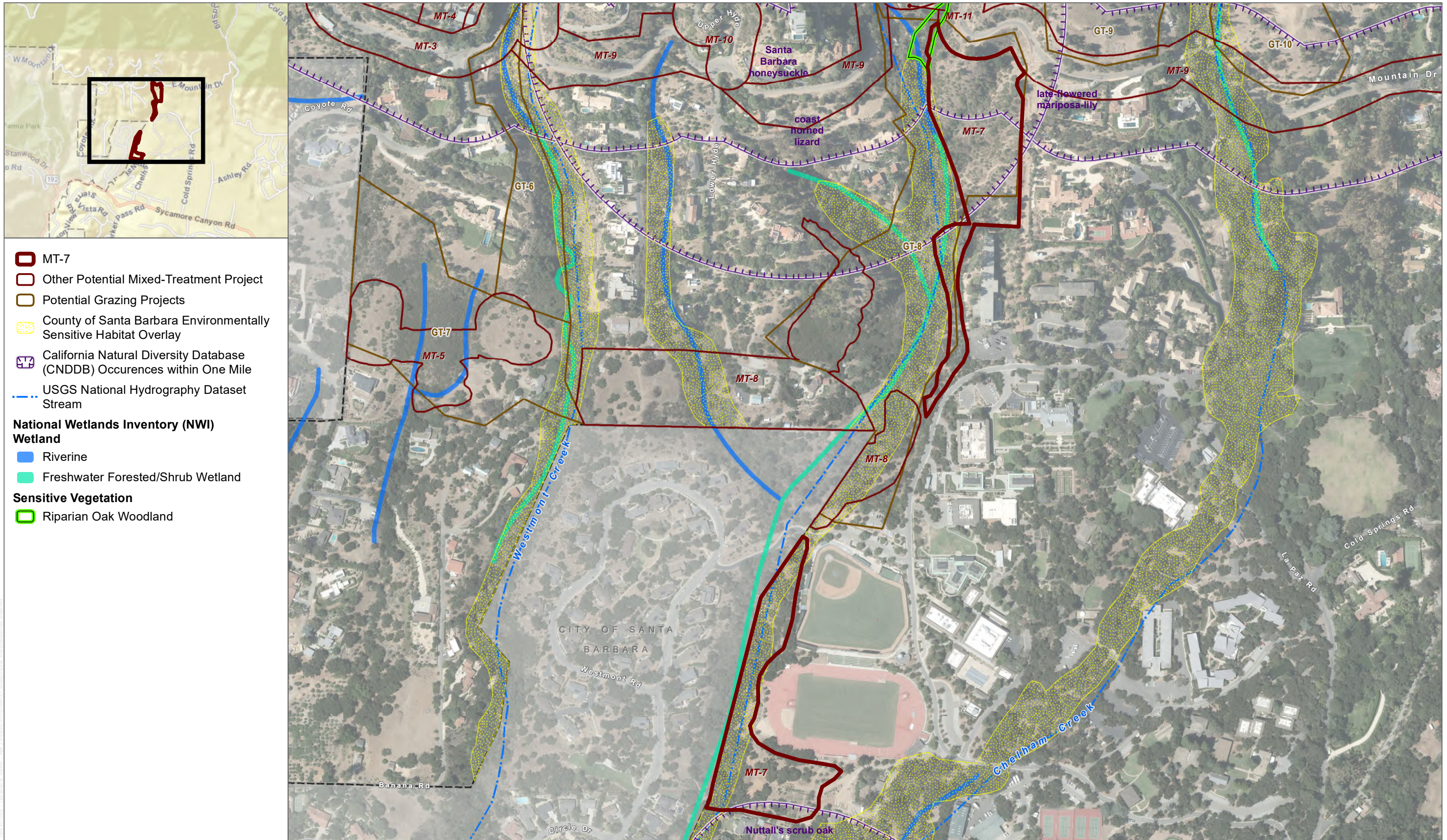


SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE 3-6**

Potential Mixed Treatment Project: MT-6





- MT-7
  - Other Potential Mixed-Treatment Project
  - Potential Grazing Projects
  - County of Santa Barbara Environmentally Sensitive Habitat Overlay
  - California Natural Diversity Database (CNDDDB) Occurrences within One Mile
  - USGS National Hydrography Dataset Stream
- National Wetlands Inventory (NWI)**
- Wetland**
- Riverine
  - Freshwater Forested/Shrub Wetland
- Sensitive Vegetation**
- Riparian Oak Woodland

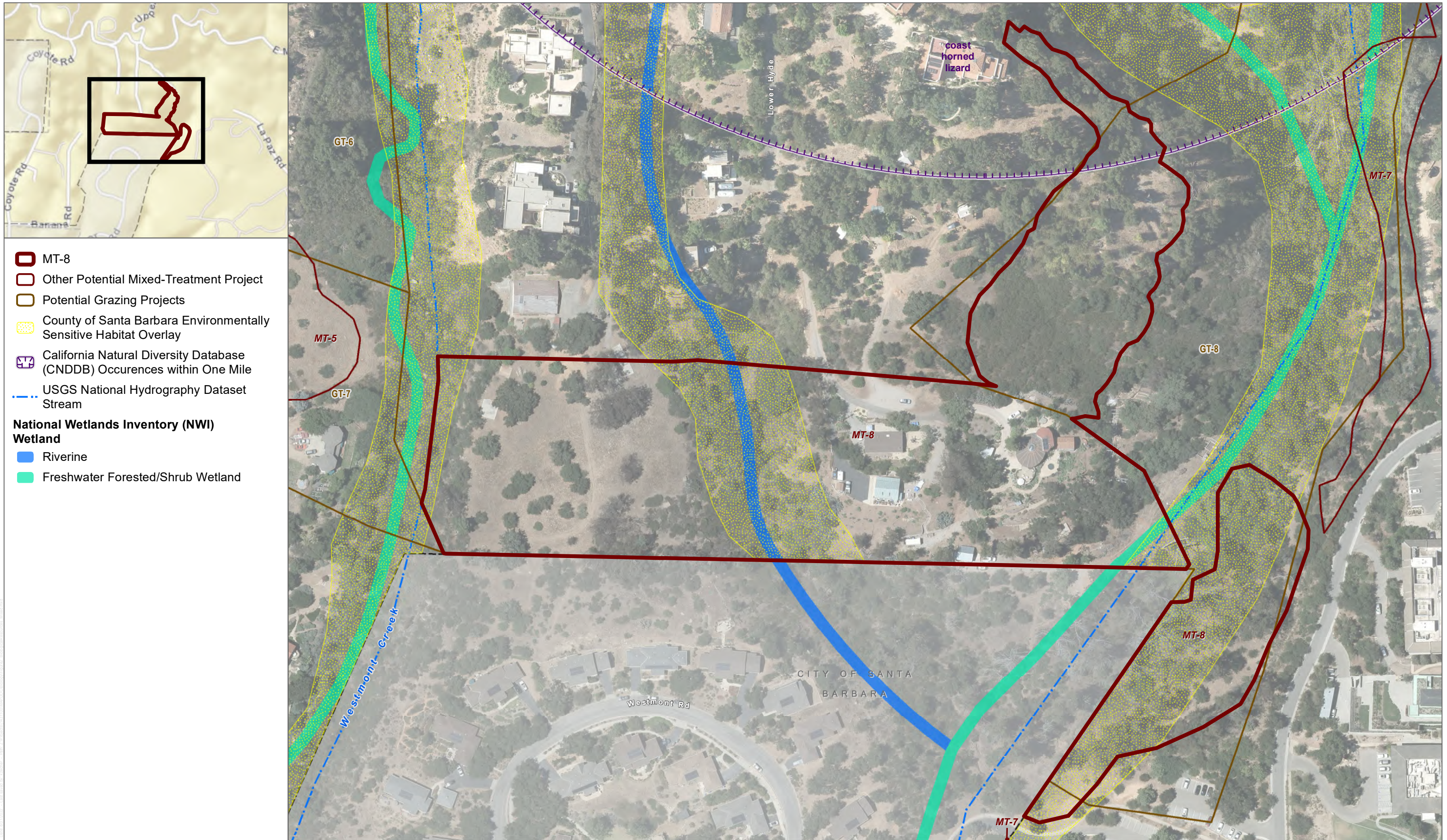
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 3-7

Potential Mixed Treatment Project: MT-7





SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

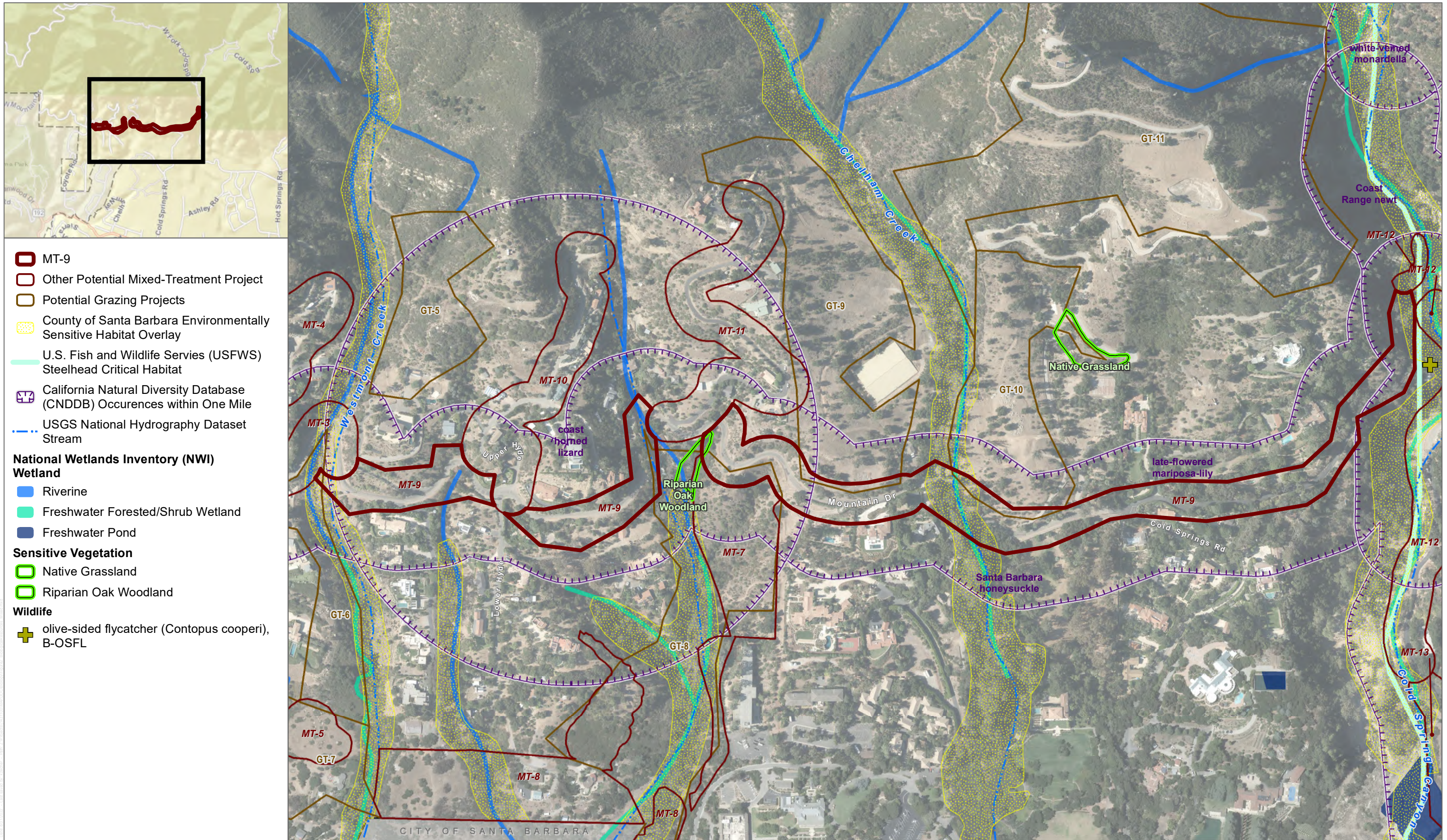


FIGURE 3-8

Potential Mixed Treatment Project: MT-8







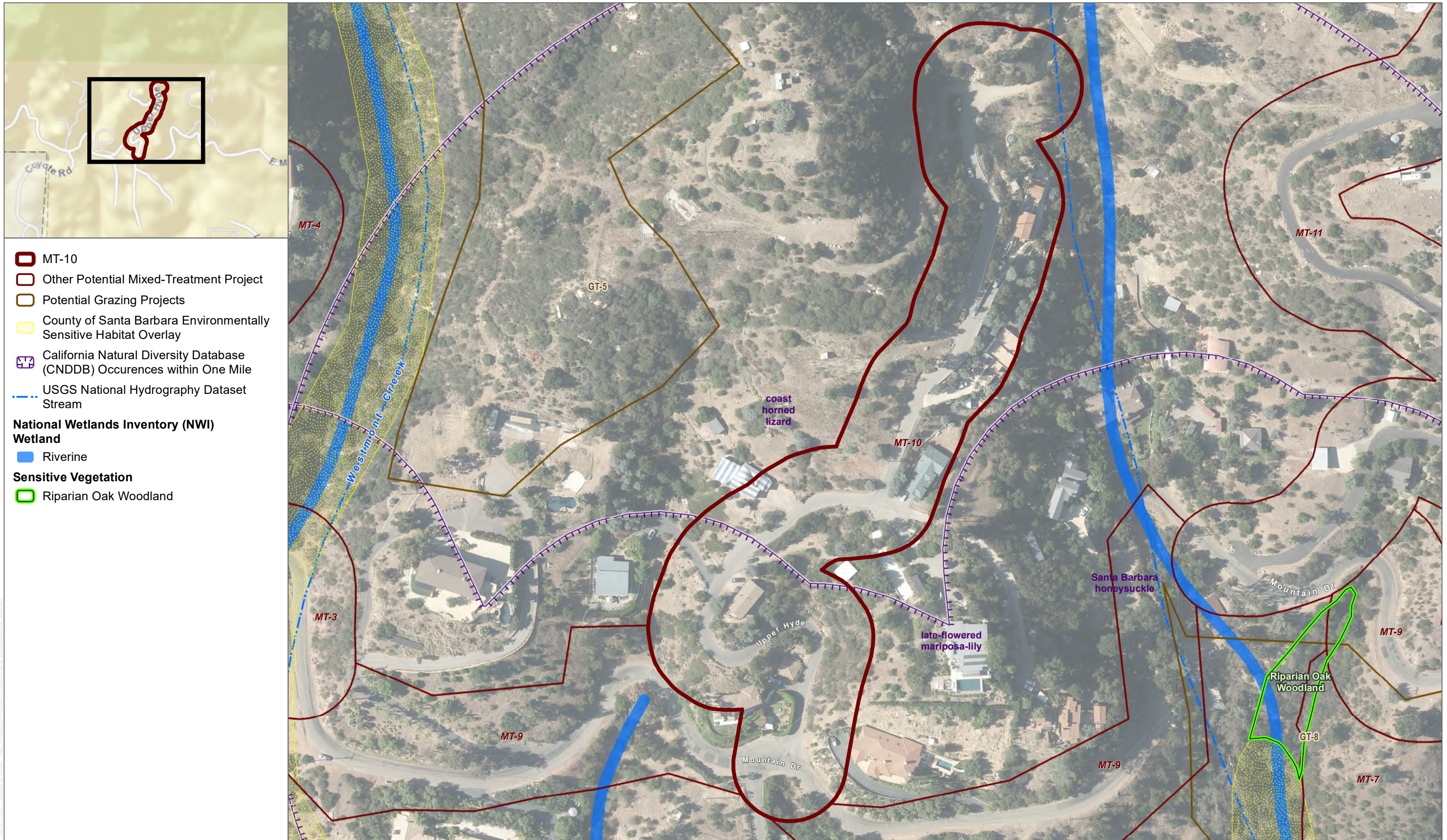
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 3-9

Potential Mixed Treatment Project: MT-9



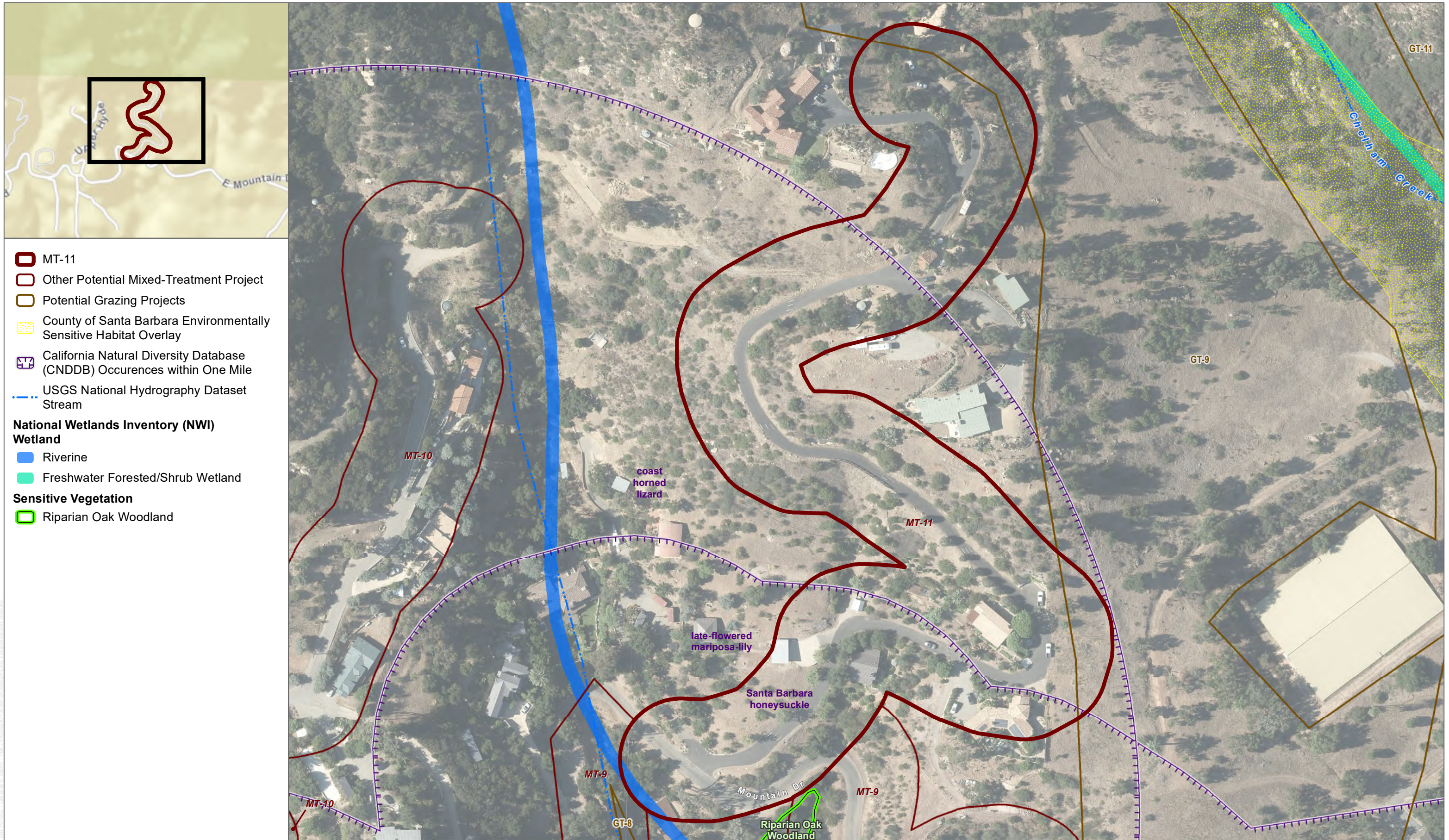


SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE 3-10**

Potential Mixed Treatment Project: MT-10





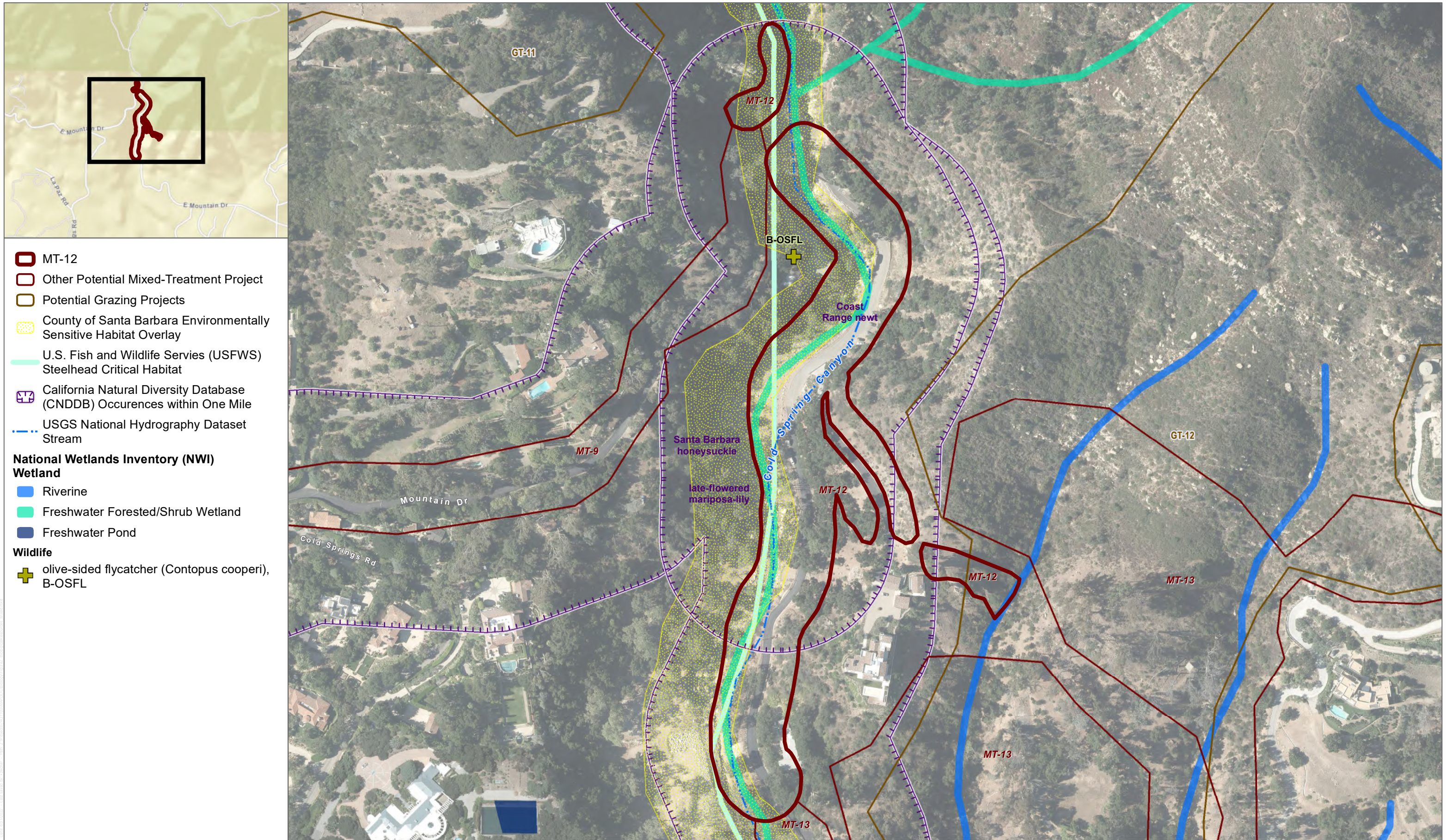
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FIGURE 3-11

Potential Mixed Treatment Project: MT-11





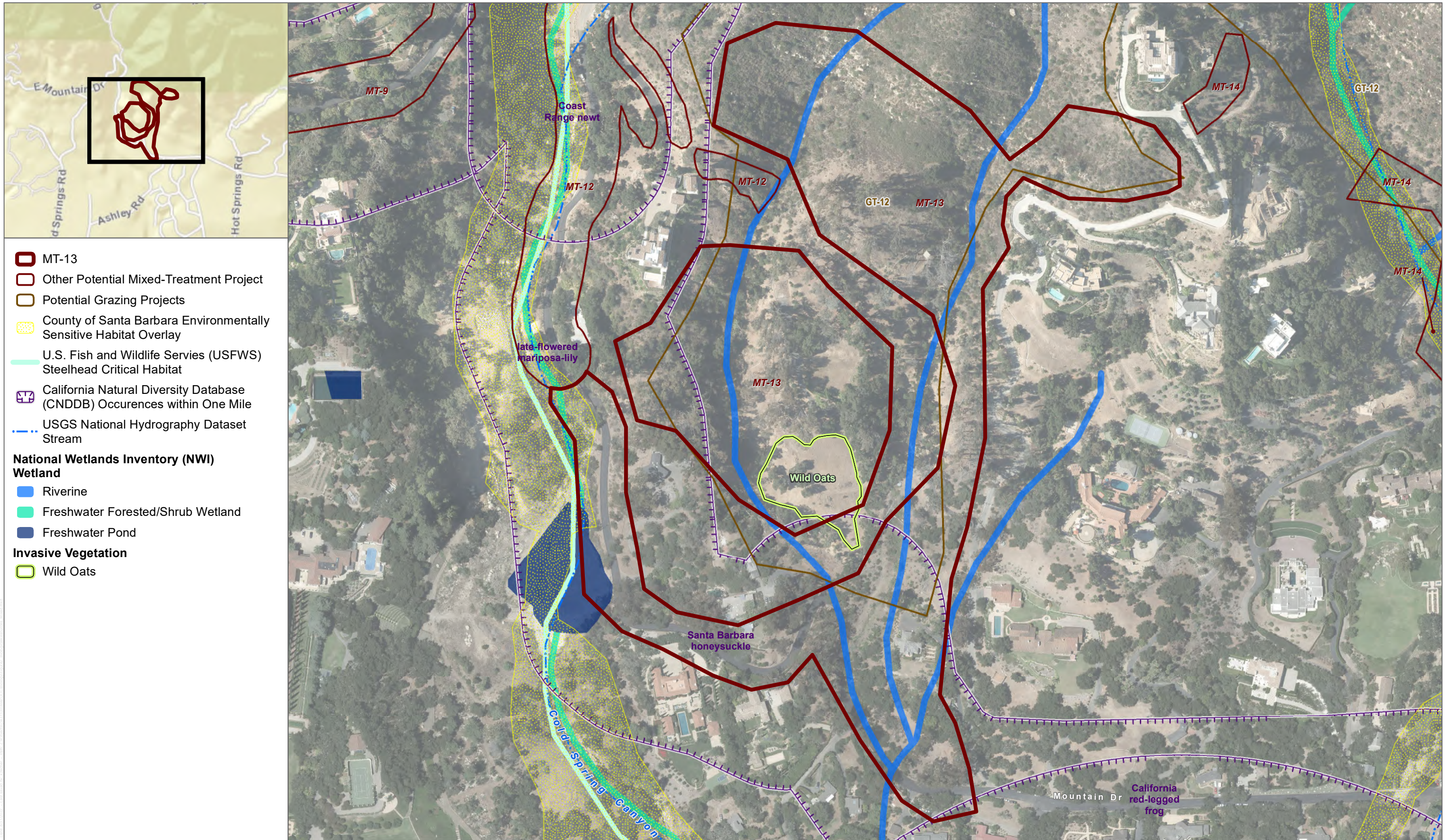
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE 3-12**

Potential Mixed Treatment Project: MT-12







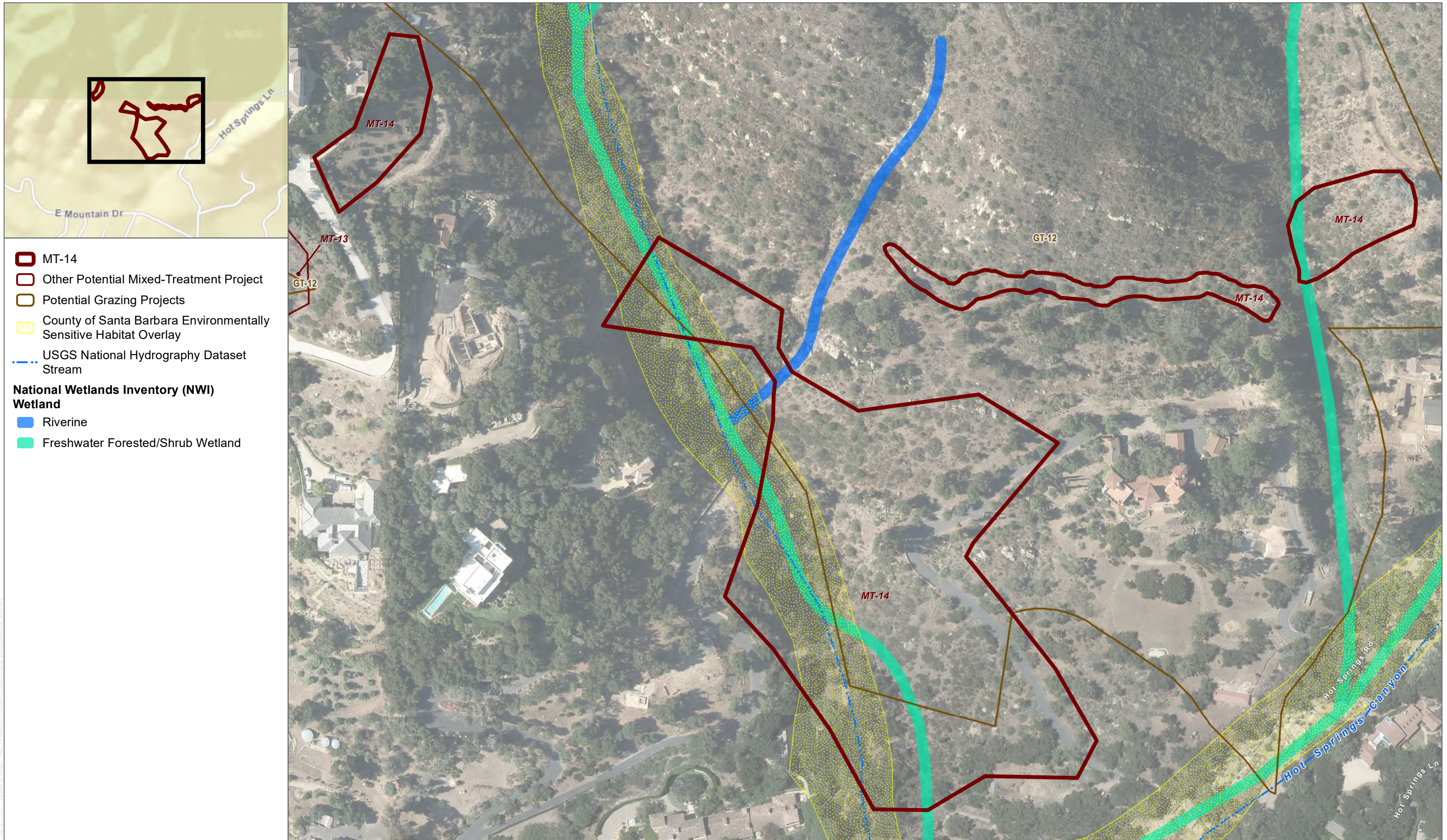
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 3-13

Potential Mixed Treatment Project: MT-13





SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 3-14

Potential Mixed Treatment Project: MT-14





SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

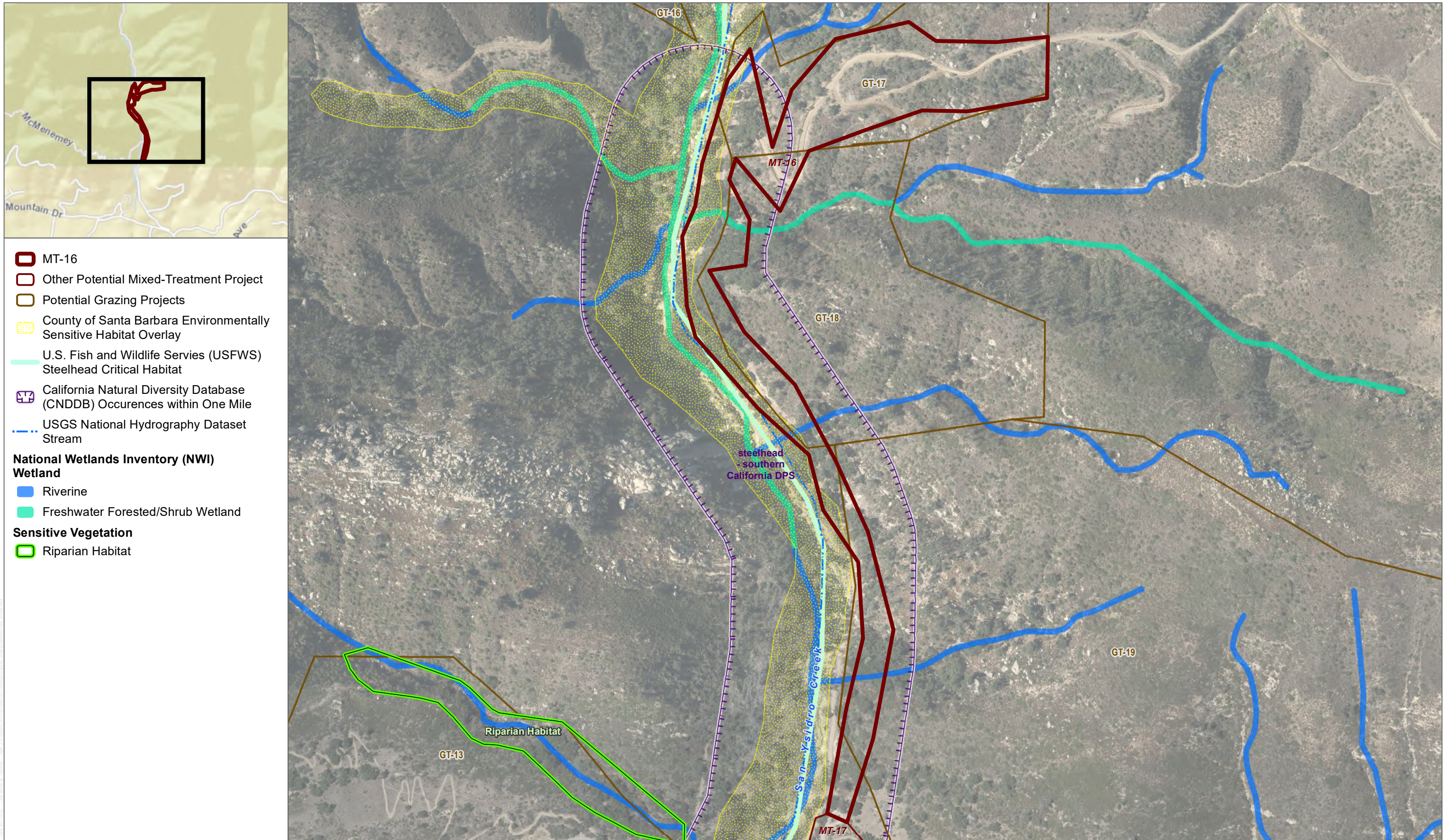


FIGURE 3-15

Potential Mixed Treatment Project: MT-15

Montecito Fire Protection District Vegetation Treatment Program Biological Resources Technical Memorandum





SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

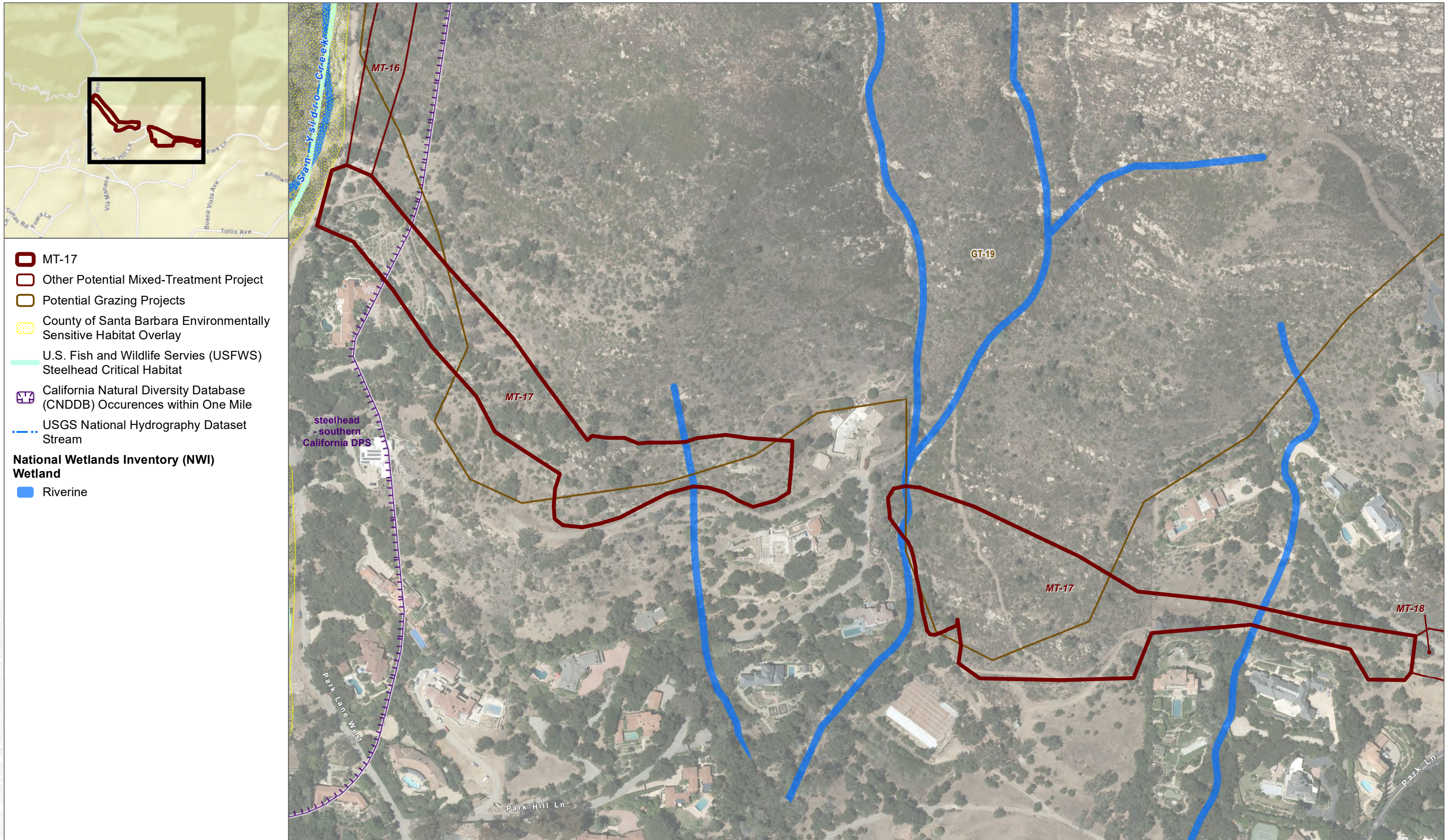


FIGURE 3-16

Potential Mixed Treatment Project: MT-16







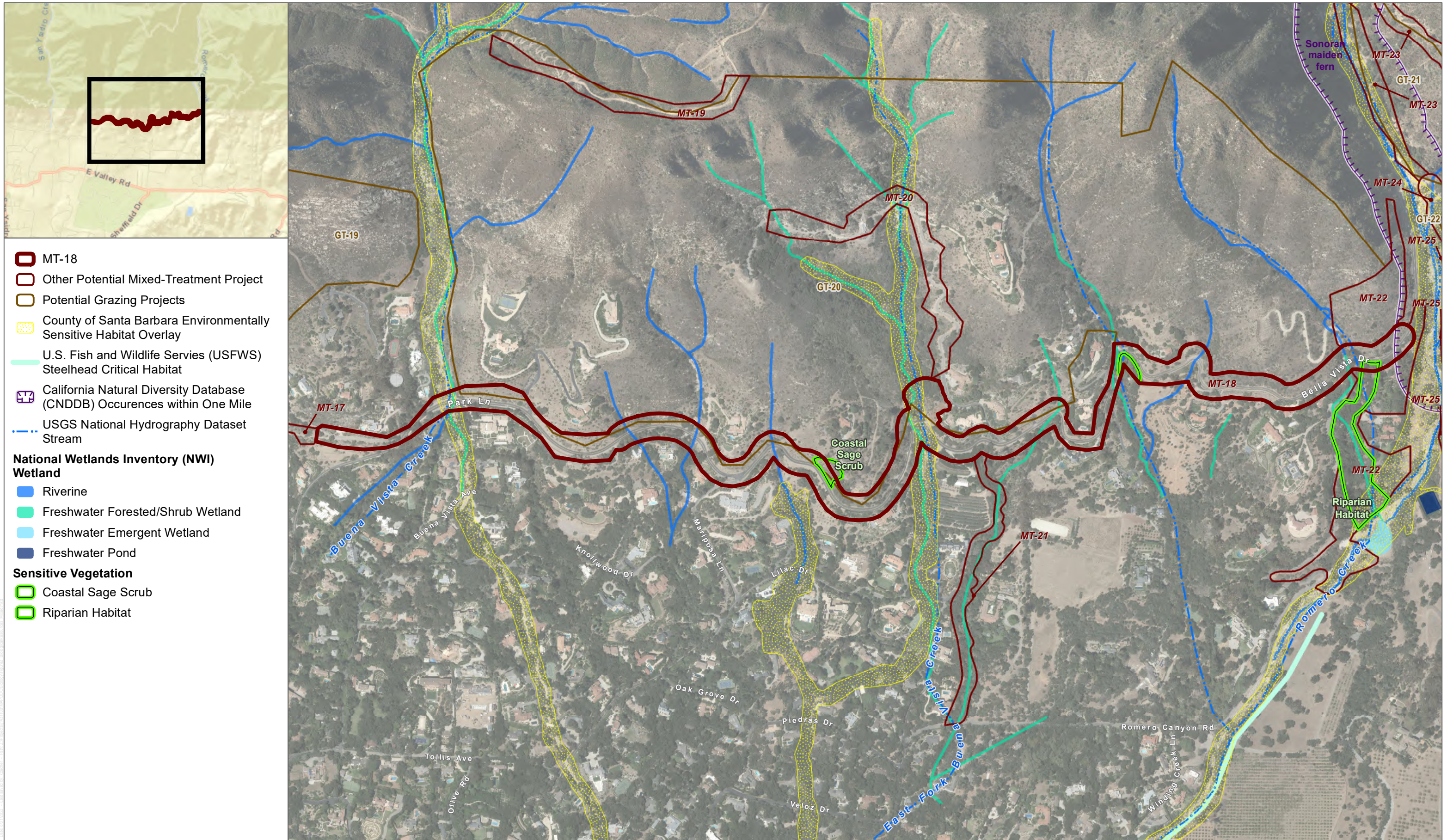
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 3-17

Potential Mixed Treatment Project: MT-17





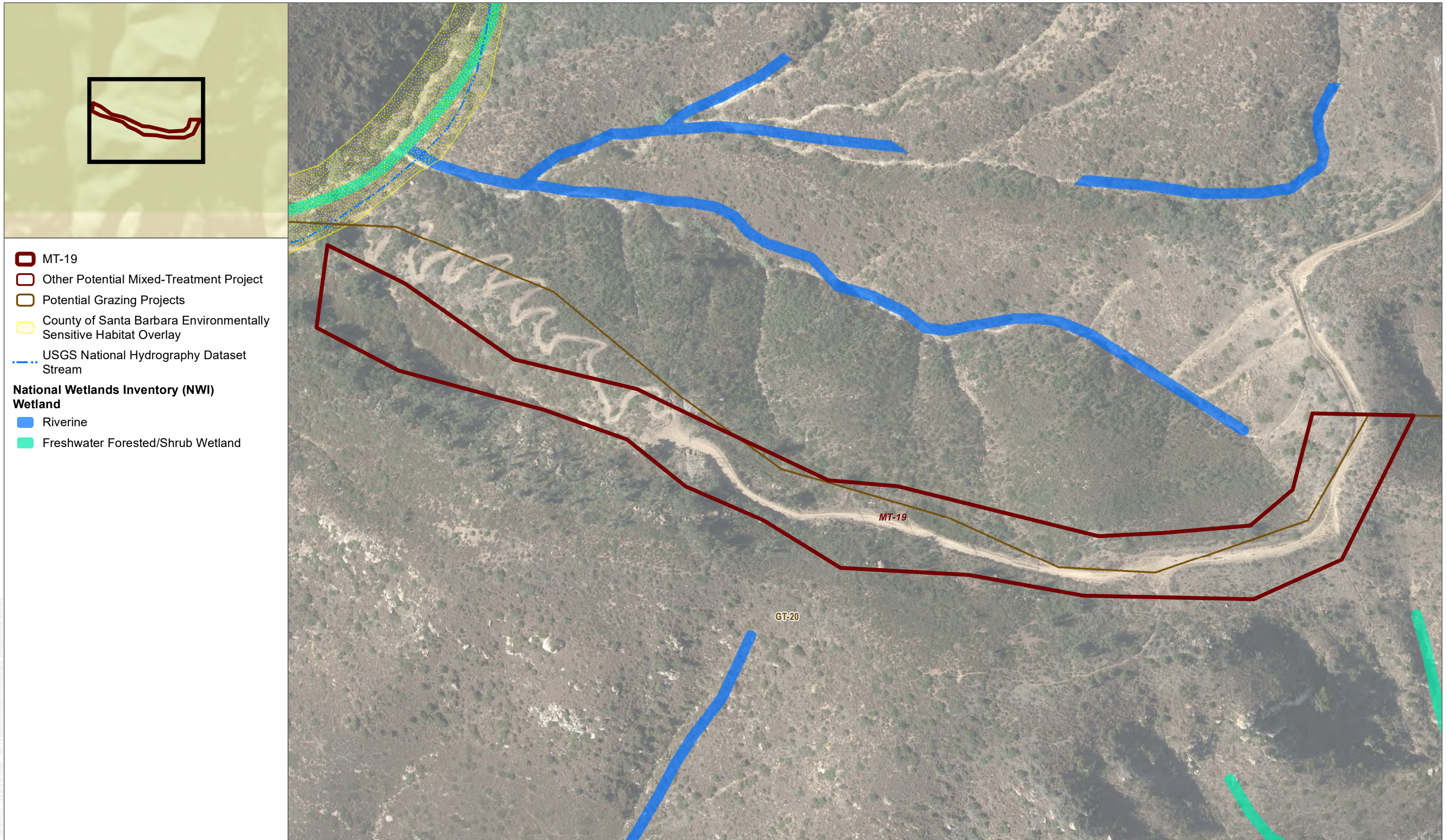
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 3-18

Potential Mixed Treatment Project: MT-18





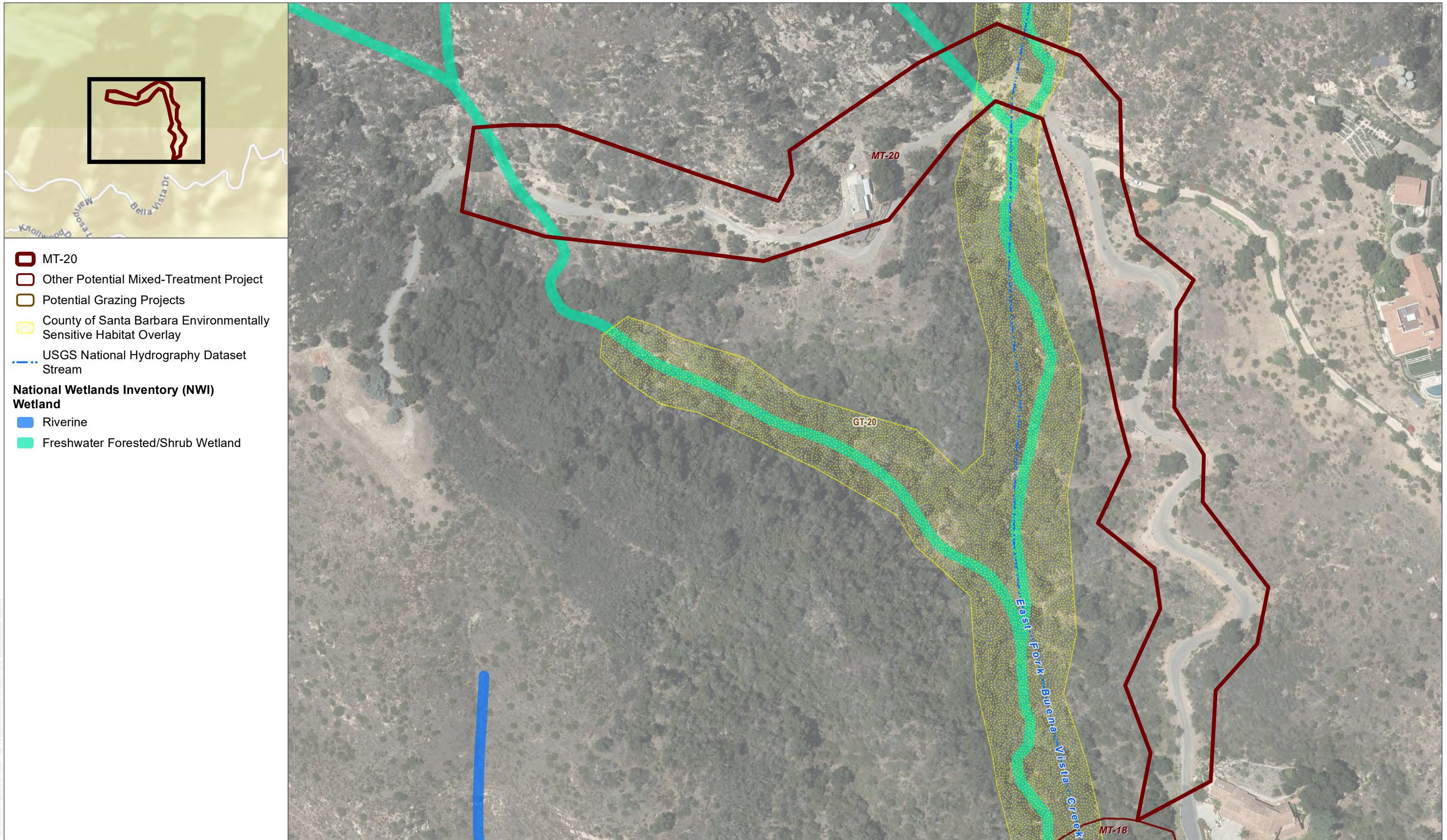
- MT-19
  - Other Potential Mixed-Treatment Project
  - Potential Grazing Projects
  - County of Santa Barbara Environmentally Sensitive Habitat Overlay
  - USGS National Hydrography Dataset Stream
- National Wetlands Inventory (NWI)**  
**Wetland**
- Riverine
  - Freshwater Forested/Shrub Wetland

SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE 3-19**

Potential Mixed Treatment Project: MT-19





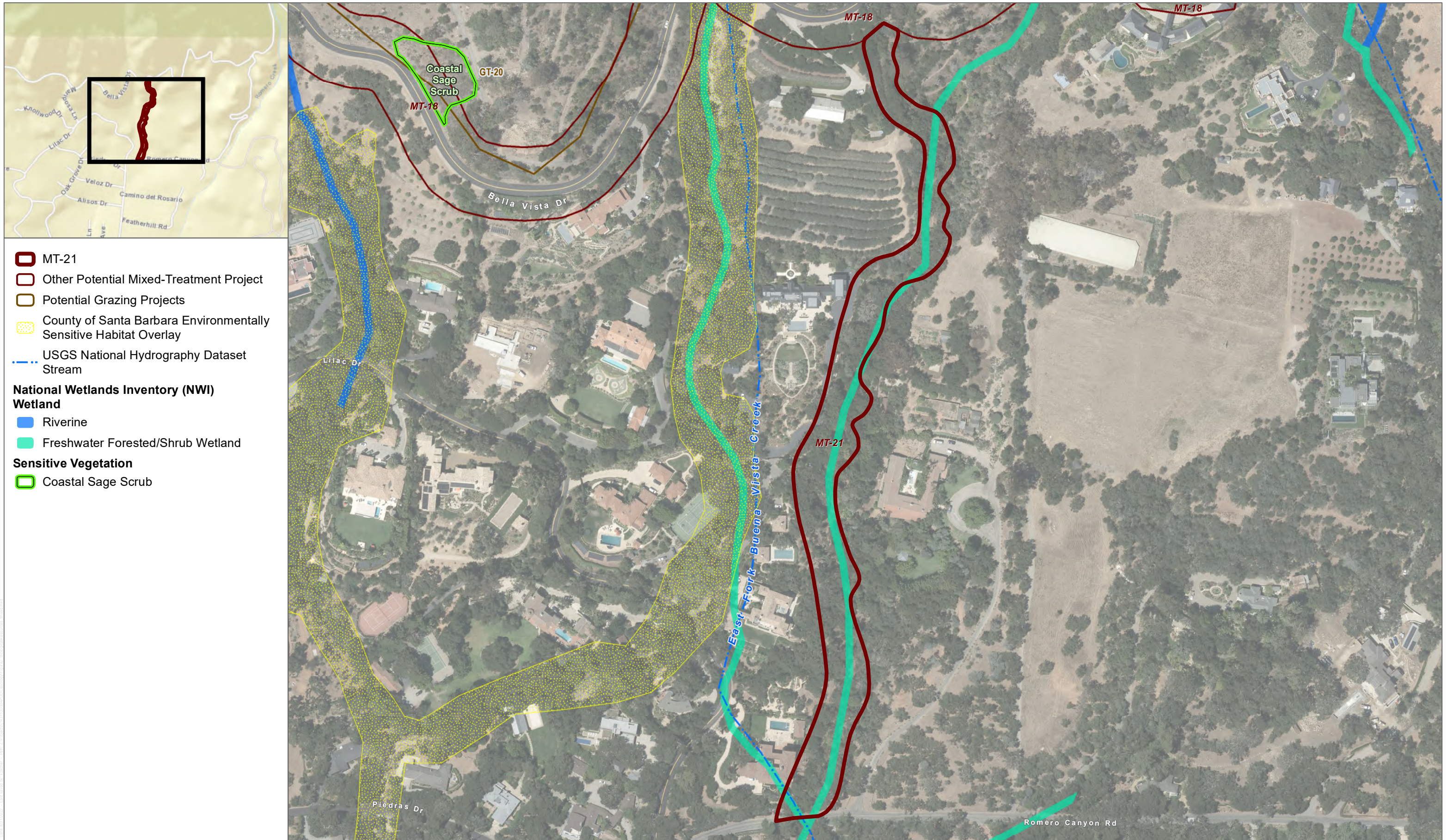
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE 3-20**

Potential Mixed Treatment Project: MT-20







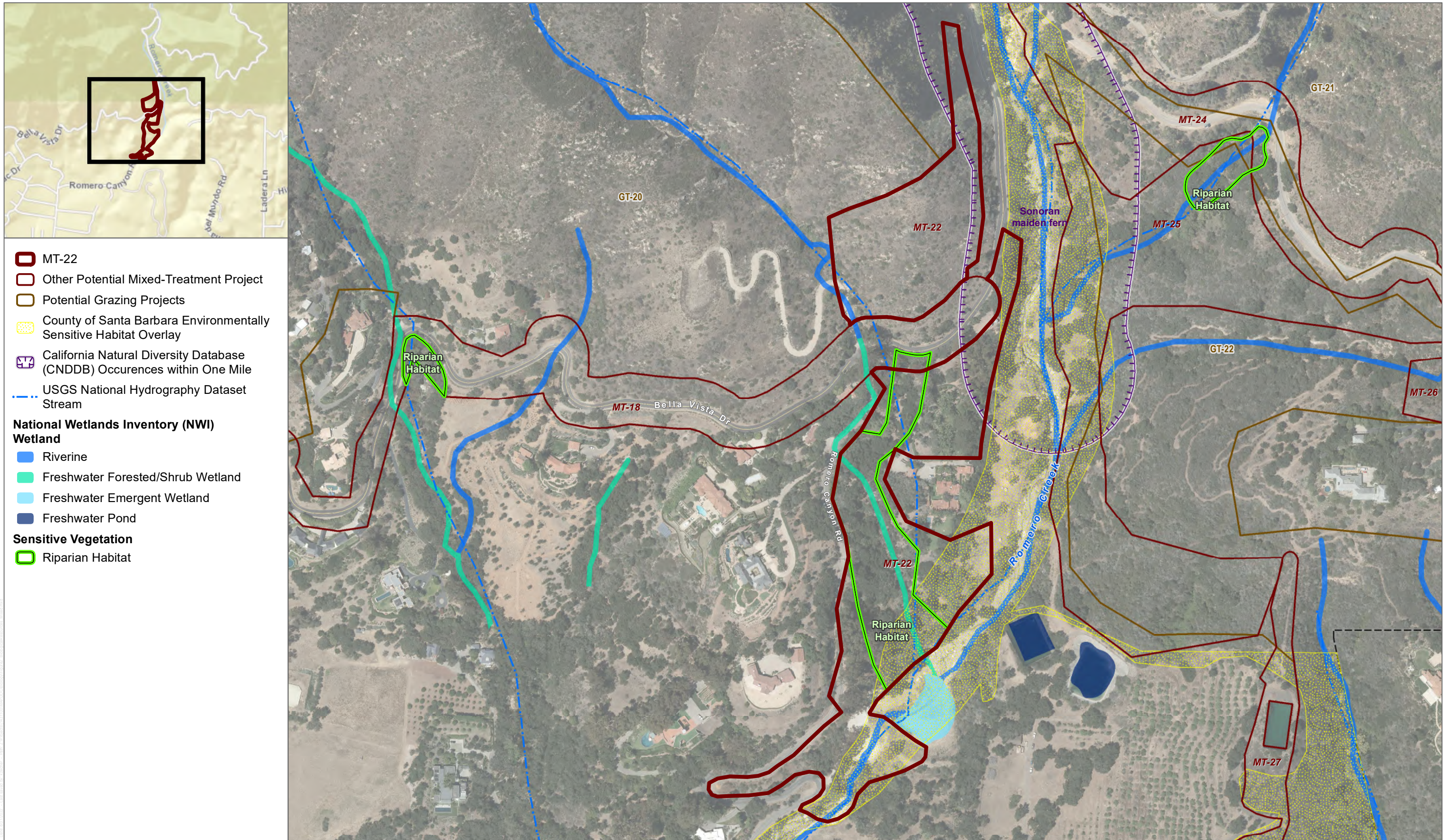
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 3-21

Potential Mixed Treatment Project: MT-21





- MT-22
  - Other Potential Mixed-Treatment Project
  - Potential Grazing Projects
  - County of Santa Barbara Environmentally Sensitive Habitat Overlay
  - California Natural Diversity Database (CNDDDB) Occurrences within One Mile
  - USGS National Hydrography Dataset Stream
- National Wetlands Inventory (NWI)**
- Wetland**
- Riverine
  - Freshwater Forested/Shrub Wetland
  - Freshwater Emergent Wetland
  - Freshwater Pond
- Sensitive Vegetation**
- Riparian Habitat

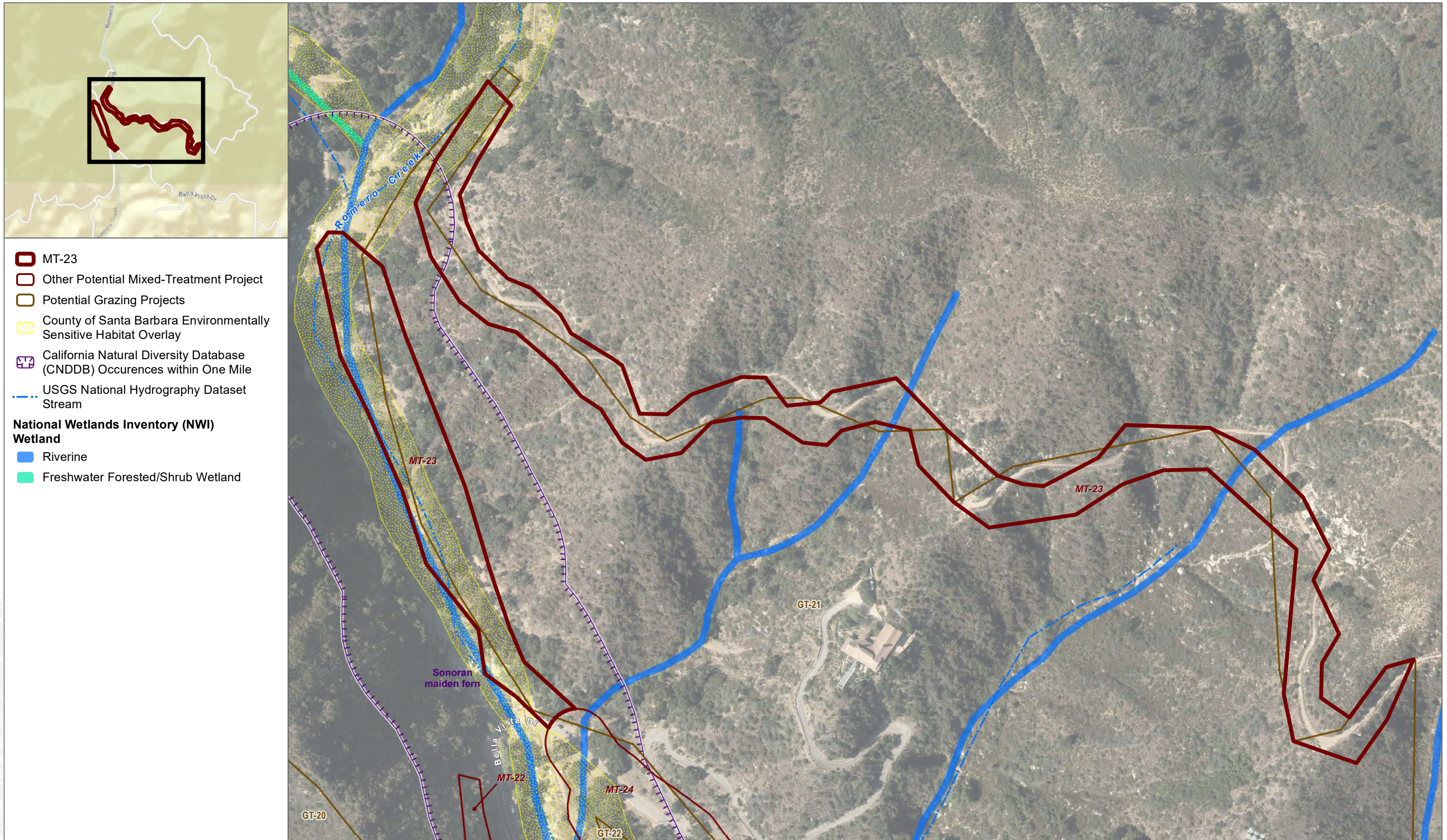
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 3-22

Potential Mixed Treatment Project: MT-22





SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

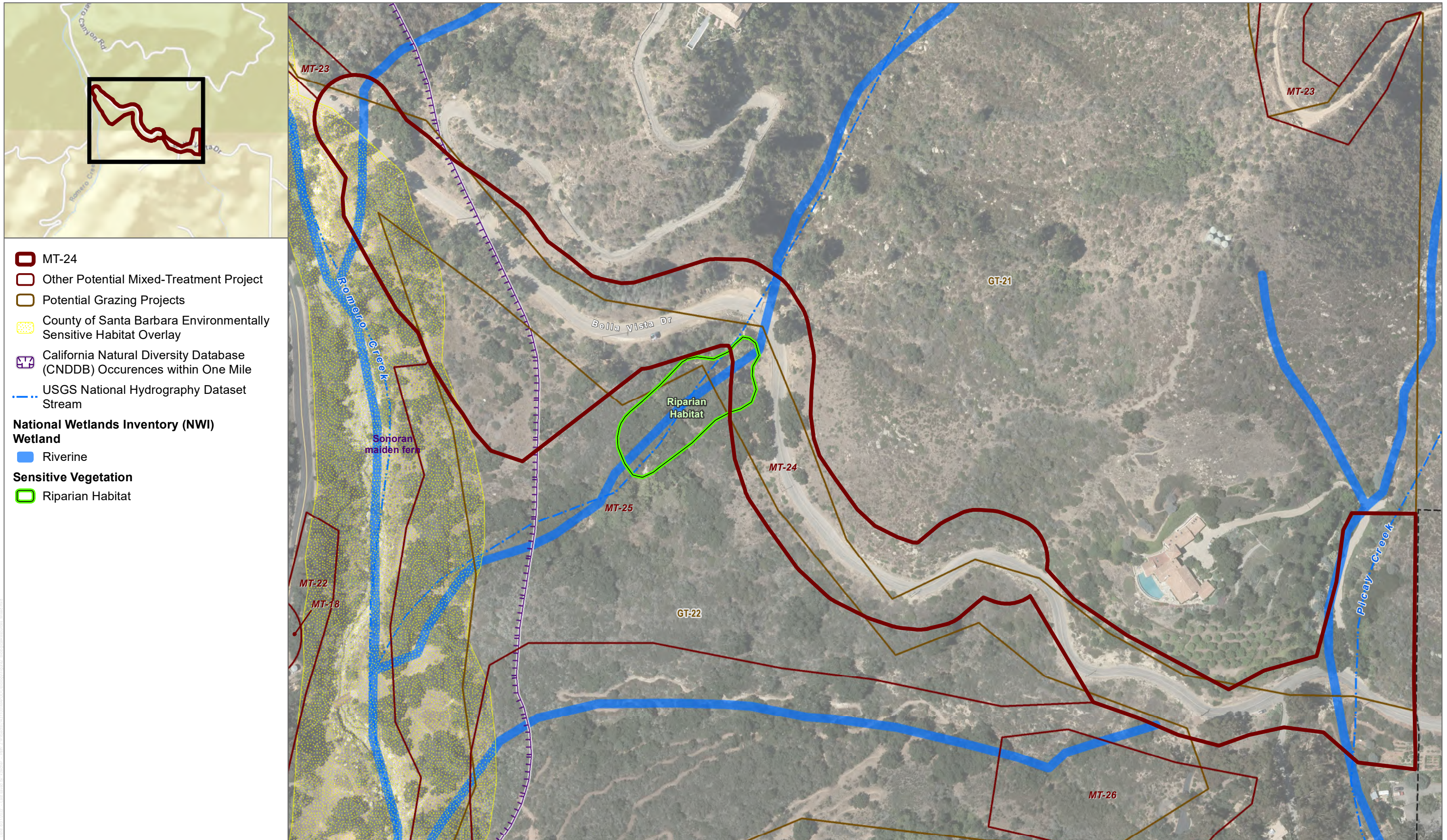


FIGURE 3-23

Potential Mixed Treatment Project: MT-23

Montecito Fire Protection District Vegetation Treatment Program Biological Resources Technical Memorandum





SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

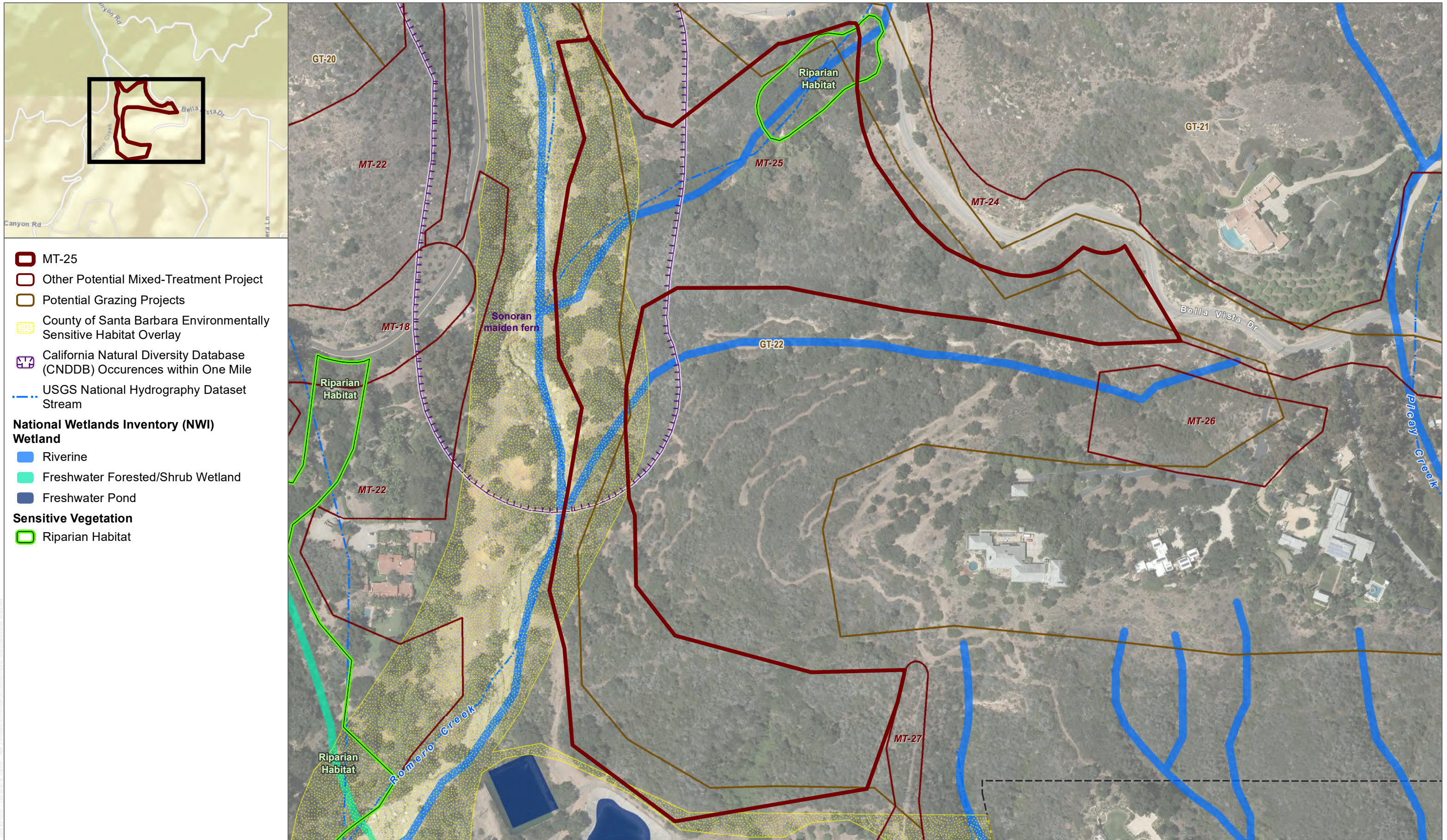


FIGURE 3-24

Potential Mixed Treatment Project: MT-24







SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 3-25

Potential Mixed Treatment Project: MT-25

Montecito Fire Protection District Vegetation Treatment Program Biological Resources Technical Memorandum



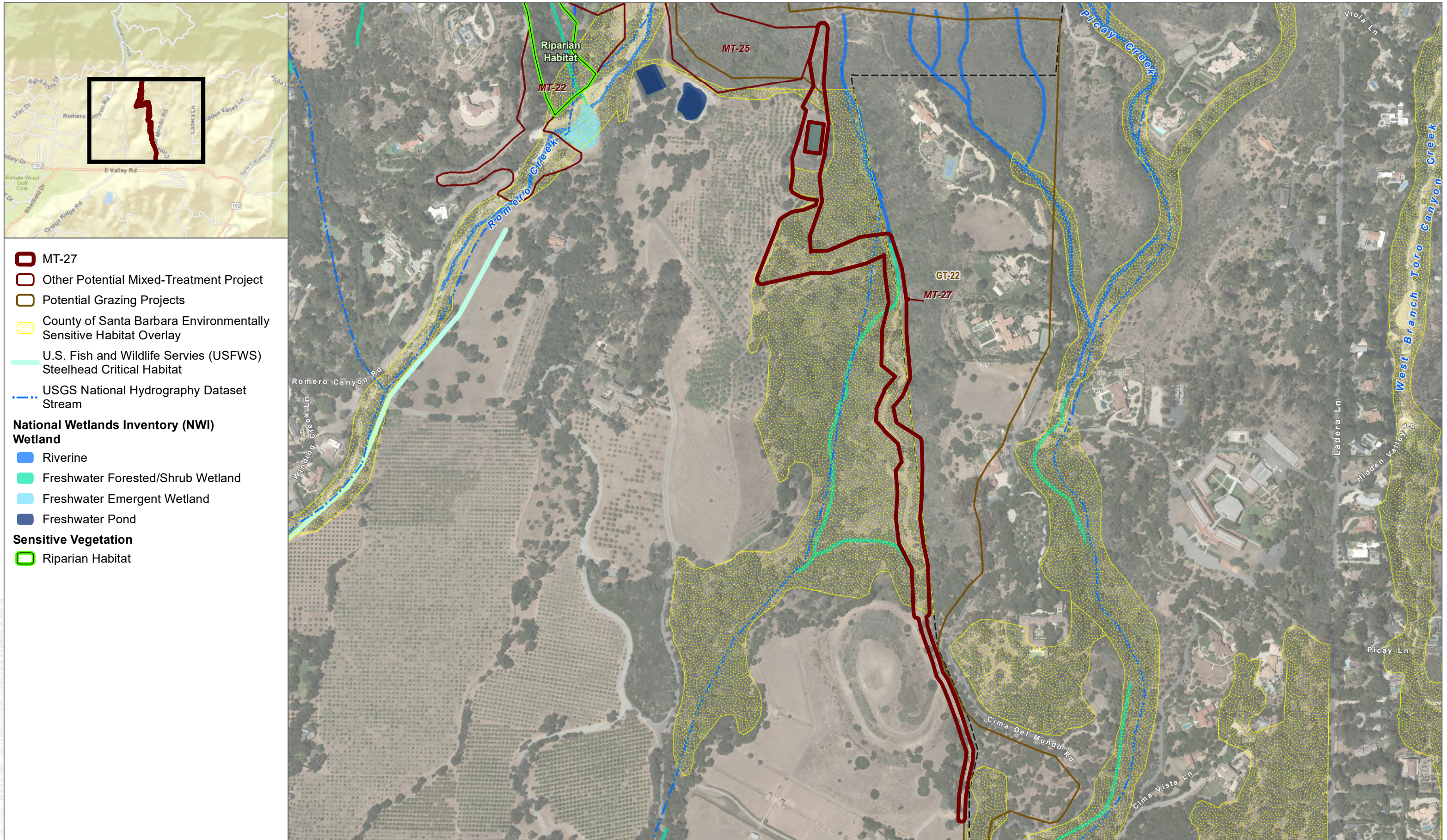


SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE 3-26**

Potential Mixed Treatment Project: MT-26





- MT-27
  - Other Potential Mixed-Treatment Project
  - Potential Grazing Projects
  - County of Santa Barbara Environmentally Sensitive Habitat Overlay
  - U.S. Fish and Wildlife Services (USFWS) Steelhead Critical Habitat
  - USGS National Hydrography Dataset Stream
- National Wetlands Inventory (NWI)**
- Riverine
  - Freshwater Forested/Shrub Wetland
  - Freshwater Emergent Wetland
  - Freshwater Pond
- Sensitive Vegetation**
- Riparian Habitat

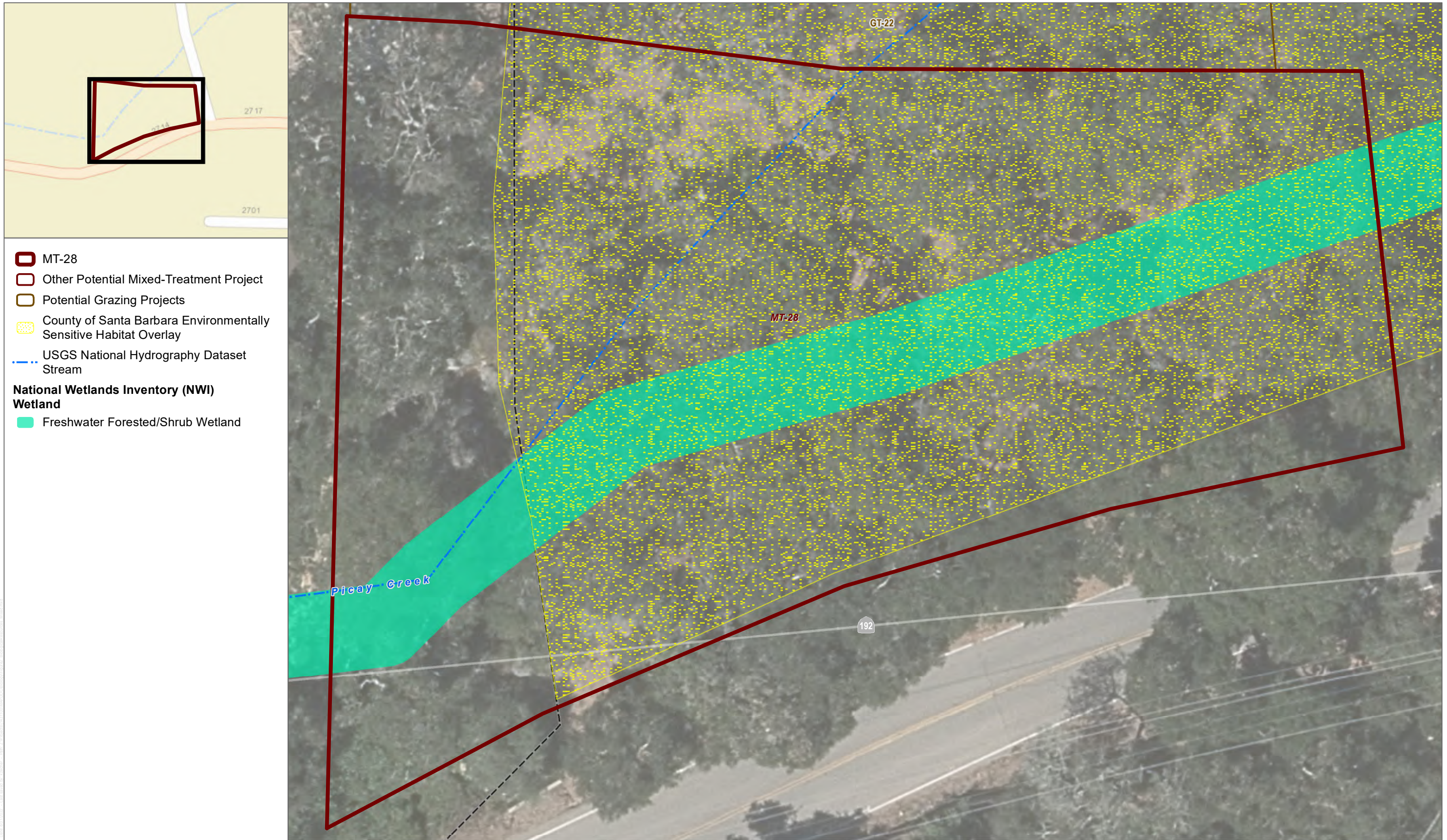
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 3-27

Potential Mixed Treatment Project: MT-27





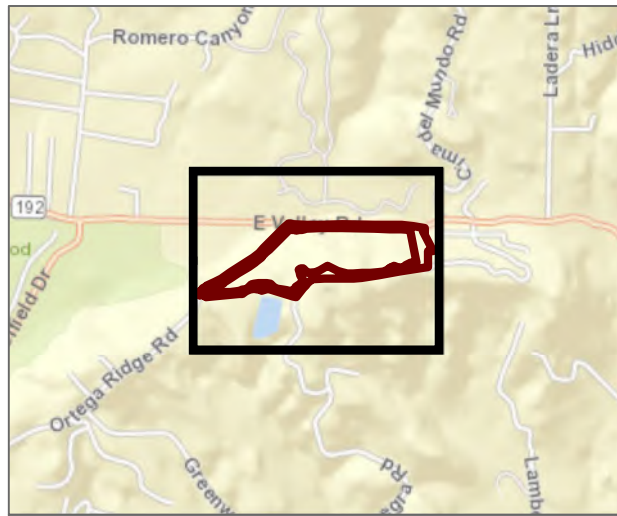
SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE 3-28**

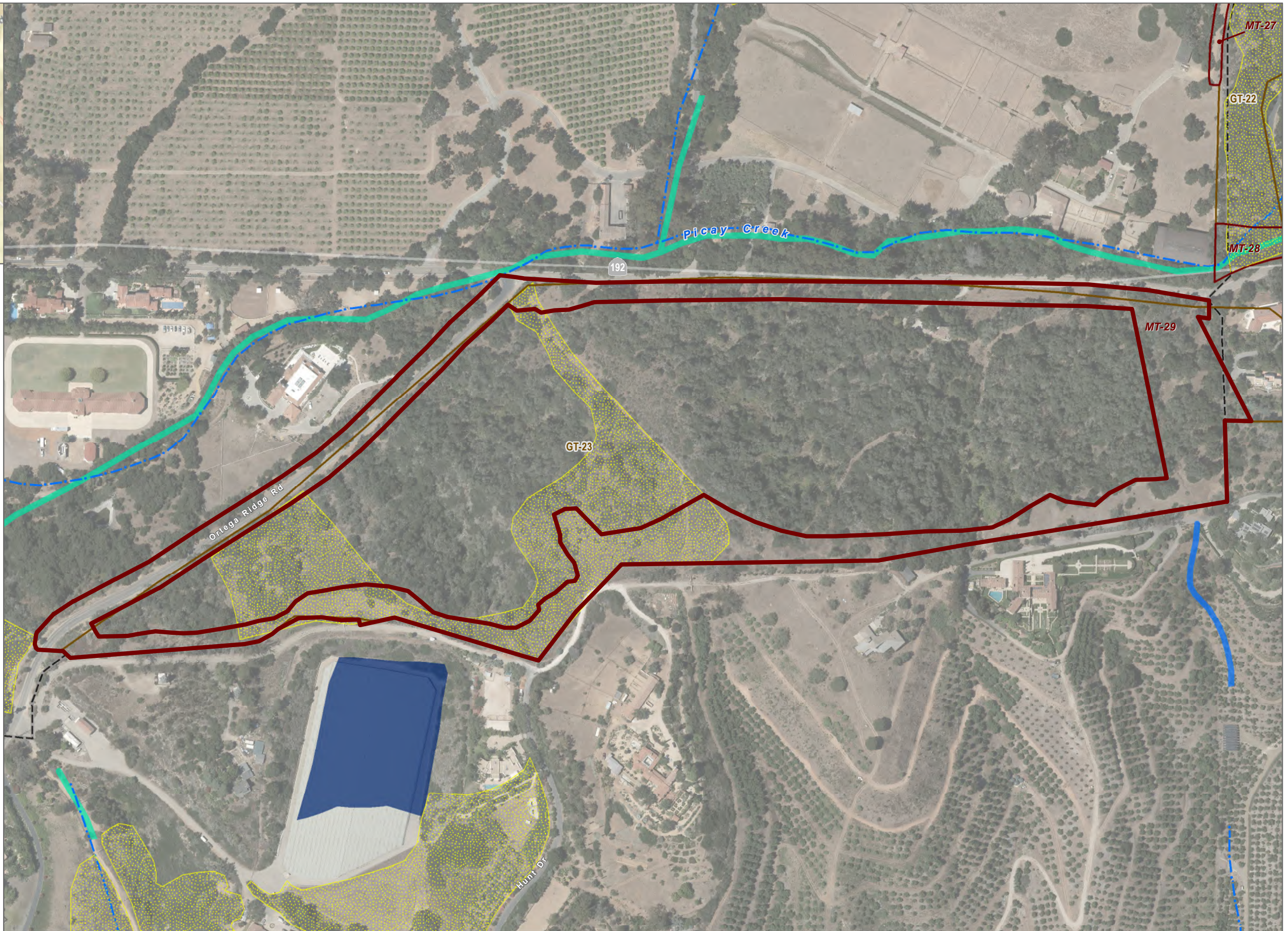
Potential Mixed Treatment Project: MT-28







- MT-29
  - Other Potential Mixed-Treatment Project
  - Potential Grazing Projects
  - County of Santa Barbara Environmentally Sensitive Habitat Overlay
  - USGS National Hydrography Dataset Stream
- National Wetlands Inventory (NWI)**
- Wetland**
- Riverine
  - Freshwater Forested/Shrub Wetland
  - Freshwater Pond



SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE 3-29

Potential Mixed Treatment Project: MT-29



---

## **Attachment B**

Special-Status Plant and Wildlife Species Potential to  
Occur Tables (CNDDDB Results)



## Special-Status Plant Species with Potential to Occur in the Treatment Areas

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
<i>Anomobryum julaceum</i>	slender silver moss	None/None/4.2	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest/moss//330-3,280	Potentially occurs. Suitable broadleafed upland forest occurs in the treatment areas.
<i>Arctostaphylos refugioensis</i>	Refugio manzanita	None/None/1B.2	Chaparral/perennial evergreen shrub/(May)Dec-Mar/900-2,690	Not expected to occur, as this readily identifiable species is not known to occur east of State Route 154.
<i>Astragalus didymocarpus</i> var. <i>milesianus</i>	Miles' milk-vetch	None/None/1B.2	Coastal scrub/annual herb/Mar-June/65-295	Not expected to occur within the treatment areas as suitable coastal scrub is absent.
<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	Ventura Marsh milk-vetch	FE/SE/1B.1	Coastal dunes, Coastal scrub, Marshes and swamps/perennial herb/(June)Aug-Oct/5-115	Not expected to occur within the treatment areas as suitable marshes and swamps, coastal dunes, and coastal scrub are absent.
<i>Atriplex coulteri</i>	Coulter's saltbush	None/None/1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland; Alkaline (sometimes), Clay (sometimes)/perennial herb/Mar-Oct/10-1,505	Not expected to occur. Some grassland communities occur within the treatment areas but the species is very coastal in its distribution in the region.
<i>Atriplex serenana</i> var. <i> davidsonii</i>	Davidson's saltscale	None/None/1B.2	Coastal bluff scrub, Coastal scrub; Alkaline/annual herb/Apr-Oct/35-655	Not expected to occur within the treatment areas as suitable coastal bluff scrub and coastal scrub in alkaline soils are absent.
<i>Calochortus fimbriatus</i>	late-flowered mariposa-lily	None/None/1B.3	Chaparral, Cismontane woodland, Riparian woodland; Serpentine (sometimes)/perennial bulbiferous herb/June-Aug/900-6,250	Potentially occurs. Suitable riparian woodland, chaparral, and cismontane woodland vegetation communities occur within the treatment areas. A CNDDDB occurrence overlaps with several of the treatment areas; however, these occurrences are outdated (CDFW 2022).
<i>Calochortus palmeri</i> var. <i> palmeri</i>	Palmer's mariposa-lily	None/None/1B.2	Chaparral, Lower montane coniferous forest, Meadows and seeps; Mesic/perennial bulbiferous herb/Apr-July/2,325-7,840	Not expected to occur within the treatment areas as all treatment areas are outside of the species' known elevation range.
<i>Calystegia sepium</i> ssp. <i> binghamiae</i>	Santa Barbara morning-glory	None/None/1A	Marshes and swamps/perennial rhizomatous herb/Aug/15-15	Not expected to occur within the treatment areas as suitable marshes and swamps are absent.
<i>Centromadia parryi</i> ssp. <i> australis</i>	southern tarplant	None/None/1B.1	Marshes and swamps, Valley and foothill grassland, Vernal pools/annual herb/May-Nov/0-1,570	Not expected to occur. Some grassland communities within the treatment areas could be considered suitable for this species. However, the distribution of this species in the project region is very coastal, and the project site is therefore outside its range.
<i>Chloropyron maritimum</i> ssp. <i> maritimum</i>	salt marsh bird's-beak	FE/SE/1B.2	Coastal dunes, Marshes and swamps/annual herb (hemiparasitic)/May-Oct(Nov)/0-100	Not expected to occur within the treatment areas as suitable marshes, swamps, and coastal dunes are absent, and the site is outside the elevation range of the species.
<i>Cordylanthus rigidus</i> ssp. <i> littoralis</i>	seaside bird's-beak	None/SE/1B.1	Chaparral, Cismontane woodland, Closed-cone coniferous forest, Coastal dunes, Coastal scrub/Apr-Oct/0-1,690	Low potential to occur. Although the species is not known from the Project vicinity, data are limited and suitable habitat occurs in some of the treatment areas, which are also generally within the known elevation range of the species.
<i>Delphinium umbraculorum</i>	umbrella larkspur	None/None/1B.3	Chaparral, Cismontane woodland/perennial herb/Apr-June/1,310-5,245	Not likely to occur. Suitable chaparral and cismontane woodland vegetation communities occur within the treatment areas and the most northern portions of the treatment areas are within the known elevation range of this species. However,

## Special-Status Plant Species with Potential to Occur in the Treatment Areas

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
				this species is expected on north of the Santa Ynez Mountains (Calflora 2022).
<i>Fritillaria ojaiensis</i>	Ojai fritillary	None/None/1B.2	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest; Rocky/perennial bulbiferous herb/Feb–May/740–3,270	Not expected to occur. Suitable chaparral and cismontane woodland vegetation communities occur within the treatment areas. However, this species is typically seen on the north side of the Santa Ynez Mountains (Calflora 2022).
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	None/None/1B.1	Chaparral, Cismontane woodland, Coastal scrub; Gravelly (sometimes), Sandy (sometimes)/perennial herb/Feb–July(Sep)/230–2,655	Potentially occurs. Suitable chaparral and cismontane woodland vegetation communities occur within the treatment areas.
<i>Juncus luciensis</i>	Santa Lucia dwarf rush	None/None/1B.2	Chaparral, Great Basin scrub, Lower montane coniferous forest, Meadows and seeps, Vernal pools/annual herb/Apr–July/985–6,690	Not expected to occur. Suitable wetland, vernal pool, and seep habitats are absent at suitable elevations within the treatment areas.
<i>Lasthenia conjugens</i>	Contra Costa goldfields	FE/None/1B.1	Cismontane woodland, Playas, Valley and foothill grassland, Vernal pools; Mesic/annual herb/Mar–June/0–1,540	Not expected to occur. Despite several historic occurrences from the south coast (Calflora 2022), USFWS does not consider the project region to occur within the current range of this species (USFWS 2022a).
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	None/None/1B.1	Marshes and swamps, Playas, Vernal pools/annual herb/Feb–June/5–4,000	Not expected to occur within the treatment areas as suitable marshes and swamps, playas, and vernal pools are absent.
<i>Layia heterotricha</i>	pale-yellow layia	None/None/1B.1	Cismontane woodland, Coastal scrub, Pinyon and juniper woodland, Valley and foothill grassland; Alkaline (sometimes), Clay (sometimes)/annual herb/Mar–June/985–5,590	Not expected to occur. Some cismontane woodland and grassland vegetation communities could be considered suitable for this species. However, these areas are limited, and this species is typically found north of the Santa Ynez Mountains (Calflora 2022).
<i>Lonicera subspicata</i> var. <i>subspicata</i>	Santa Barbara honeysuckle	None/None/1B.2	Chaparral, Cismontane woodland, Coastal scrub/perennial evergreen shrub/(Feb)May–Aug(Dec)/35–3,280	Potentially occurs. Suitable chaparral, and cismontane woodland vegetation communities occur within the treatment areas. A CNDDDB occurrence was recorded within 1 mile of the treatment areas (CDFW 2022).
<i>Malacothrix saxatilis</i> var. <i>arachnoidea</i>	Carmel Valley malacothrix	None/None/1B.2	Chaparral, Coastal scrub/perennial rhizomatous herb/(Mar)June–Dec/80–3,395	Not expected to occur. Suitable chaparral vegetation community occurs within the treatment areas. However, this species is typically found north of the Santa Ynez Mountains (Calflora 2022).
<i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i>	white-veined monardella	None/None/1B.3	Chaparral, Cismontane woodland/perennial herb/(Apr)May–Aug(Sep–Dec)/165–5,000	Potentially occurs. Suitable chaparral, and cismontane woodland vegetation communities occur within the treatment areas. A CNDDDB occurrence overlaps with several of the treatment areas; however, the occurrences are outdated (CDFW 2022)..
<i>Muhlenbergia utilis</i>	aparejo grass	None/None/2B.2	Chaparral, Cismontane woodland, Coastal scrub, Marshes and swamps, Meadows and seeps; Alkaline (sometimes), Serpentinite (sometimes)/perennial rhizomatous herb/Mar–Oct/80–7,625	Potentially occurs. Suitable mesic chaparral, and riparian scrub vegetation communities occur within the treatment areas.
<i>Nasturtium gambelii</i>	Gambel's water cress	FE/ST/1B.1	Marshes and swamps/perennial rhizomatous herb/Apr–Oct/15–1,080	Not expected to occur within the treatment areas as suitable marshes and swamps are absent.

## Special-Status Plant Species with Potential to Occur in the Treatment Areas

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
<i>Nolina cismontana</i>	chaparral nolina	None/None/1B.2	Chaparral, Coastal scrub/perennial evergreen shrub/(Mar)May-July/460-4,180	Potentially occurs. Suitable chaparral vegetation community occurs within the treatment areas.
<i>Pleuridium mexicanum</i>	Mexican earthmoss	None/None/2B.1	Chaparral/moss//1,440-1,440	Potentially occurs. Suitable chaparral vegetation community occurs within the treatment areas.
<i>Quercus dumosa</i>	Nuttall's scrub oak	None/None/1B.1	Chaparral, Closed-cone coniferous forest, Coastal scrub/perennial evergreen shrub/Feb-Apr(May-Aug)/50-1,310	Potentially occurs. Suitable chaparral vegetation community occurs within the treatment areas. Multiple CNDDDB occurrences overlap or are adjacent to treatment areas (CDFW 2022). However, none were identified during the reconnaissance survey conducted in accordance with SPR BIO-1.
<i>Scrophularia atrata</i>	black-flowered figwort	None/None/1B.2	Chaparral, Closed-cone coniferous forest, Coastal dunes, Coastal scrub, Riparian scrub/perennial herb/Mar-July/35-1,640	Potentially occurs. Suitable chaparral, and riparian scrub vegetation communities occur within the treatment areas. A CNDDDB occurrence was recorded within 1 mile of the treatment areas.
<i>Streptanthus campestris</i>	southern jewelflower	None/None/1B.3	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland/perennial herb/(Apr)May-July/2,950-7,545	Not expected to occur within the treatment areas as all treatment areas are outside of the species' known elevation range.
<i>Suaeda esteroa</i>	estuary seablite	None/None/1B.2	Marshes and swamps/perennial herb/(Jan-May)July-Oct/0-15	Not expected to occur within the treatment areas as suitable marshes and swamps are absent.
<i>Thelypteris puberula</i> var. <i>sonorensis</i>	Sonoran maiden fern	None/None/2B.2	Meadows and seeps/perennial rhizomatous herb/Jan-Sep/165-2,000	Potentially occurs. Suitable meadow and seep vegetation community occurs within the treatment areas. Multiple CNDDDB occurrences either overlap or were recorded within 1 mile of the treatment areas (CDFW 2022).
<i>Thermopsis macrophylla</i>	Santa Ynez false lupine	None/SR/1B.3	Chaparral/perennial rhizomatous herb/Apr-June/1,390-4,590	Not expected to occur. Chaparral vegetation occurs within the treatment areas. However, this species is expected further north, beyond the crest of the Santa Ynez Mountains (Calflora 2022).

**Notes:**

Status Legend:

FE: Federally listed as endangered

SE: State listed as endangered

ST: State listed as threatened

SR: State Rare

CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere

CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere

CRPR 4: Watch List: Plants of limited distribution

.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3 Not very threatened in California (&lt;20% of occurrences threatened / low degree and immediacy of threat or no current threats known)



## Special-Status Wildlife Species with Potential to Occur in the Treatment Areas

Row Labels	Common Name	Status (Federal/State)	Habitat	Potential to Occur
Amphibians				
<i>Anaxyrus californicus</i>	arroyo toad	FE/SSC	Semi-arid areas near washes, sandy riverbanks, riparian areas, palm oasis, Joshua tree, mixed chaparral and sagebrush; stream channels for breeding (typically third order); adjacent stream terraces and uplands for foraging and wintering	Not expected to occur. Suitable habitat is absent, and the species is not known to occur on the south side of the Santa Ynez ridge.
<i>Rana draytonii</i>	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	High potential to occur. Two CNDDDB locations are near the confluence of Cold Springs and Hot Springs Creek south of MT-13 (CDFW 2022a), and the species may occur along other creeks in the vicinity, such as Romero or San Ysidro Creek.
<i>Taricha torosa</i> (Monterey Co. south only)	California newt	None/SSC	Wet forests, oak forests, chaparral, and rolling grassland	High potential to occur. CNDDDB includes two occurrences along Cold Springs Creek within or near MT-12 (CDFW 2022a), and the species may occur elsewhere in the vicinity of aquatic habitats.
Birds				
<i>Agelaius tricolor</i> (nesting colony)	tricolored blackbird	None/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture	Not expected to occur. Suitable breeding habitat is limited to the lowlands in the region, and there are no recent breeding records in southern Santa Barbara County.
<i>Ammodramus savannarum</i> (nesting)	grasshopper sparrow	None/SSC	Nests and forages in moderately open grassland with tall forbs or scattered shrubs used for perches	Not expected to occur. Suitable open grasslands do not occur on the project site.
<i>Aquila chrysaetos</i> (nesting & wintering)	golden eagle	None/FP	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Not expected to occur while nesting. May fly over the Project site on rare occasion.
<i>Athene cunicularia</i> (burrow sites & some wintering sites)	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Not expected to occur. No suitable open habitats occur on the Project site.
<i>Charadrius nivosus nivosus</i> (nesting)	western snowy plover	FT/SSC	On coasts nests on sandy marine and estuarine shores; in the interior nests on sandy, barren or sparsely vegetated flats near saline or alkaline lakes, reservoirs, and ponds	Not expected to occur. No suitable habitat present.
<i>Coturnicops noveboracensis</i>	yellow rail	None/SSC	Nesting requires wet marsh/sedge meadows or coastal marshes with wet soil and shallow, standing water	Not expected to occur. No suitable habitat present.
<i>Contopus cooperi</i>	olive-sided flycatcher	None/SSC	Nests in mixed-conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir, and lodgepole pine habitats; usually close to water. Where it occurs more coastally, it may occur in habitats supporting other taller trees, such as <i>Eucalyptus</i> spp.	Observed. Known to occur along Cold Springs Creek near where it occurs along Mountain Drive.
<i>Elanus leucurus</i> (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	Low potential to occur. The limited grassland areas are marginally suitable for this species, which typically forages in more extensive and open habitats, and nests in nearby trees.
<i>Empidonax traillii extimus</i> (nesting)	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration.	Not expected to occur. May occur during migration. But riparian thickets suitable for nesting are absent in the Project vicinity.

## Special-Status Wildlife Species with Potential to Occur in the Treatment Areas

Row Labels	Common Name	Status (Federal/State)	Habitat	Potential to Occur
<i>Falco mexicanus</i> (nesting)	prairie falcon	None/WL	Forages in grassland, savanna, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs	Not expected to occur. Suitable nesting habitat does not occur on the site, and the species is rare anywhere on the south coast. Foraging is limited to more extensive open habitats than occur on the project site.
<i>Gymnogyps californianus</i>	California condor	FE/FP, SE	Nests in rock formations, deep caves, and occasionally in cavities in giant sequoia trees ( <i>Sequoiadendron giganteus</i> ); forages in relatively open habitats where large animal carcasses can be detected	Not expected to occur. May occasionally fly over the Project vicinity, but not known to nest or forage in the vicinity.
<i>Laterallus jamaicensis coturniculus</i>	California black rail	None/FP, ST	Tidal marshes, shallow freshwater margins, wet meadows, and flooded grassy vegetation; suitable habitats are often supplied by canal leakage in Sierra Nevada foothill populations	Not expected to occur. Suitable habitat is absent.
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow	None/SE	Nests and forages in coastal saltmarsh dominated by pickleweed ( <i>Salicornia</i> spp.)	Not expected to occur. The Project site is not along the coast and lacks suitable habitat.
<i>Pelecanus occidentalis californicus</i> (nesting colonies & communal roosts)	California brown pelican	FD/FP, SCD	Forages in warm coastal marine and estuarine environments; in California, nests on dry, rocky offshore islands	Not expected to occur. The Project site is away from the coast, where this species is known to occur, and suitable habitat is absent.
<i>Rallus obsoletus levipes</i>	Ridgway's rail	FE/FP, SE	Coastal wetlands, brackish areas, coastal saline emergent wetlands	Not expected to occur. The Project site is away from the coast, where this species is known to occur, and suitable habitat is absent.
<i>Riparia riparia</i> (nesting)	bank swallow	None/ST	Nests in riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with sandy soils; open country and water during migration	Not expected to occur. Suitable habitat is absent, and the species has not been recorded nesting in the region in recent years.
<i>Setophaga petechia</i> (nesting)	yellow warbler	None/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	High potential to occur. Riparian habitats, especially more extensive habitats on major creeks such as Romero Creek, have a high potential to support breeding by this species.
<i>Sternula antillarum browni</i> (nesting colony)	California least tern	FE/FP, SE	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats	Not expected to occur. Suitable habitat is absent.
<i>Vireo bellii pusillus</i> (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Not expected to occur. Riparian thickets suitable for nesting are absent in the Project site.
Fishes				
<i>Eucyclogobius newberryi</i>	tidewater goby	FE/None	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County, to the mouth of the Smith River	Not expected to occur. The Project site is far from any coastal brackish water habitats.
<i>Oncorhynchus mykiss irideus</i> pop. 10	southern steelhead - southern California DPS	FE/SCE	Clean, clear, cool, well-oxygenated streams; needs relatively deep pools in migration and gravelly substrate to spawn	High potential to occur. Federally designated critical habitat occurs along Cold Springs/Hot Springs Creek and San Ysidro Creek where they cross the treatment areas. Additional critical habitat occurs along Sycamore and Romero Creeks just downstream of treatments areas MT-1 and MT-22,

## Special-Status Wildlife Species with Potential to Occur in the Treatment Areas

Row Labels	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				respectively. Steelhead is expected to travel through or spawn in these areas.
Invertebrates				
<i>Danaus plexippus</i> pop. 1	monarch	FC/None	Wind-protected tree groves with nectar sources and nearby water sources	High potential to occur. A known winter roost is within GT-15, in eucalyptus.
Mammals				
<i>Antrozous pallidus</i>	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	Moderate potential to occur. Low potential to roost within the Project site, although foraging habitat is present throughout the area.
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, man-made structures, and tunnels	Low potential to occur. Roosting habitat is absent.
<i>Eumops perotis californicus</i>	western mastiff bat	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Low potential to occur. Roosting habitat is absent.
<i>Lasiurus blossevillii</i>	western red bat	None/SSC	Forest, woodland, riparian, mesquite bosque, and orchards, including fig, apricot, peach, pear, almond, walnut, and orange; roosts in tree canopy	Moderate potential to occur. Suitable roosting habitat occurs in riparian habitat and oak woodland the Project site, where maternity roosts may occur.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	None/SSC	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	High potential to occur. Likely occurs in scrub habitats, especially those with rocky substrates.
<i>Nyctinomops macrotis</i>	big free-tailed bat	None/SSC	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water	Low potential to occur. The Project site is outside the normal range of the species, although it has potential to occur during migration.
Reptiles				
<i>Anniella pulchra</i>	northern California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley-foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and sandy or loose, loamy soils	Moderate potential to occur. Occurrence may be limited by extensive areas of rocky substrates, but in area of loose soils, leaf litter (such as may accumulate under some oak woodland), and riparian habitat, this species has potential to occur.
<i>Aspidoscelis tigris stejnegeri</i>	San Diegan tiger whiptail	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	Low potential to occur. The Project site is at the edge of, and possibly outside, the species' range.
<i>Emys marmorata</i>	western pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Moderate to occur. Some streams may support suitable aquatic habitat, and individuals may occupy upland habitats nearby when not occupying aquatic habitats.
<i>Phrynosoma blainvillii</i>	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley-foothill hardwood, conifer, riparian, pine-cypress, juniper, and annual grassland habitats	High potential to occur. This species has potential to occur, mostly in scrub habitats, within the project site. CNDDDB includes an occurrence within MT-3 and

**Special-Status Wildlife Species with Potential to Occur in the Treatment Areas**

Row Labels	Common Name	Status (Federal/State)	Habitat	Potential to Occur
				others near MT-4, MT-8, MT-9, MT-10, MT-11, and GT-5 (CDFW 2022a).
<i>Salvadora hexalepis virgultea</i>	coast patch-nosed snake	None/SSC	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Moderate potential to occur. This species has potential to occur, mostly in scrub habitats, within the Project site.
<i>Thamnophis hammondi</i>	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Moderate potential to occur. This species may occur along perennial streams in the project vicinity, such as along Romero Creek, San Ysidro Creek, or Cold Springs Creek.

**Notes:**

Status Abbreviations:

FE: Federally Endangered

FT: Federally Threatened

FC: Federal Candidate Species

FD: Federally Delisted

SSC: California Species of Special Concern

FP: California Fully Protected Species

ST: State Threatened

SE: State Endangered



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# **Attachment C**

Potentially Occurring Special-Status Species by  
Treatment Area









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# **Attachment D**

## CDFW correspondence



## David Compton

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**From:** Kelly, Audrey@Wildlife <Audrey.Kelly@Wildlife.ca.gov>  
**Sent:** Friday, August 26, 2022 8:26 AM  
**To:** David Compton  
**Subject:** RE: Montecito Fire Protection District Cal-VTP Project

Hi David,

This addresses my comments. Please allow CDFW to provide additional comments if there are changes to the project description at a later date. Thank you again for allowing CDFW to collaborate with you on this project!

Thank you,

**Audrey Kelly**

Environmental Scientist

California Department of Fish and Wildlife – South Coast Region

Temporary line: (805)861-8475

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**From:** David Compton <dcompton@dudek.com>  
**Sent:** Thursday, August 25, 2022 4:43 PM  
**To:** Kelly, Audrey@Wildlife <Audrey.Kelly@Wildlife.ca.gov>  
**Subject:** RE: Montecito Fire Protection District Cal-VTP Project

**WARNING:** This message is from an external source. Verify the sender and exercise caution when clicking links or opening attachments.

Hi Audrey,

I want to answer your concerns expressed in your most recent emails, but also summarize everything I believe we've agreed on to date.

In answer to the grazing concern, we are modifying the project description to provide a clearer description of the grazing treatment and its goals. Below is the revised text on prescribed herbivory (with the new addition of text highlighted). It should make clear that the project as proposed has a goal that is consistent with avoiding erosion and water quality impacts, as well as type conversion of vegetation. Let us know whether, given this change to the project description and the measures we are recommending, you still have concerns over grazing.

“The proposed prescribed herbivory treatments would occur on approximately 883 acres of steep and rugged terrain. These areas provided for limited access by hand crews or mechanical equipment, making prescribed herbivory the only realistic vegetation management treatment activity in the proposed project areas. The prescribed herbivory treatment activities would utilize temporary electric fences to contain the animals, which would be constructed along existing road and trail systems. During project implementation, there would be a need to construct narrow (approximately 3-foot) saw lines to facilitate fence construction. Limited ground disturbance is expected to occur on any of the proposed projects.

For the prescribed herbivory treatments, animals would be confined within small (1-10 acre) paddocks using portable electric fencing until the agreed upon level of grazing in the paddock is completed. Prior to being brought to the site, the herd will be sequestered for at least 3 days where feed utilized does not contain unwanted seed/plant material. Grazing activities will be conducted in a manner which keeps all animals under herdsman's control and appropriately confined. Measures would be taken to ensure no grazing animals or herd control animals cause noise which disturbs adjoining neighbors, and to remove animals that cause a noise nuisance. Within each paddock, the goal will be a 75% reduction of

herbaceous fuels (grasses), trampled or consumed, and a 50% reduction of palatable vegetation on the ladder fuels on all other vegetation (shrubs) up to 3.5 feet in height. Combined effects will create a 12"-3' spacing between 50% of the vegetation. The animals will then be moved to the next paddock."

Also, here is information regarding implementation of measures that address your steelhead BMPs.

Dudek will recommend, as part of implementing MM BIO-2a, avoidance of listed wildlife species and their habitat, that no live vegetation be removed from riparian habitats during mixed treatments, that no work of any kind be conducted in a wetted portion of stream. If any removal of dead vegetation occurs is conducted in riparian habitat along streams in watersheds supporting steelhead critical habitat, it should be conducted outside the steelhead migration season.

Note that no heavy equipment is being used in manual treatment. Any chippers use would be stationed on existing roads, as stated in the project description. The project description does not specifically say that no vegetation will be stockpiled in or near streams, or in riparian areas. But we will include this requirement in our recommendations for protecting riparian vegetation through implementation of **SPR BIO-4**.

As for the potential need for water quality BMPs, implementation of SPR HYD-1 will requirement conformance with Water Board WDRs:

"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."

In relation to CDFW's grazing BMPs mentioned below, in accordance with SPR HYD-3, Dudek will be recommending that all grazing occur outside riparian habitat and water courses, and outside a 50 ft buffer around these areas. Animals will be excluded from these sensitive areas by fencing.

We hope the new project description text for grazing, highlighted above, addresses the grazing plan requirement.

### **Summary of Other Items Discussed Below**

We added seaside bird's beak to the list of species we will survey for, in appropriate habitat, at an appropriate season, per the PTO table provided below.

In addition to measures mentioned above in relation to reducing impacts from erosion during grazing, we are implementing several other measures to reduce impacts to vegetation from grazing: **MM BIO-1a** (Avoid Loss of Special-Status Plants Listed under ESA or CESA), **MM BIO-1b** (Avoid Loss of Special-Status Plants Not Listed Under ESA or CESA)

[since we are recommending avoidance, we are not recommending MM BIO-1c to mitigation loss of rare plants], **MM BIO-3a** (Design Treatments to Avoid Loss of Sensitive Natural Communities and Oak Woodlands), **MM BIO-4** (Avoid State and Federally Protected Wetlands), **SPR GEO-1** (Suspend Disturbance during Heavy Precipitation), **SPR GEO-4** (erosion monitoring), **SPR HYD-3** (Water Quality Protections for Prescribed Herbivory), and **SPR HYD-4** (Identify and Protect Watercourse and Lake Protection Zones).

Other measures being implemented for bio impacts are:

SPR BIO-2, worker environmental awareness training

SPR BIO-3, sensitive natural communities. We've identified several such communities and are recommending additional surveys and avoidance prior to implementation in all areas.

SPR BIO-5, avoid type conversion in chaparral and coastal scrub.. We're still considering how this applies.

SPR BIO-6, prevent spread of plant pathogens. We will recommend full implementation of this SPR.

SPR BIO-7, Special-status plant surveys. Our bio memo will include the required timing of rare plant surveys for each area and will require avoidance of rare plants that are identified..

SPR BIO-9, prevent spread of invasive plants and non-native wildlife. We have identified areas of invasive plants, and we will recommend implementation all other measures included in this SPR.

SPR BIO-10, special-status wildlife species. We've identified a variety of potentially occurring species (including two federally listed species, California red-legged frog and steelhead, for which we will recommend avoidance measures).

The only special-status species identified during surveys was olive-sided flycatcher, present in one area along Cold Springs Creek. We will recommend appropriate surveys to detect these species, in addition to the avoidance of steelhead streams and of California red-legged frogs. We are still considering our approach to the frogs and are in contact with Chris Diel of USFWS about the issue. I will let you know what approach we settle on with USFWS.

SPR BIO-11, wildlife friendly fencing for prescribed herbivory.

SPR BIO-12, nesting birds. We'll be recommending pre-activity surveys and avoidance, during the appropriate season

Let me know if you have further or unaddressed concerns.

### **Dave Compton**

Senior Biologist

### **DUDEK**

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---

**From:** Kelly, Audrey@Wildlife <[Audrey.Kelly@Wildlife.ca.gov](mailto:Audrey.Kelly@Wildlife.ca.gov)>

**Sent:** Tuesday, August 23, 2022 2:05 PM

**To:** David Compton <[dcompton@dudek.com](mailto:dcompton@dudek.com)>

**Subject:** RE: Montecito Fire Protection District Cal-VTP Project

And mostly my concern over if sheep, goats, or cattle were proposed was that I wanted to make sure that whatever livestock is being used will be managed appropriately in order to meet project objectives and reduce potential for environmental impacts. See my grazing management comment below!

---

**From:** Kelly, Audrey@Wildlife

**Sent:** Tuesday, August 23, 2022 2:00 PM

**To:** David Compton <[dcompton@dudek.com](mailto:dcompton@dudek.com)>

**Subject:** RE: Montecito Fire Protection District Cal-VTP Project

Hi David,

I am sending you the recommendations I have together right now, hopefully in advance of your discussion this afternoon. I started going through the proposed SPR measures below and I see slight discrepancies between the CDFW recommendations and the CalVTP so I am going to continue to read through it and might follow up with a few edits or comments. Please let me know if you have any questions about this below.

**Proposed steelhead BMPs:**

Activities that require alteration of streams, including vegetation thinning or removal within the bed, bank, or channel of a stream should submit a notification to CDFW pursuant to Fish and Game Code, section 1600 et seq. Based on this notification and other information, CDFW determines whether a Lake and Streambed Alteration Agreement (LSAA) with the applicant is required prior to conducting the proposed activities. The [Lake and Streambed Alteration Program](#) has information on the submittal process. (Please note, the SPR HYD-4 definition of a Watercourse and Lake Protection Zone (WLPZ) isn't defined in Fish and Game Code. CDFW recommends submittal of a notification for project activities that require alteration of streams, including vegetation thinning or removal within the bed, bank, or channel of a stream or lake.)

*CDFW recommended BMP's for hand removal:*

- CDFW recommends avoidance of vegetation alteration in or adjacent to stream areas or tributaries to streams where steelhead may occur.
- If avoidance is not possible, CDFW recommends that all project activities in or adjacent to these streams occur when the outside the steelhead migration season between January to April (or beginning as early as October depending on the onset of fall/winter precipitation events). For ephemeral streams, CDFW recommends work to occur when the stream is dry and no storm events are predicted in the 48 hour forecast. (similar to GEO-1)
- Avoid use of heavy equipment in streambed areas. Use hand tools for vegetation alteration.
- Vegetation that is removed during Project activities should not be stockpiled in or near a stream channel, or in areas where it has the potential to enter a stream channel or drainage. Native vegetation stockpiling may occur in upland and open space areas, where it will not impact native vegetation, and where wildlife can utilize these materials. Non-native vegetation should be disposed of properly and not stockpiled.
- Precautions to minimize turbidity/siltation may require the placement of silt fencing, coir logs, coir rolls, straw bale dikes, or other siltation barriers so that silt and/or other deleterious materials are not allowed to pass to downstream reaches. Materials composing the silt barrier shall not pose an entanglement risk to fish or wildlife.
- No vegetation trimming in excess of what is necessary to allow the level of access needed to complete the Project activities and meet the stated objectives of the Project. Native vegetation should not be trimmed or removed for purposes of aesthetics or recreational access.

*CDFW recommendations for prescribed grazing:*

- CDFW recommends avoidance of prescribed grazing in streambed areas through placement of wildlife temporary friendly fencing to exclude livestock from streams. (consistent with HYD-3)
- CDFW recommends preparation of a grazing management plan to manage grazing intensity, frequency, and season of grazing to reduce the potential for adverse impacts (direct or indirect) such as excess sediment runoff or increased nitrogen inputs. The grazing management plan should include site specific measures to minimize concentrated livestock areas, trailing, and trampling to reduce soil compaction, excess runoff and erosion.

Thanks,  
Audrey

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# **Attachment E**

## Soils Report







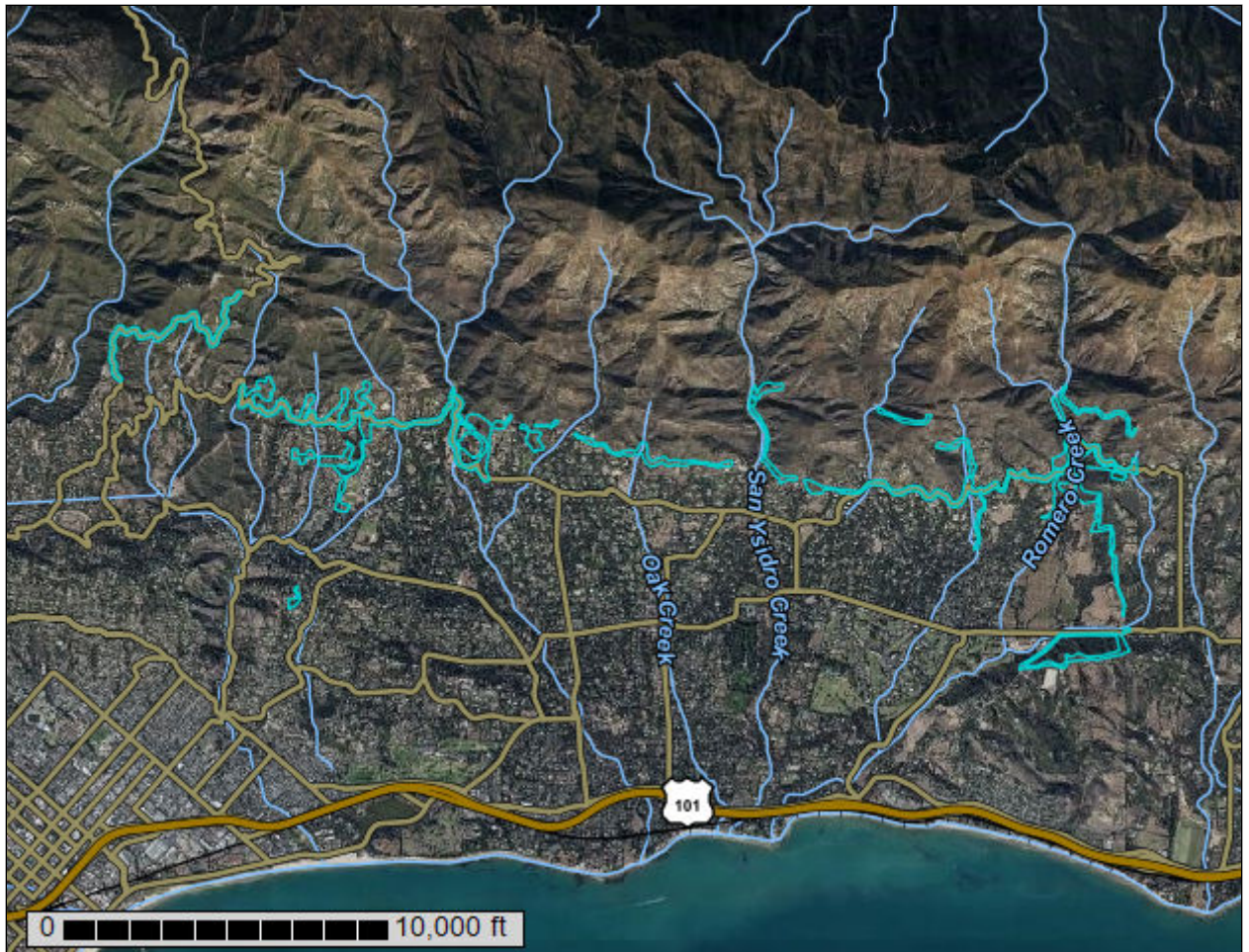
United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for Santa Barbara County, California, South Coastal Part



# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

## Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

## Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.



# Soil Map

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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map (Mixed treatment)



Map Scale: 1:52,900 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84



### MAP LEGEND

**Area of Interest (AOI)**

 Area of Interest (AOI)




















**Soils**

 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

**Special Point Features**






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Santa Barbara County, California, South Coastal Part  
 Survey Area Data: Version 14, Sep 9, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 10, 2020—Nov 16, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend (Mixed treatment)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BaC	Ballard fine sandy loam, 2 to 9 percent slopes	0.7	0.2%
BbC	Ballard stony fine sandy loam, very stony subsurface, 2 to 9 percent slopes	4.2	1.3%
ChC	Cortina stony loamy sand, 2 to 9 percent slopes	3.5	1.1%
LcG	Lodo-Sespe complex , 50 to 75 percent slopes	4.9	1.5%
MaG	Maymen stony fine sandy loam, 30 to 75 percent slopes	90.0	28.5%
MbH	Maymen-Rock outcrop complex , 50 to 75 percent slopes	102.9	32.6%
MdD	Milpitas stony fine sandy loam, 9 to 15 percent slopes	17.2	5.4%
MdE	Milpitas stony fine sandy loam, 15 to 30 percent slopes	0.7	0.2%
MeD2	Milpitas-Positas fine sandy loam, 9 to 15 percent slopes, eroded	6.5	2.1%
MeE2	Milpitas-Positas fine sandy loams, 15 to 30 percent slopes, eroded	0.3	0.1%
OAG	Orthents, 50 to 75 percent slopes	7.7	2.4%
RA	Riverwash	2.4	0.8%
Rb	Rock outcrop-Maymen complex, 75 to 100 percent slopes	22.0	7.0%
TbE2	Todos clay loam, 15 to 30 percent slopes, eroded	16.4	5.2%
TdF2	Todos-Lodo complex, 30 to 50 percent slopes, eroded	34.3	10.9%
ZaF2	Zaca clay, 30 to 50 percent slopes, eroded	2.3	0.7%
<b>Totals for Area of Interest</b>		<b>316.1</b>	<b>100.0%</b>

## Map Unit Descriptions (Mixed treatment)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

## Custom Soil Resource Report

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps.

## Custom Soil Resource Report

The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Santa Barbara County, California, South Coastal Part

### BaC—Ballard fine sandy loam, 2 to 9 percent slopes

#### Map Unit Setting

*National map unit symbol:* hc44  
*Elevation:* 20 to 570 feet  
*Mean annual precipitation:* 20 to 24 inches  
*Mean annual air temperature:* 60 to 63 degrees F  
*Frost-free period:* 355 to 365 days  
*Farmland classification:* Prime farmland if irrigated

#### Map Unit Composition

*Ballard and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Ballard

##### Setting

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Alluvium derived from sedimentary rock

##### Typical profile

*H1 - 0 to 31 inches:* fine sandy loam  
*H2 - 31 to 42 inches:* stony clay loam  
*H3 - 42 to 60 inches:* very stony clay loam

##### Properties and qualities

*Slope:* 2 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Moderate (about 7.3 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 2e  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* B  
*Ecological site:* R019XG911CA - Loamy Fan  
*Hydric soil rating:* No

#### Minor Components

##### Elder

*Percent of map unit:* 4 percent  
*Landform:* Alluvial fans

Custom Soil Resource Report

*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Botella**

*Percent of map unit:* 4 percent  
*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

**Ballard**

*Percent of map unit:* 4 percent  
*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Goleta**

*Percent of map unit:* 3 percent  
*Landform:* Flood plains, alluvial fans  
*Landform position (two-dimensional):* Toeslope, footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear, convex  
*Hydric soil rating:* No

**BbC—Ballard stony fine sandy loam, very stony subsurface, 2 to 9 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hc45  
*Elevation:* 40 to 740 feet  
*Mean annual precipitation:* 20 to 24 inches  
*Mean annual air temperature:* 60 to 63 degrees F  
*Frost-free period:* 355 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Ballard, very stony subsurface, and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*



## Description of Ballard, Very Stony Subsurface

### Setting

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Alluvium derived from sedimentary rock

### Typical profile

*H1 - 0 to 24 inches:* stony fine sandy loam  
*H2 - 24 to 35 inches:* very stony loam  
*H3 - 35 to 60 inches:* very stony loamy sand

### Properties and qualities

*Slope:* 2 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* B  
*Ecological site:* R019XG911CA - Loamy Fan  
*Hydric soil rating:* No

## Minor Components

### Milpitas, st-fsl

*Percent of map unit:* 8 percent  
*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

### Unnamed

*Percent of map unit:* 7 percent  
*Hydric soil rating:* No

## **ChC—Cortina stony loamy sand, 2 to 9 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hc4r  
*Elevation:* 40 to 540 feet  
*Mean annual precipitation:* 21 to 24 inches  
*Mean annual air temperature:* 60 to 63 degrees F  
*Frost-free period:* 360 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Cortina and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Cortina**

#### **Setting**

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Alluvium

#### **Typical profile**

*H1 - 0 to 9 inches:* stony loamy sand  
*H2 - 9 to 44 inches:* very stony sandy loam  
*H3 - 44 to 60 inches:* very gravelly loamy sand

#### **Properties and qualities**

*Slope:* 2 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat excessively drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* FrequentNone  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Very low (about 2.5 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 4w  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A  
*Ecological site:* R019XG912CA - Sandy Fan  
*Hydric soil rating:* No

**Minor Components**

**Riverwash**

*Percent of map unit:* 4 percent  
*Landform:* Channels  
*Hydric soil rating:* Yes

**Milpitas, st-fsl**

*Percent of map unit:* 4 percent  
*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

**Ballard**

*Percent of map unit:* 4 percent  
*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Unnamed, soils 9-15% slopes**

*Percent of map unit:* 3 percent  
*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**LcG—Lodo-Sespe complex , 50 to 75 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hc5l  
*Elevation:* 230 to 1,680 feet  
*Mean annual precipitation:* 22 to 27 inches  
*Mean annual air temperature:* 59 to 63 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Lodo and similar soils:* 60 percent  
*Sespe and similar soils:* 30 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Lodo

### Setting

*Landform:* Low hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone and shale

### Typical profile

*H1 - 0 to 11 inches:* gravelly clay loam  
*H2 - 11 to 15 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 50 to 75 percent  
*Depth to restrictive feature:* 6 to 20 inches to paralithic bedrock  
*Drainage class:* Somewhat excessively drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Very low (about 1.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* 7e  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Other vegetative classification:* SHALLOW LOAMY (020XD032CA\_2)  
*Hydric soil rating:* No

## Description of Sespe

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone and shale

### Typical profile

*H1 - 0 to 11 inches:* clay loam  
*H2 - 11 to 38 inches:* clay  
*H3 - 38 to 42 inches:* weathered bedrock

### Properties and qualities

*Slope:* 50 to 75 percent  
*Depth to restrictive feature:* 11 inches to abrupt textural change; 24 to 40 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)

## Custom Soil Resource Report

*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 5 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Very low (about 2.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* 7e  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Ecological site:* R020XD001CA - CLAYEY  
*Hydric soil rating:* No

### Minor Components

#### Rock outcrop

*Percent of map unit:* 3 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Shoulder  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Maymen

*Percent of map unit:* 3 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Ayar

*Percent of map unit:* 2 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Gaviota

*Percent of map unit:* 2 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

## **MaG—Maymen stony fine sandy loam, 30 to 75 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hc5w  
*Elevation:* 460 to 3,720 feet  
*Mean annual precipitation:* 24 to 32 inches  
*Mean annual air temperature:* 59 to 64 degrees F  
*Frost-free period:* 300 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Maymen and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Maymen**

#### **Setting**

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from shale, conglomerate and/or sandstone

#### **Typical profile**

*H1 - 0 to 4 inches:* stony fine sandy loam  
*H2 - 4 to 14 inches:* loam  
*H3 - 14 to 18 inches:* unweathered bedrock

#### **Properties and qualities**

*Slope:* 30 to 75 percent  
*Depth to restrictive feature:* 10 to 18 inches to lithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.20 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Very low (about 1.8 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 7e  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Other vegetative classification:* SHALLOW LOAMY (020XD032CA\_2)  
*Hydric soil rating:* No

**Minor Components**

**Lodo**

*Percent of map unit:* 4 percent  
*Landform:* Low hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Sespe**

*Percent of map unit:* 4 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Rock outcrop**

*Percent of map unit:* 4 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Unnamed**

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

**MbH—Maymen-Rock outcrop complex , 50 to 75 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hc73  
*Elevation:* 390 to 3,710 feet  
*Mean annual precipitation:* 23 to 33 inches  
*Mean annual air temperature:* 59 to 64 degrees F  
*Frost-free period:* 290 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Maymen and similar soils:* 50 percent  
*Rock outcrop:* 30 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Maymen

### Setting

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Concave

*Across-slope shape:* Convex

*Parent material:* Residuum weathered from shale, conglomerate and/or sandstone

### Typical profile

*H1 - 0 to 4 inches:* stony fine sandy loam

*H2 - 4 to 14 inches:* loam

*H3 - 14 to 18 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 50 to 75 percent

*Depth to restrictive feature:* 10 to 18 inches to lithic bedrock

*Drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.20 to 1.98 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Very low (about 1.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* 7e

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* D

*Hydric soil rating:* No

## Description of Rock Outcrop

### Setting

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Concave

*Across-slope shape:* Convex

*Parent material:* Sedimentary rock

### Typical profile

*H1 - 0 to 60 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 50 to 99 percent

*Depth to restrictive feature:* 0 inches to lithic bedrock

*Runoff class:* Very high

### Interpretive groups

*Land capability classification (irrigated):* 8

*Land capability classification (nonirrigated):* 8

*Hydric soil rating:* No



**Minor Components**

**Gaviota**

*Percent of map unit:* 8 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Lodo**

*Percent of map unit:* 8 percent  
*Landform:* Low hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Unnamed**

*Percent of map unit:* 4 percent  
*Hydric soil rating:* No

**MdD—Milpitas stony fine sandy loam, 9 to 15 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hc60  
*Elevation:* 50 to 1,070 feet  
*Mean annual precipitation:* 21 to 24 inches  
*Mean annual air temperature:* 60 to 63 degrees F  
*Frost-free period:* 360 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Milpitas and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Milpitas**

**Setting**

*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed alluvium

## Custom Soil Resource Report

### Typical profile

*H1 - 0 to 25 inches:* stony fine sandy loam  
*H2 - 25 to 54 inches:* stony clay  
*H3 - 54 to 68 inches:* very gravelly sandy loam

### Properties and qualities

*Slope:* 9 to 15 percent  
*Depth to restrictive feature:* 20 to 28 inches to abrupt textural change  
*Drainage class:* Moderately well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 3.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* D  
*Ecological site:* R015XD115CA - CLAYPAN  
*Hydric soil rating:* No

### Minor Components

#### Unnamed, soils similar to positas

*Percent of map unit:* 8 percent  
*Hydric soil rating:* No

#### Milpitas, fine sandy loam

*Percent of map unit:* 4 percent  
*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear

#### Positas, fine sandy loam

*Percent of map unit:* 3 percent  
*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

## MdE—Milpitas stony fine sandy loam, 15 to 30 percent slopes

### Map Unit Setting

*National map unit symbol:* hc61

## Custom Soil Resource Report

*Elevation:* 180 to 850 feet  
*Mean annual precipitation:* 21 to 25 inches  
*Mean annual air temperature:* 61 to 62 degrees F  
*Frost-free period:* 360 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Milpitas and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Milpitas

#### Setting

*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed alluvium

#### Typical profile

*H1 - 0 to 25 inches:* stony fine sandy loam  
*H2 - 25 to 54 inches:* stony clay  
*H3 - 54 to 68 inches:* very gravelly sandy loam

#### Properties and qualities

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 20 to 28 inches to abrupt textural change  
*Drainage class:* Moderately well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 3.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* D  
*Ecological site:* R015XD115CA - CLAYPAN  
*Hydric soil rating:* No

### Minor Components

#### Unnamed

*Percent of map unit:* 10 percent  
*Hydric soil rating:* No

#### Milpitas, fine sandy loam

*Percent of map unit:* 3 percent  
*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear

## Custom Soil Resource Report

*Across-slope shape:* Linear

### **Positas, fine sandy loam**

*Percent of map unit:* 2 percent

*Landform:* Terraces

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

## **MeD2—Milpitas-Positas fine sandy loam, 9 to 15 percent slopes, eroded**

### **Map Unit Setting**

*National map unit symbol:* hc64

*Elevation:* 30 to 960 feet

*Mean annual precipitation:* 20 to 23 inches

*Mean annual air temperature:* 60 to 62 degrees F

*Frost-free period:* 360 to 365 days

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Milpitas and similar soils:* 45 percent

*Positas and similar soils:* 40 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Milpitas**

#### **Setting**

*Landform:* Terraces

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Mixed alluvium

#### **Typical profile**

*H1 - 0 to 15 inches:* fine sandy loam

*H2 - 15 to 54 inches:* clay

*H3 - 54 to 68 inches:* very gravelly sandy loam

#### **Properties and qualities**

*Slope:* 9 to 15 percent

*Depth to restrictive feature:* 12 to 28 inches to abrupt textural change

*Drainage class:* Moderately well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

## Custom Soil Resource Report

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water supply, 0 to 60 inches:* Very low (about 2.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* D

*Ecological site:* R015XD115CA - CLAYPAN

*Hydric soil rating:* No

### Description of Positas

#### Setting

*Landform:* Terraces

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Mixed alluvium

#### Typical profile

*H1 - 0 to 19 inches:* fine sandy loam

*H2 - 19 to 41 inches:* clay

*H3 - 41 to 68 inches:* clay loam

#### Properties and qualities

*Slope:* 9 to 15 percent

*Depth to restrictive feature:* 14 to 26 inches to abrupt textural change

*Drainage class:* Moderately well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water supply, 0 to 60 inches:* Very low (about 2.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* D

*Ecological site:* R015XD115CA - CLAYPAN

*Hydric soil rating:* No

### Minor Components

#### Unnamed

*Percent of map unit:* 8 percent

*Hydric soil rating:* No

#### Milpitas, st-fsl

*Percent of map unit:* 7 percent

*Landform:* Terraces

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

## Custom Soil Resource Report

*Across-slope shape:* Linear  
*Hydric soil rating:* No

### **MeE2—Milpitas-Positas fine sandy loams, 15 to 30 percent slopes, eroded**

#### **Map Unit Setting**

*National map unit symbol:* hc65  
*Elevation:* 30 to 1,130 feet  
*Mean annual precipitation:* 20 to 24 inches  
*Mean annual air temperature:* 59 to 62 degrees F  
*Frost-free period:* 360 to 365 days  
*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

*Milpitas and similar soils:* 45 percent  
*Positas and similar soils:* 40 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### **Description of Milpitas**

##### **Setting**

*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed alluvium

##### **Typical profile**

*H1 - 0 to 15 inches:* fine sandy loam  
*H2 - 15 to 54 inches:* clay  
*H3 - 54 to 68 inches:* very gravelly sandy loam

##### **Properties and qualities**

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 12 to 28 inches to abrupt textural change  
*Drainage class:* Moderately well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Very low (about 2.1 inches)

**Interpretive groups**

*Land capability classification (irrigated): 4e*  
*Land capability classification (nonirrigated): 4e*  
*Hydrologic Soil Group: D*  
*Ecological site: R015XD115CA - CLAYPAN*  
*Hydric soil rating: No*

**Description of Positas**

**Setting**

*Landform: Terraces*  
*Landform position (two-dimensional): Footslope*  
*Landform position (three-dimensional): Tread*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Parent material: Mixed alluvium*

**Typical profile**

*H1 - 0 to 19 inches: fine sandy loam*  
*H2 - 19 to 41 inches: clay*  
*H3 - 41 to 68 inches: clay loam*

**Properties and qualities**

*Slope: 15 to 30 percent*  
*Depth to restrictive feature: 14 to 26 inches to abrupt textural change*  
*Drainage class: Moderately well drained*  
*Runoff class: Very high*  
*Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)*  
*Depth to water table: More than 80 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*  
*Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*  
*Available water supply, 0 to 60 inches: Very low (about 2.3 inches)*

**Interpretive groups**

*Land capability classification (irrigated): 4e*  
*Land capability classification (nonirrigated): 4e*  
*Hydrologic Soil Group: D*  
*Ecological site: R015XD115CA - CLAYPAN*  
*Hydric soil rating: No*

**Minor Components**

**Unnamed**

*Percent of map unit: 3 percent*  
*Hydric soil rating: No*

**Diablo**

*Percent of map unit: 3 percent*  
*Landform: Hillslopes*  
*Landform position (two-dimensional): Backslope*  
*Landform position (three-dimensional): Side slope*  
*Down-slope shape: Convex*  
*Across-slope shape: Convex*  
*Hydric soil rating: No*

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### **Ayar**

*Percent of map unit:* 3 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### **Zaca**

*Percent of map unit:* 3 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### **Milpitas, st-fsl**

*Percent of map unit:* 3 percent  
*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

## **OAG—Orthents, 50 to 75 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hc6b  
*Elevation:* 30 to 1,100 feet  
*Mean annual precipitation:* 20 to 24 inches  
*Mean annual air temperature:* 60 to 63 degrees F  
*Frost-free period:* 360 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Orthents and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Orthents**

#### **Setting**

*Landform:* Escarpments  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Riser  
*Down-slope shape:* Concave



## Custom Soil Resource Report

*Across-slope shape:* Convex  
*Parent material:* Mixed alluvium

### Typical profile

*H1 - 0 to 60 inches:* variable

### Properties and qualities

*Slope:* 50 to 75 percent  
*Depth to restrictive feature:* More than 80 inches  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None

### Interpretive groups

*Land capability classification (irrigated):* 7e  
*Land capability classification (nonirrigated):* 7e  
*Ecological site:* R019XG909CA - Terrace  
*Hydric soil rating:* No

### Minor Components

#### Unnamed

*Percent of map unit:* 10 percent  
*Hydric soil rating:* No

## RA—Riverwash

### Map Unit Setting

*National map unit symbol:* hc6d  
*Elevation:* 70 to 1,560 feet  
*Mean annual precipitation:* 22 to 28 inches  
*Mean annual air temperature:* 61 to 64 degrees F  
*Frost-free period:* 360 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Riverwash:* 100 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Riverwash

#### Setting

*Landform:* Channels  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Sandy, gravelly, stony and bouldery alluvium

### Typical profile

*H1 - 0 to 6 inches:* variable

**Properties and qualities**

*Slope:* 0 to 5 percent  
*Frequency of flooding:* FrequentNone

**Interpretive groups**

*Land capability classification (irrigated):* 8w  
*Land capability classification (nonirrigated):* 8w  
*Ecological site:* R019XG905CA - Riparian  
*Hydric soil rating:* Yes

**Rb—Rock outcrop-Maymen complex, 75 to 100 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hc6f  
*Elevation:* 490 to 4,030 feet  
*Mean annual precipitation:* 24 to 34 inches  
*Mean annual air temperature:* 57 to 63 degrees F  
*Frost-free period:* 265 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Rock outcrop:* 70 percent  
*Maymen and similar soils:* 25 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Rock Outcrop**

**Setting**

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Sedimentary rock

**Typical profile**

*H1 - 0 to 60 inches:* unweathered bedrock

**Properties and qualities**

*Slope:* 75 to 99 percent  
*Depth to restrictive feature:* 0 inches to lithic bedrock  
*Runoff class:* Very high

**Interpretive groups**

*Land capability classification (irrigated):* 8  
*Land capability classification (nonirrigated):* 8  
*Hydric soil rating:* No

**Description of Maymen**

**Setting**

*Landform:* Mountains

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*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from shale, conglomerate and/or sandstone

### Typical profile

*H1 - 0 to 4 inches:* stony fine sandy loam  
*H2 - 4 to 14 inches:* loam  
*H3 - 14 to 18 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 75 to 99 percent  
*Depth to restrictive feature:* 0 to 15 inches to lithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.20 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Very low (about 1.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* 8e  
*Land capability classification (nonirrigated):* 8e  
*Hydrologic Soil Group:* D  
*Hydric soil rating:* No

### Minor Components

#### Gaviota

*Percent of map unit:* 3 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Lodo

*Percent of map unit:* 2 percent  
*Landform:* Low hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

## **TbE2—Todos clay loam, 15 to 30 percent slopes, eroded**

### **Map Unit Setting**

*National map unit symbol:* hc6q  
*Elevation:* 150 to 960 feet  
*Mean annual precipitation:* 22 to 25 inches  
*Mean annual air temperature:* 59 to 62 degrees F  
*Frost-free period:* 355 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Todos and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Todos**

#### **Setting**

*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone and shale

#### **Typical profile**

*H1 - 0 to 18 inches:* clay loam  
*H2 - 18 to 44 inches:* clay  
*H3 - 44 to 48 inches:* weathered bedrock

#### **Properties and qualities**

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 40 to 60 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Moderate (about 7.0 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* C  
*Ecological site:* R015XD001CA - CLAYEY  
*Hydric soil rating:* No

**Minor Components**

**Lodo**

*Percent of map unit:* 4 percent  
*Landform:* Low hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Sespe**

*Percent of map unit:* 4 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Ayar**

*Percent of map unit:* 4 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Unnamed, severely eroded**

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

**TdF2—Todos-Lodo complex, 30 to 50 percent slopes, eroded**

**Map Unit Setting**

*National map unit symbol:* hc6r  
*Elevation:* 150 to 1,490 feet  
*Mean annual precipitation:* 22 to 25 inches  
*Mean annual air temperature:* 59 to 62 degrees F  
*Frost-free period:* 355 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Todos and similar soils:* 60 percent  
*Lodo and similar soils:* 35 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Todos

### Setting

*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone and shale

### Typical profile

*H1 - 0 to 18 inches:* clay loam  
*H2 - 18 to 44 inches:* clay  
*H3 - 44 to 48 inches:* weathered bedrock

### Properties and qualities

*Slope:* 30 to 50 percent  
*Depth to restrictive feature:* 40 to 50 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Moderate (about 7.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* 6e  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* C  
*Ecological site:* R015XD001CA - CLAYEY  
*Hydric soil rating:* No

## Description of Lodo

### Setting

*Landform:* Low hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone and shale

### Typical profile

*H1 - 0 to 11 inches:* gravelly clay loam  
*H2 - 11 to 15 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 30 to 50 percent  
*Depth to restrictive feature:* 6 to 20 inches to paralithic bedrock  
*Drainage class:* Somewhat excessively drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches

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*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Very low (about 1.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* 6e  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* D  
*Ecological site:* R015XD093CA - SHALLOW LOAMY  
*Hydric soil rating:* No

### Minor Components

#### Sespe

*Percent of map unit:* 1 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Rock outcrop

*Percent of map unit:* 1 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Maymen

*Percent of map unit:* 1 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Gaviota

*Percent of map unit:* 1 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Ayar

*Percent of map unit:* 1 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex

*Hydric soil rating:* No

## **ZaF2—Zaca clay, 30 to 50 percent slopes, eroded**

### **Map Unit Setting**

*National map unit symbol:* hc6x  
*Elevation:* 70 to 1,260 feet  
*Mean annual precipitation:* 19 to 23 inches  
*Mean annual air temperature:* 58 to 62 degrees F  
*Frost-free period:* 360 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Zaca and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Zaca**

#### **Setting**

*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from mudstone and calcareous shale

#### **Typical profile**

*H1 - 0 to 48 inches:* clay  
*H2 - 48 to 52 inches:* weathered bedrock

#### **Properties and qualities**

*Slope:* 30 to 50 percent  
*Depth to restrictive feature:* 40 to 50 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Moderate (about 8.2 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 6e  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* C  
*Ecological site:* R015XD001CA - CLAYEY



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*Hydric soil rating:* No

**Minor Components**

**Santa lucia**

*Percent of map unit:* 4 percent

*Landform:* Hills

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

**Diablo**

*Percent of map unit:* 4 percent

*Landform:* Hills

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

**Ayar**

*Percent of map unit:* 4 percent

*Landform:* Hills

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Hydric soil rating:* No

**Unnamed**

*Percent of map unit:* 3 percent

*Hydric soil rating:* No

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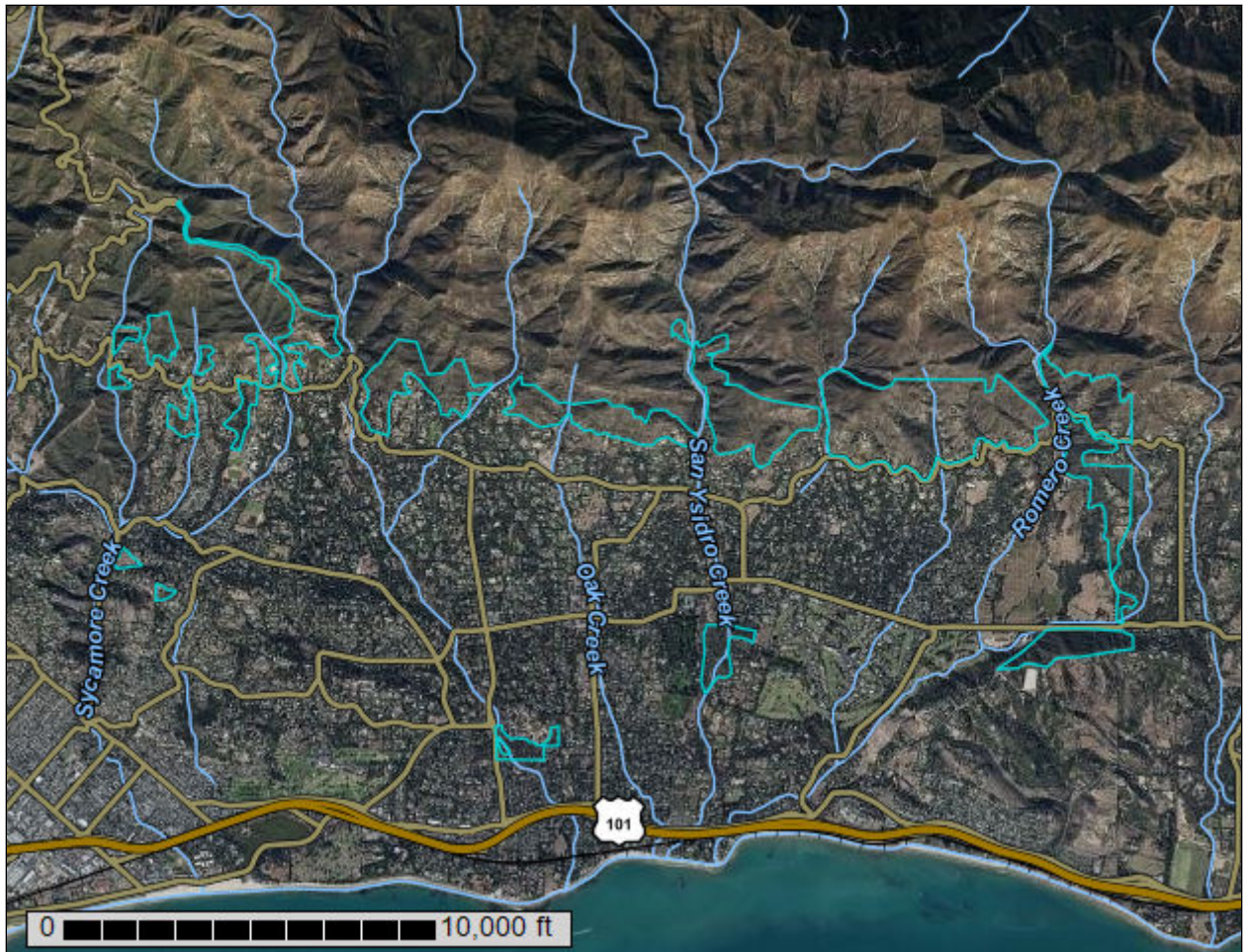
United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for Santa Barbara County, California, South Coastal Part



# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil



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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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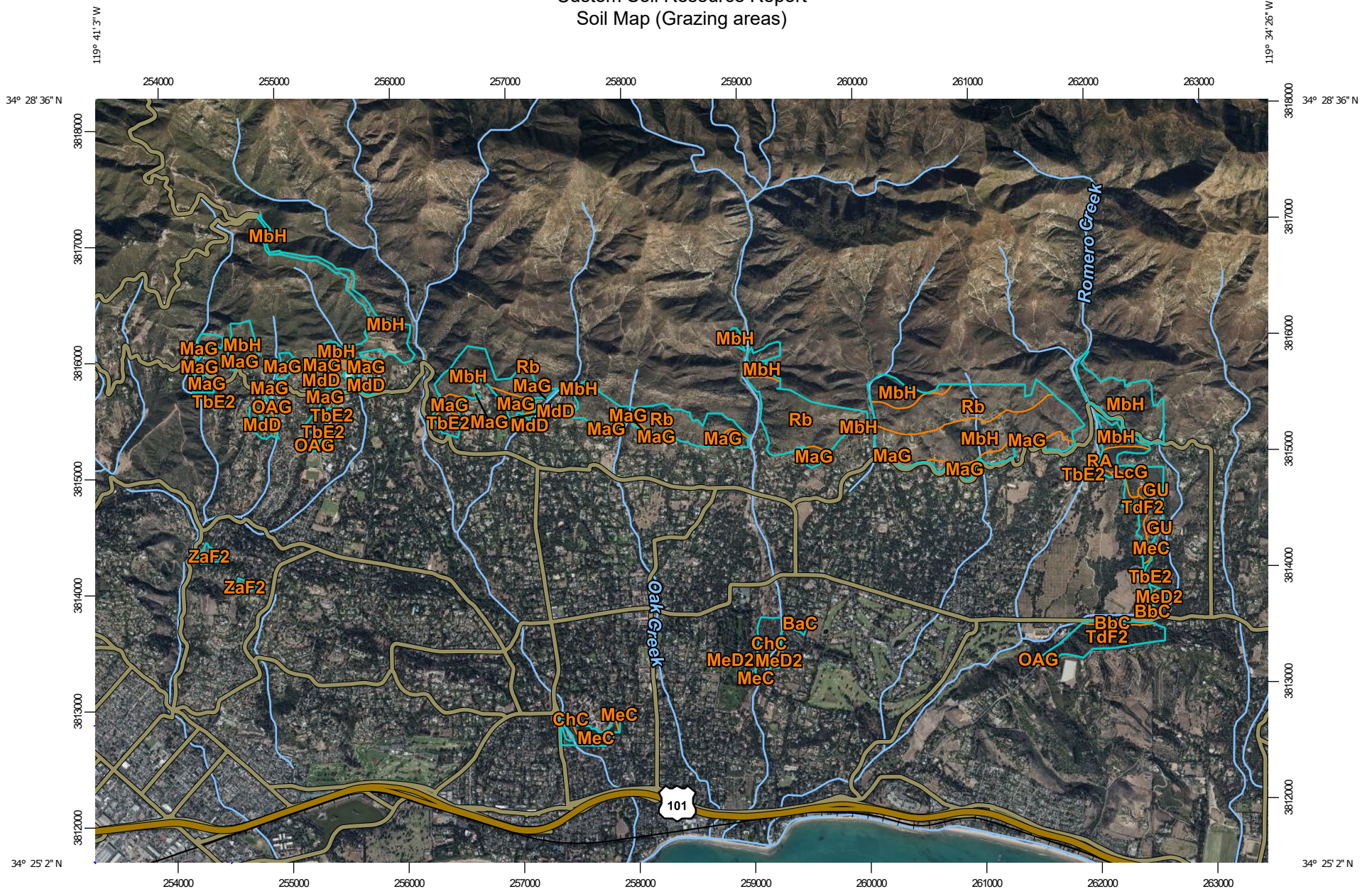
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

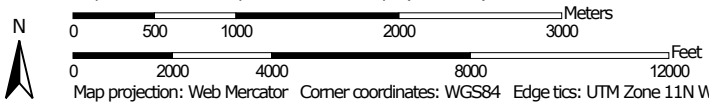
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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map (Grazing areas)



Map Scale: 1:46,400 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

### MAP LEGEND

**Area of Interest (AOI)**

 Area of Interest (AOI)




















**Soils**

 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

**Special Point Features**






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Santa Barbara County, California, South Coastal Part  
 Survey Area Data: Version 14, Sep 9, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 10, 2020—Nov 16, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend (Grazing areas)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BaC	Ballard fine sandy loam, 2 to 9 percent slopes	0.6	0.1%
BbC	Ballard stony fine sandy loam, very stony subsurface, 2 to 9 percent slopes	4.6	0.5%
ChC	Cortina stony loamy sand, 2 to 9 percent slopes	30.0	3.2%
GcC	Goleta fine sandy loam, 2 to 9 percent slopes	1.1	0.1%
GU	Gullied land	2.5	0.3%
LcG	Lodo-Sespe complex , 50 to 75 percent slopes	31.3	3.3%
MaG	Maymen stony fine sandy loam, 30 to 75 percent slopes	70.0	7.5%
MbH	Maymen-Rock outcrop complex , 50 to 75 percent slopes	379.3	40.4%
MdD	Milpitas stony fine sandy loam, 9 to 15 percent slopes	21.9	2.3%
MdE	Milpitas stony fine sandy loam, 15 to 30 percent slopes	5.9	0.6%
MeC	Milpitas-Positas fine sandy loams, 2 to 9 percent slopes	15.9	1.7%
MeD2	Milpitas-Positas fine sandy loam, 9 to 15 percent slopes, eroded	6.3	0.7%
OAG	Orthents, 50 to 75 percent slopes	3.7	0.4%
RA	Riverwash	0.0	0.0%
Rb	Rock outcrop-Maymen complex, 75 to 100 percent slopes	264.0	28.2%
TbD2	Todos clay loam, 9 to 15 percent slopes, eroded	13.1	1.4%
TbE2	Todos clay loam, 15 to 30 percent slopes, eroded	12.9	1.4%
TdF2	Todos-Lodo complex, 30 to 50 percent slopes, eroded	65.9	7.0%
ZaF2	Zaca clay, 30 to 50 percent slopes, eroded	8.5	0.9%
<b>Totals for Area of Interest</b>		<b>937.7</b>	<b>100.0%</b>

## Map Unit Descriptions (Grazing areas)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas

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shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.



## Santa Barbara County, California, South Coastal Part

### BaC—Ballard fine sandy loam, 2 to 9 percent slopes

#### Map Unit Setting

*National map unit symbol:* hc44  
*Elevation:* 20 to 570 feet  
*Mean annual precipitation:* 20 to 24 inches  
*Mean annual air temperature:* 60 to 63 degrees F  
*Frost-free period:* 355 to 365 days  
*Farmland classification:* Prime farmland if irrigated

#### Map Unit Composition

*Ballard and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Ballard

##### Setting

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Alluvium derived from sedimentary rock

##### Typical profile

*H1 - 0 to 31 inches:* fine sandy loam  
*H2 - 31 to 42 inches:* stony clay loam  
*H3 - 42 to 60 inches:* very stony clay loam

##### Properties and qualities

*Slope:* 2 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Moderate (about 7.3 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 2e  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* B  
*Ecological site:* R019XG911CA - Loamy Fan  
*Hydric soil rating:* No

#### Minor Components

##### Elder

*Percent of map unit:* 4 percent  
*Landform:* Alluvial fans

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*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### **Botella**

*Percent of map unit:* 4 percent  
*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

### **Ballard**

*Percent of map unit:* 4 percent  
*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### **Goleta**

*Percent of map unit:* 3 percent  
*Landform:* Flood plains, alluvial fans  
*Landform position (two-dimensional):* Toeslope, footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear, convex  
*Hydric soil rating:* No

## **BbC—Ballard stony fine sandy loam, very stony subsurface, 2 to 9 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hc45  
*Elevation:* 40 to 740 feet  
*Mean annual precipitation:* 20 to 24 inches  
*Mean annual air temperature:* 60 to 63 degrees F  
*Frost-free period:* 355 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Ballard, very stony subsurface, and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Ballard, Very Stony Subsurface

### Setting

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Alluvium derived from sedimentary rock

### Typical profile

*H1 - 0 to 24 inches:* stony fine sandy loam  
*H2 - 24 to 35 inches:* very stony loam  
*H3 - 35 to 60 inches:* very stony loamy sand

### Properties and qualities

*Slope:* 2 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 4.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* B  
*Ecological site:* R019XG911CA - Loamy Fan  
*Hydric soil rating:* No

## Minor Components

### Milpitas, st-fsl

*Percent of map unit:* 8 percent  
*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

### Unnamed

*Percent of map unit:* 7 percent  
*Hydric soil rating:* No

## **ChC—Cortina stony loamy sand, 2 to 9 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hc4r  
*Elevation:* 40 to 540 feet  
*Mean annual precipitation:* 21 to 24 inches  
*Mean annual air temperature:* 60 to 63 degrees F  
*Frost-free period:* 360 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Cortina and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Cortina**

#### **Setting**

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Alluvium

#### **Typical profile**

*H1 - 0 to 9 inches:* stony loamy sand  
*H2 - 9 to 44 inches:* very stony sandy loam  
*H3 - 44 to 60 inches:* very gravelly loamy sand

#### **Properties and qualities**

*Slope:* 2 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Somewhat excessively drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* FrequentNone  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Very low (about 2.5 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 4w  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A  
*Ecological site:* R019XG912CA - Sandy Fan  
*Hydric soil rating:* No

**Minor Components**

**Riverwash**

*Percent of map unit:* 4 percent  
*Landform:* Channels  
*Hydric soil rating:* Yes

**Milpitas, st-fsl**

*Percent of map unit:* 4 percent  
*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

**Ballard**

*Percent of map unit:* 4 percent  
*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Unnamed, soils 9-15% slopes**

*Percent of map unit:* 3 percent  
*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**GcC—Goleta fine sandy loam, 2 to 9 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hc5d  
*Elevation:* 20 to 740 feet  
*Mean annual precipitation:* 20 to 24 inches  
*Mean annual air temperature:* 58 to 62 degrees F  
*Frost-free period:* 360 to 365 days  
*Farmland classification:* Prime farmland if irrigated

**Map Unit Composition**

*Goleta and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Goleta

### Setting

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Parent material:* Alluvium derived from sedimentary rock

### Typical profile

*H1 - 0 to 29 inches:* fine sandy loam  
*H2 - 29 to 40 inches:* loam  
*H3 - 40 to 55 inches:* stratified loamy sand to clay loam  
*H4 - 55 to 72 inches:* fine sandy loam

### Properties and qualities

*Slope:* 2 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* Rare  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 5 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Moderate (about 8.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2e  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* B  
*Ecological site:* R019XG911CA - Loamy Fan  
*Hydric soil rating:* No

## Minor Components

### Elder

*Percent of map unit:* 8 percent  
*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### Metz

*Percent of map unit:* 7 percent  
*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

## **GU—Gullied land**

### **Map Unit Setting**

*National map unit symbol:* hc57  
*Elevation:* 20 to 870 feet  
*Mean annual precipitation:* 16 to 25 inches  
*Mean annual air temperature:* 59 to 61 degrees F  
*Frost-free period:* 345 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Gullied land:* 100 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Gullied Land**

#### **Setting**

*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Riser  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Alluvium

#### **Interpretive groups**

*Land capability classification (irrigated):* 8e  
*Land capability classification (nonirrigated):* 8e  
*Ecological site:* R019XG909CA - Terrace  
*Hydric soil rating:* No

## **LcG—Lodo-Sespe complex , 50 to 75 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hc5l  
*Elevation:* 230 to 1,680 feet  
*Mean annual precipitation:* 22 to 27 inches  
*Mean annual air temperature:* 59 to 63 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Lodo and similar soils:* 60 percent  
*Sespe and similar soils:* 30 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Lodo

### Setting

*Landform:* Low hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone and shale

### Typical profile

*H1 - 0 to 11 inches:* gravelly clay loam  
*H2 - 11 to 15 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 50 to 75 percent  
*Depth to restrictive feature:* 6 to 20 inches to paralithic bedrock  
*Drainage class:* Somewhat excessively drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Very low (about 1.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* 7e  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Other vegetative classification:* SHALLOW LOAMY (020XD032CA\_2)  
*Hydric soil rating:* No

## Description of Sespe

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone and shale

### Typical profile

*H1 - 0 to 11 inches:* clay loam  
*H2 - 11 to 38 inches:* clay  
*H3 - 38 to 42 inches:* weathered bedrock

### Properties and qualities

*Slope:* 50 to 75 percent  
*Depth to restrictive feature:* 11 inches to abrupt textural change; 24 to 40 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)



## Custom Soil Resource Report

*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 5 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Very low (about 2.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* 7e  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Ecological site:* R020XD001CA - CLAYEY  
*Hydric soil rating:* No

### Minor Components

#### Rock outcrop

*Percent of map unit:* 3 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Shoulder  
*Landform position (three-dimensional):* Mountaintop  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Maymen

*Percent of map unit:* 3 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Ayar

*Percent of map unit:* 2 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Gaviota

*Percent of map unit:* 2 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

## **MaG—Maymen stony fine sandy loam, 30 to 75 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hc5w  
*Elevation:* 460 to 3,720 feet  
*Mean annual precipitation:* 24 to 32 inches  
*Mean annual air temperature:* 59 to 64 degrees F  
*Frost-free period:* 300 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Maymen and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Maymen**

#### **Setting**

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from shale, conglomerate and/or sandstone

#### **Typical profile**

*H1 - 0 to 4 inches:* stony fine sandy loam  
*H2 - 4 to 14 inches:* loam  
*H3 - 14 to 18 inches:* unweathered bedrock

#### **Properties and qualities**

*Slope:* 30 to 75 percent  
*Depth to restrictive feature:* 10 to 18 inches to lithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.20 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Very low (about 1.8 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 7e  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Other vegetative classification:* SHALLOW LOAMY (020XD032CA\_2)  
*Hydric soil rating:* No

**Minor Components**

**Lodo**

*Percent of map unit: 4 percent*  
*Landform: Low hills*  
*Landform position (two-dimensional): Backslope*  
*Landform position (three-dimensional): Side slope*  
*Down-slope shape: Convex*  
*Across-slope shape: Convex*  
*Hydric soil rating: No*

**Sespe**

*Percent of map unit: 4 percent*  
*Landform: Mountains*  
*Landform position (two-dimensional): Backslope*  
*Landform position (three-dimensional): Mountainflank*  
*Down-slope shape: Concave*  
*Across-slope shape: Convex*  
*Hydric soil rating: No*

**Rock outcrop**

*Percent of map unit: 4 percent*  
*Landform: Mountains*  
*Landform position (two-dimensional): Backslope*  
*Landform position (three-dimensional): Mountainflank*  
*Down-slope shape: Convex*  
*Across-slope shape: Convex*  
*Hydric soil rating: No*

**Unnamed**

*Percent of map unit: 3 percent*  
*Hydric soil rating: No*

**MbH—Maymen-Rock outcrop complex , 50 to 75 percent slopes**

**Map Unit Setting**

*National map unit symbol: hc73*  
*Elevation: 390 to 3,710 feet*  
*Mean annual precipitation: 23 to 33 inches*  
*Mean annual air temperature: 59 to 64 degrees F*  
*Frost-free period: 290 to 365 days*  
*Farmland classification: Not prime farmland*

**Map Unit Composition**

*Maymen and similar soils: 50 percent*  
*Rock outcrop: 30 percent*  
*Minor components: 20 percent*  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Maymen

### Setting

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Concave

*Across-slope shape:* Convex

*Parent material:* Residuum weathered from shale, conglomerate and/or sandstone

### Typical profile

*H1 - 0 to 4 inches:* stony fine sandy loam

*H2 - 4 to 14 inches:* loam

*H3 - 14 to 18 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 50 to 75 percent

*Depth to restrictive feature:* 10 to 18 inches to lithic bedrock

*Drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.20 to 1.98 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Very low (about 1.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* 7e

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* D

*Hydric soil rating:* No

## Description of Rock Outcrop

### Setting

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Concave

*Across-slope shape:* Convex

*Parent material:* Sedimentary rock

### Typical profile

*H1 - 0 to 60 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 50 to 99 percent

*Depth to restrictive feature:* 0 inches to lithic bedrock

*Runoff class:* Very high

### Interpretive groups

*Land capability classification (irrigated):* 8

*Land capability classification (nonirrigated):* 8

*Hydric soil rating:* No

**Minor Components**

**Gaviota**

*Percent of map unit:* 8 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Lodo**

*Percent of map unit:* 8 percent  
*Landform:* Low hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Unnamed**

*Percent of map unit:* 4 percent  
*Hydric soil rating:* No

**MdD—Milpitas stony fine sandy loam, 9 to 15 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hc60  
*Elevation:* 50 to 1,070 feet  
*Mean annual precipitation:* 21 to 24 inches  
*Mean annual air temperature:* 60 to 63 degrees F  
*Frost-free period:* 360 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Milpitas and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Milpitas**

**Setting**

*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed alluvium

## Custom Soil Resource Report

### Typical profile

*H1 - 0 to 25 inches:* stony fine sandy loam  
*H2 - 25 to 54 inches:* stony clay  
*H3 - 54 to 68 inches:* very gravelly sandy loam

### Properties and qualities

*Slope:* 9 to 15 percent  
*Depth to restrictive feature:* 20 to 28 inches to abrupt textural change  
*Drainage class:* Moderately well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 3.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* D  
*Ecological site:* R015XD115CA - CLAYPAN  
*Hydric soil rating:* No

### Minor Components

#### Unnamed, soils similar to positas

*Percent of map unit:* 8 percent  
*Hydric soil rating:* No

#### Milpitas, fine sandy loam

*Percent of map unit:* 4 percent  
*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear

#### Positas, fine sandy loam

*Percent of map unit:* 3 percent  
*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

## MdE—Milpitas stony fine sandy loam, 15 to 30 percent slopes

### Map Unit Setting

*National map unit symbol:* hc61

## Custom Soil Resource Report

*Elevation:* 180 to 850 feet  
*Mean annual precipitation:* 21 to 25 inches  
*Mean annual air temperature:* 61 to 62 degrees F  
*Frost-free period:* 360 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Milpitas and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Milpitas

#### Setting

*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed alluvium

#### Typical profile

*H1 - 0 to 25 inches:* stony fine sandy loam  
*H2 - 25 to 54 inches:* stony clay  
*H3 - 54 to 68 inches:* very gravelly sandy loam

#### Properties and qualities

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 20 to 28 inches to abrupt textural change  
*Drainage class:* Moderately well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 3.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* D  
*Ecological site:* R015XD115CA - CLAYPAN  
*Hydric soil rating:* No

### Minor Components

#### Unnamed

*Percent of map unit:* 10 percent  
*Hydric soil rating:* No

#### Milpitas, fine sandy loam

*Percent of map unit:* 3 percent  
*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear

## Custom Soil Resource Report

*Across-slope shape:* Linear

### **Positas, fine sandy loam**

*Percent of map unit:* 2 percent

*Landform:* Terraces

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

## **MeC—Milpitas-Positas fine sandy loams, 2 to 9 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hc63

*Elevation:* 20 to 520 feet

*Mean annual precipitation:* 20 to 23 inches

*Mean annual air temperature:* 59 to 62 degrees F

*Frost-free period:* 360 to 365 days

*Farmland classification:* Farmland of statewide importance

### **Map Unit Composition**

*Milpitas and similar soils:* 45 percent

*Positas and similar soils:* 35 percent

*Minor components:* 20 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Milpitas**

#### **Setting**

*Landform:* Terraces

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Mixed alluvium

#### **Typical profile**

*H1 - 0 to 25 inches:* fine sandy loam

*H2 - 25 to 54 inches:* gravelly clay

*H3 - 54 to 68 inches:* very gravelly sandy loam

#### **Properties and qualities**

*Slope:* 2 to 9 percent

*Depth to restrictive feature:* 20 to 28 inches to abrupt textural change

*Drainage class:* Moderately well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None



## Custom Soil Resource Report

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Low (about 3.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* D

*Ecological site:* R015XD115CA - CLAYPAN

*Hydric soil rating:* No

### Description of Positas

#### Setting

*Landform:* Terraces

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Mixed alluvium

#### Typical profile

*H1 - 0 to 19 inches:* fine sandy loam

*H2 - 19 to 41 inches:* clay

*H3 - 41 to 68 inches:* clay loam

#### Properties and qualities

*Slope:* 2 to 9 percent

*Depth to restrictive feature:* 14 to 26 inches to abrupt textural change

*Drainage class:* Moderately well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water supply, 0 to 60 inches:* Very low (about 2.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* D

*Ecological site:* R015XD115CA - CLAYPAN

*Hydric soil rating:* No

### Minor Components

#### Botella

*Percent of map unit:* 7 percent

*Landform:* Valleys

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

#### Ballard

*Percent of map unit:* 7 percent

## Custom Soil Resource Report

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### **Eroded soils**

*Percent of map unit:* 6 percent  
*Hydric soil rating:* No

## **MeD2—Milpitas-Positas fine sandy loam, 9 to 15 percent slopes, eroded**

### **Map Unit Setting**

*National map unit symbol:* hc64  
*Elevation:* 30 to 960 feet  
*Mean annual precipitation:* 20 to 23 inches  
*Mean annual air temperature:* 60 to 62 degrees F  
*Frost-free period:* 360 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Milpitas and similar soils:* 45 percent  
*Positas and similar soils:* 40 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Milpitas**

#### **Setting**

*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed alluvium

#### **Typical profile**

*H1 - 0 to 15 inches:* fine sandy loam  
*H2 - 15 to 54 inches:* clay  
*H3 - 54 to 68 inches:* very gravelly sandy loam

#### **Properties and qualities**

*Slope:* 9 to 15 percent  
*Depth to restrictive feature:* 12 to 28 inches to abrupt textural change  
*Drainage class:* Moderately well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches

## Custom Soil Resource Report

*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Very low (about 2.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* D  
*Ecological site:* R015XD115CA - CLAYPAN  
*Hydric soil rating:* No

### Description of Positas

#### Setting

*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed alluvium

#### Typical profile

*H1 - 0 to 19 inches:* fine sandy loam  
*H2 - 19 to 41 inches:* clay  
*H3 - 41 to 68 inches:* clay loam

#### Properties and qualities

*Slope:* 9 to 15 percent  
*Depth to restrictive feature:* 14 to 26 inches to abrupt textural change  
*Drainage class:* Moderately well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Very low (about 2.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* D  
*Ecological site:* R015XD115CA - CLAYPAN  
*Hydric soil rating:* No

### Minor Components

#### Unnamed

*Percent of map unit:* 8 percent  
*Hydric soil rating:* No

#### Milpitas, st-fsl

*Percent of map unit:* 7 percent  
*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread

## Custom Soil Resource Report

*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Hydric soil rating:* No

### **OAG—Orthents, 50 to 75 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* hc6b  
*Elevation:* 30 to 1,100 feet  
*Mean annual precipitation:* 20 to 24 inches  
*Mean annual air temperature:* 60 to 63 degrees F  
*Frost-free period:* 360 to 365 days  
*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

*Orthents and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### **Description of Orthents**

##### **Setting**

*Landform:* Escarpments  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Riser  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Mixed alluvium

##### **Typical profile**

*H1 - 0 to 60 inches:* variable

##### **Properties and qualities**

*Slope:* 50 to 75 percent  
*Depth to restrictive feature:* More than 80 inches  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None

##### **Interpretive groups**

*Land capability classification (irrigated):* 7e  
*Land capability classification (nonirrigated):* 7e  
*Ecological site:* R019XG909CA - Terrace  
*Hydric soil rating:* No

#### **Minor Components**

##### **Unnamed**

*Percent of map unit:* 10 percent  
*Hydric soil rating:* No

## **RA—Riverwash**

### **Map Unit Setting**

*National map unit symbol:* hc6d  
*Elevation:* 70 to 1,560 feet  
*Mean annual precipitation:* 22 to 28 inches  
*Mean annual air temperature:* 61 to 64 degrees F  
*Frost-free period:* 360 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Riverwash:* 100 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Riverwash**

#### **Setting**

*Landform:* Channels  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Sandy, gravelly, stony and bouldery alluvium

#### **Typical profile**

*H1 - 0 to 6 inches:* variable

#### **Properties and qualities**

*Slope:* 0 to 5 percent  
*Frequency of flooding:* FrequentNone

#### **Interpretive groups**

*Land capability classification (irrigated):* 8w  
*Land capability classification (nonirrigated):* 8w  
*Ecological site:* R019XG905CA - Riparian  
*Hydric soil rating:* Yes

## **Rb—Rock outcrop-Maymen complex, 75 to 100 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hc6f  
*Elevation:* 490 to 4,030 feet  
*Mean annual precipitation:* 24 to 34 inches  
*Mean annual air temperature:* 57 to 63 degrees F  
*Frost-free period:* 265 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Rock outcrop: 70 percent*

*Maymen and similar soils: 25 percent*

*Minor components: 5 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Rock Outcrop**

**Setting**

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountainflank*

*Down-slope shape: Concave*

*Across-slope shape: Convex*

*Parent material: Sedimentary rock*

**Typical profile**

*H1 - 0 to 60 inches: unweathered bedrock*

**Properties and qualities**

*Slope: 75 to 99 percent*

*Depth to restrictive feature: 0 inches to lithic bedrock*

*Runoff class: Very high*

**Interpretive groups**

*Land capability classification (irrigated): 8*

*Land capability classification (nonirrigated): 8*

*Hydric soil rating: No*

**Description of Maymen**

**Setting**

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountainflank*

*Down-slope shape: Concave*

*Across-slope shape: Convex*

*Parent material: Residuum weathered from shale, conglomerate and/or sandstone*

**Typical profile**

*H1 - 0 to 4 inches: stony fine sandy loam*

*H2 - 4 to 14 inches: loam*

*H3 - 14 to 18 inches: unweathered bedrock*

**Properties and qualities**

*Slope: 75 to 99 percent*

*Depth to restrictive feature: 0 to 15 inches to lithic bedrock*

*Drainage class: Well drained*

*Runoff class: High*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high  
(0.20 to 1.98 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water supply, 0 to 60 inches: Very low (about 1.8 inches)*

**Interpretive groups**

*Land capability classification (irrigated): 8e*  
*Land capability classification (nonirrigated): 8e*  
*Hydrologic Soil Group: D*  
*Hydric soil rating: No*

**Minor Components**

**Gaviota**

*Percent of map unit: 3 percent*  
*Landform: Hills*  
*Landform position (two-dimensional): Backslope*  
*Landform position (three-dimensional): Side slope*  
*Down-slope shape: Convex*  
*Across-slope shape: Convex*  
*Hydric soil rating: No*

**Lodo**

*Percent of map unit: 2 percent*  
*Landform: Low hills*  
*Landform position (two-dimensional): Backslope*  
*Landform position (three-dimensional): Side slope*  
*Down-slope shape: Convex*  
*Across-slope shape: Convex*  
*Hydric soil rating: No*

**TbD2—Todos clay loam, 9 to 15 percent slopes, eroded**

**Map Unit Setting**

*National map unit symbol: hc6p*  
*Elevation: 180 to 1,390 feet*  
*Mean annual precipitation: 22 to 27 inches*  
*Mean annual air temperature: 60 to 62 degrees F*  
*Frost-free period: 360 to 365 days*  
*Farmland classification: Not prime farmland*

**Map Unit Composition**

*Todos and similar soils: 85 percent*  
*Minor components: 15 percent*  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Todos**

**Setting**

*Landform: Hills*  
*Landform position (two-dimensional): Backslope*  
*Landform position (three-dimensional): Side slope*  
*Down-slope shape: Convex*  
*Across-slope shape: Convex*

## Custom Soil Resource Report

*Parent material:* Residuum weathered from sandstone and shale

### Typical profile

*H1 - 0 to 18 inches:* clay loam

*H2 - 18 to 44 inches:* clay

*H3 - 44 to 48 inches:* weathered bedrock

### Properties and qualities

*Slope:* 9 to 15 percent

*Depth to restrictive feature:* 40 to 60 inches to paralithic bedrock

*Drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water supply, 0 to 60 inches:* Moderate (about 7.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* C

*Ecological site:* R019XD001CA - CLAYEY (1975)

*Hydric soil rating:* No

### Minor Components

#### Unnamed

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

#### Botella variant

*Percent of map unit:* 5 percent

*Landform:* Fans

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Convex

*Hydric soil rating:* No

#### Unnamed

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

## TbE2—Todos clay loam, 15 to 30 percent slopes, eroded

### Map Unit Setting

*National map unit symbol:* hc6q

*Elevation:* 150 to 960 feet

*Mean annual precipitation:* 22 to 25 inches



## Custom Soil Resource Report

*Mean annual air temperature:* 59 to 62 degrees F  
*Frost-free period:* 355 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Todos and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Todos

#### Setting

*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone and shale

#### Typical profile

*H1 - 0 to 18 inches:* clay loam  
*H2 - 18 to 44 inches:* clay  
*H3 - 44 to 48 inches:* weathered bedrock

#### Properties and qualities

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 40 to 60 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Moderate (about 7.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* C  
*Ecological site:* R015XD001CA - CLAYEY  
*Hydric soil rating:* No

### Minor Components

#### Lodo

*Percent of map unit:* 4 percent  
*Landform:* Low hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Sespe

*Percent of map unit:* 4 percent

## Custom Soil Resource Report

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### **Ayar**

*Percent of map unit:* 4 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

### **Unnamed, severely eroded**

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

## **TdF2—Todos-Lodo complex, 30 to 50 percent slopes, eroded**

### **Map Unit Setting**

*National map unit symbol:* hc6r  
*Elevation:* 150 to 1,490 feet  
*Mean annual precipitation:* 22 to 25 inches  
*Mean annual air temperature:* 59 to 62 degrees F  
*Frost-free period:* 355 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Todos and similar soils:* 60 percent  
*Lodo and similar soils:* 35 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Todos**

#### **Setting**

*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone and shale

#### **Typical profile**

*H1 - 0 to 18 inches:* clay loam  
*H2 - 18 to 44 inches:* clay  
*H3 - 44 to 48 inches:* weathered bedrock

## Custom Soil Resource Report

### Properties and qualities

*Slope:* 30 to 50 percent  
*Depth to restrictive feature:* 40 to 50 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Moderate (about 7.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* 6e  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* C  
*Ecological site:* R015XD001CA - CLAYEY  
*Hydric soil rating:* No

### Description of Lodo

#### Setting

*Landform:* Low hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone and shale

#### Typical profile

*H1 - 0 to 11 inches:* gravelly clay loam  
*H2 - 11 to 15 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 30 to 50 percent  
*Depth to restrictive feature:* 6 to 20 inches to paralithic bedrock  
*Drainage class:* Somewhat excessively drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Very low (about 1.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* 6e  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* D  
*Ecological site:* R015XD093CA - SHALLOW LOAMY  
*Hydric soil rating:* No

**Minor Components**

**Sespe**

*Percent of map unit:* 1 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Rock outcrop**

*Percent of map unit:* 1 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Maymen**

*Percent of map unit:* 1 percent  
*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Gaviota**

*Percent of map unit:* 1 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Ayar**

*Percent of map unit:* 1 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

## **ZaF2—Zaca clay, 30 to 50 percent slopes, eroded**

### **Map Unit Setting**

*National map unit symbol:* hc6x  
*Elevation:* 70 to 1,260 feet  
*Mean annual precipitation:* 19 to 23 inches  
*Mean annual air temperature:* 58 to 62 degrees F  
*Frost-free period:* 360 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Zaca and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Zaca**

#### **Setting**

*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from mudstone and calcareous shale

#### **Typical profile**

*H1 - 0 to 48 inches:* clay  
*H2 - 48 to 52 inches:* weathered bedrock

#### **Properties and qualities**

*Slope:* 30 to 50 percent  
*Depth to restrictive feature:* 40 to 50 inches to paralithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Moderate (about 8.2 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 6e  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* C  
*Ecological site:* R015XD001CA - CLAYEY  
*Hydric soil rating:* No

**Minor Components**

**Santa lucia**

*Percent of map unit:* 4 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Diablo**

*Percent of map unit:* 4 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Ayar**

*Percent of map unit:* 4 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

**Unnamed**

*Percent of map unit:* 3 percent  
*Hydric soil rating:* No

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## Custom Soil Resource Report

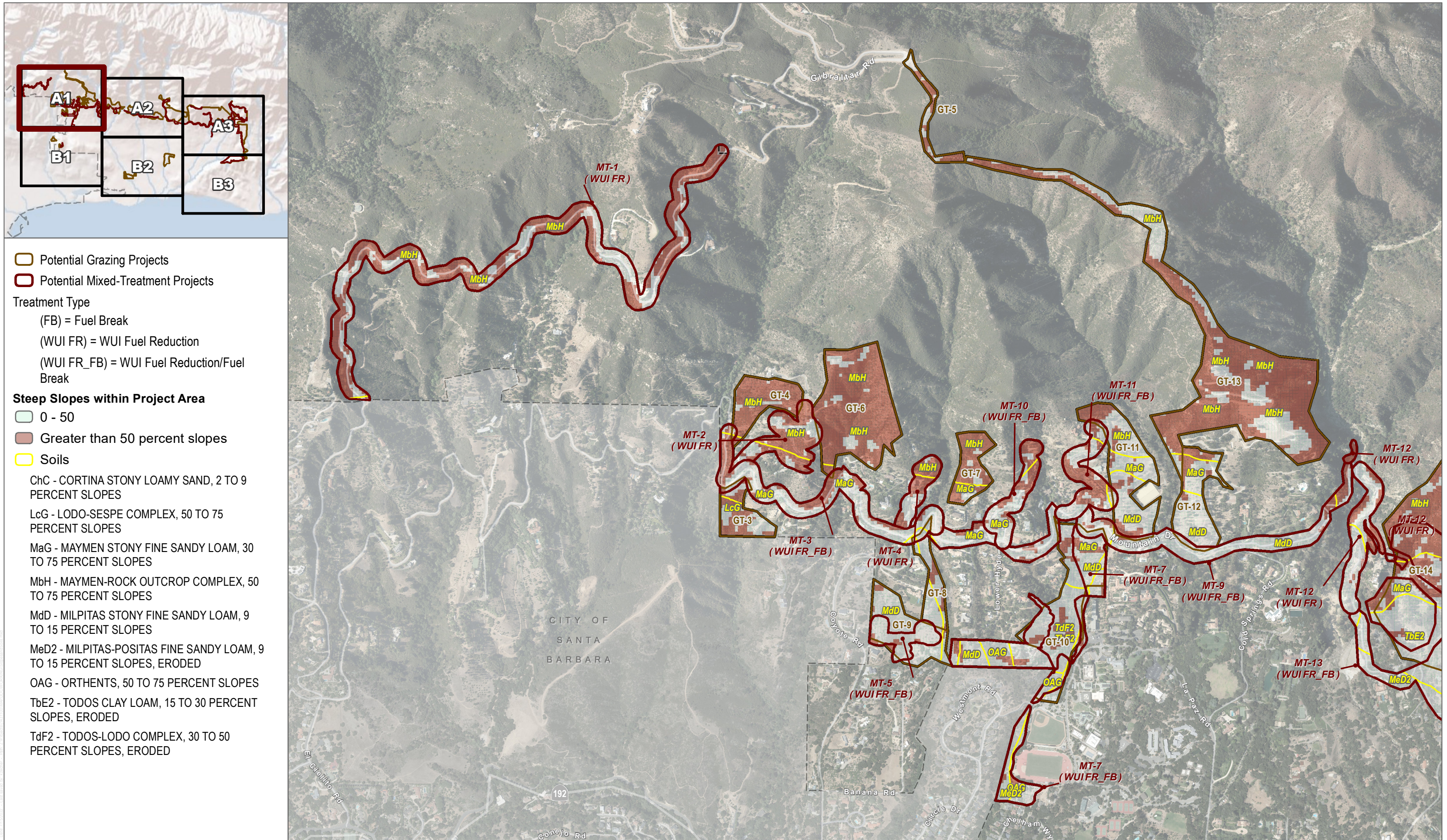
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SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

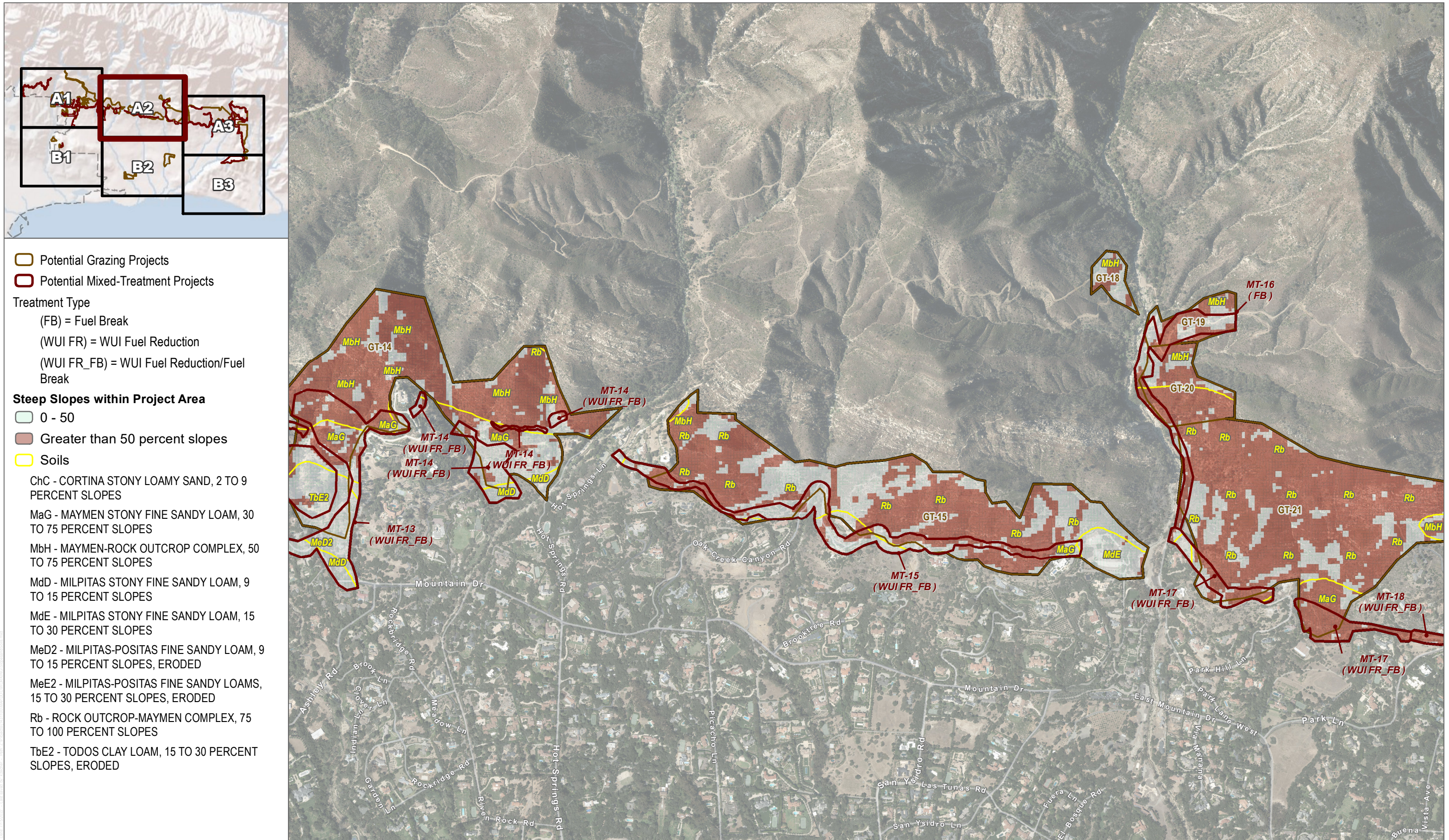


FIGURE A1

Steep Slopes and Soils

Montecito Fire Protection District Vegetation Treatment Program





SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

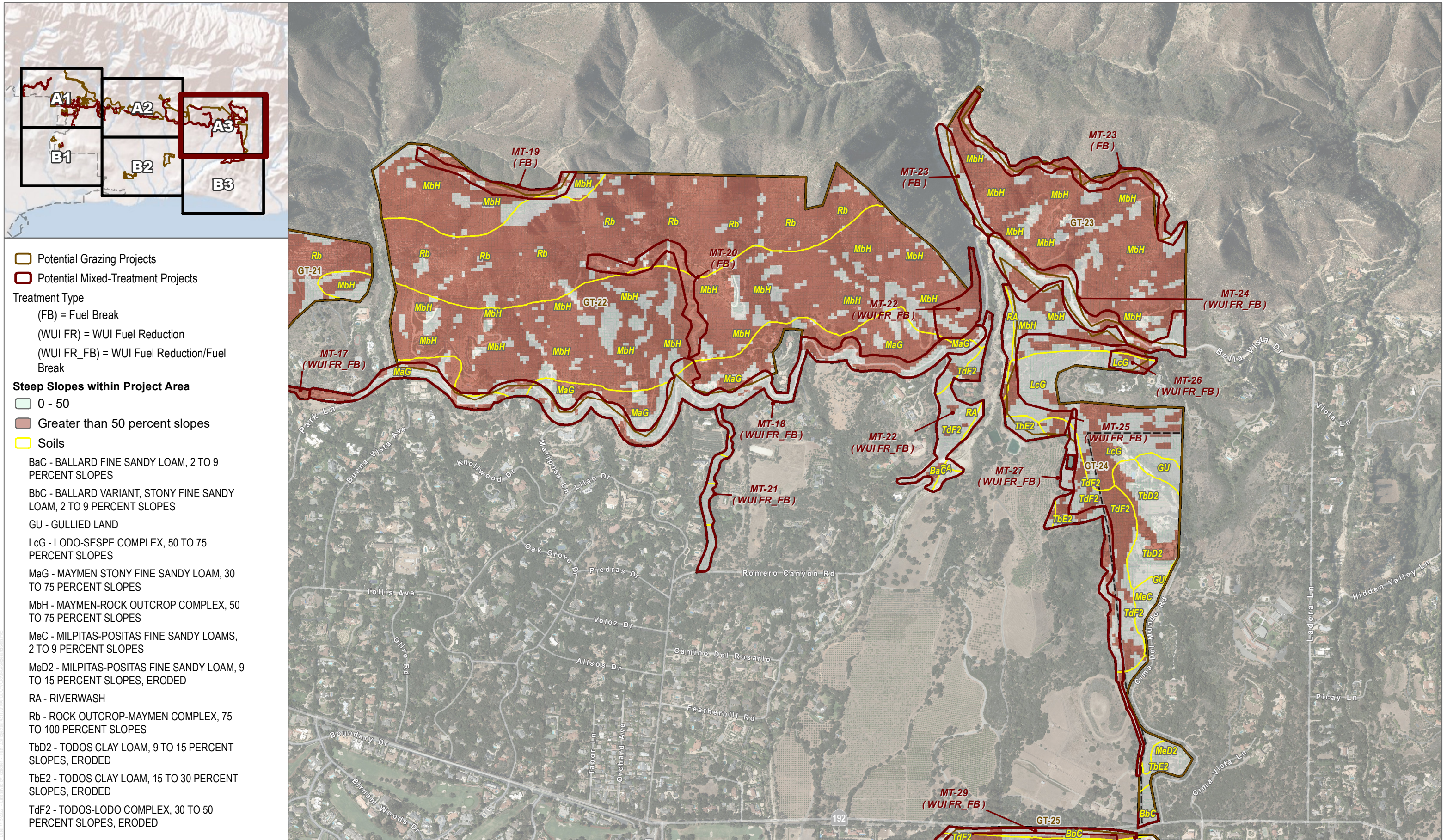


FIGURE A2

Steep Slopes and Soils

Montecito Fire Protection District Vegetation Treatment Program





SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

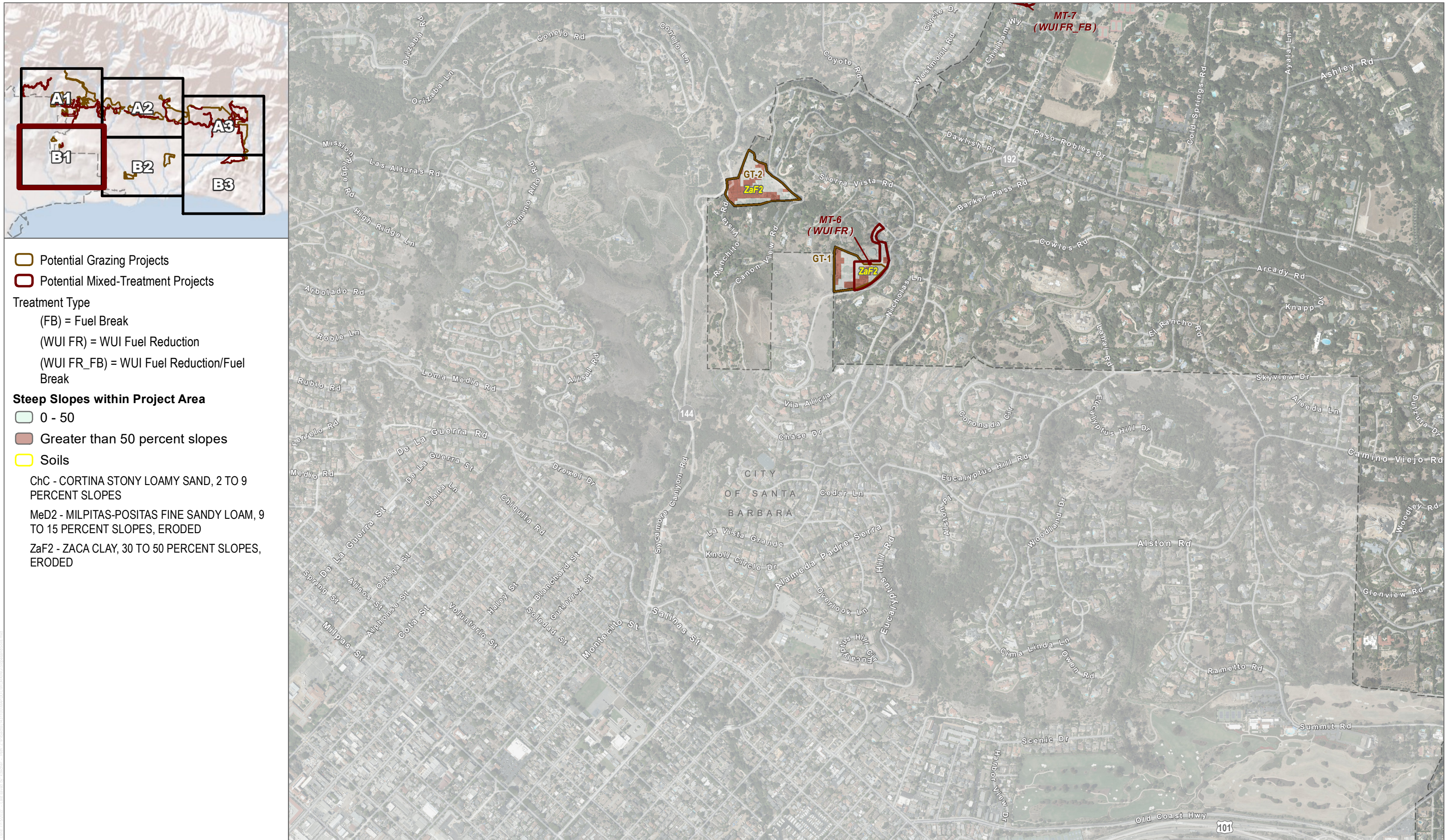


FIGURE A3

Steep Slopes and Soils

Montecito Fire Protection District Vegetation Treatment Program





SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

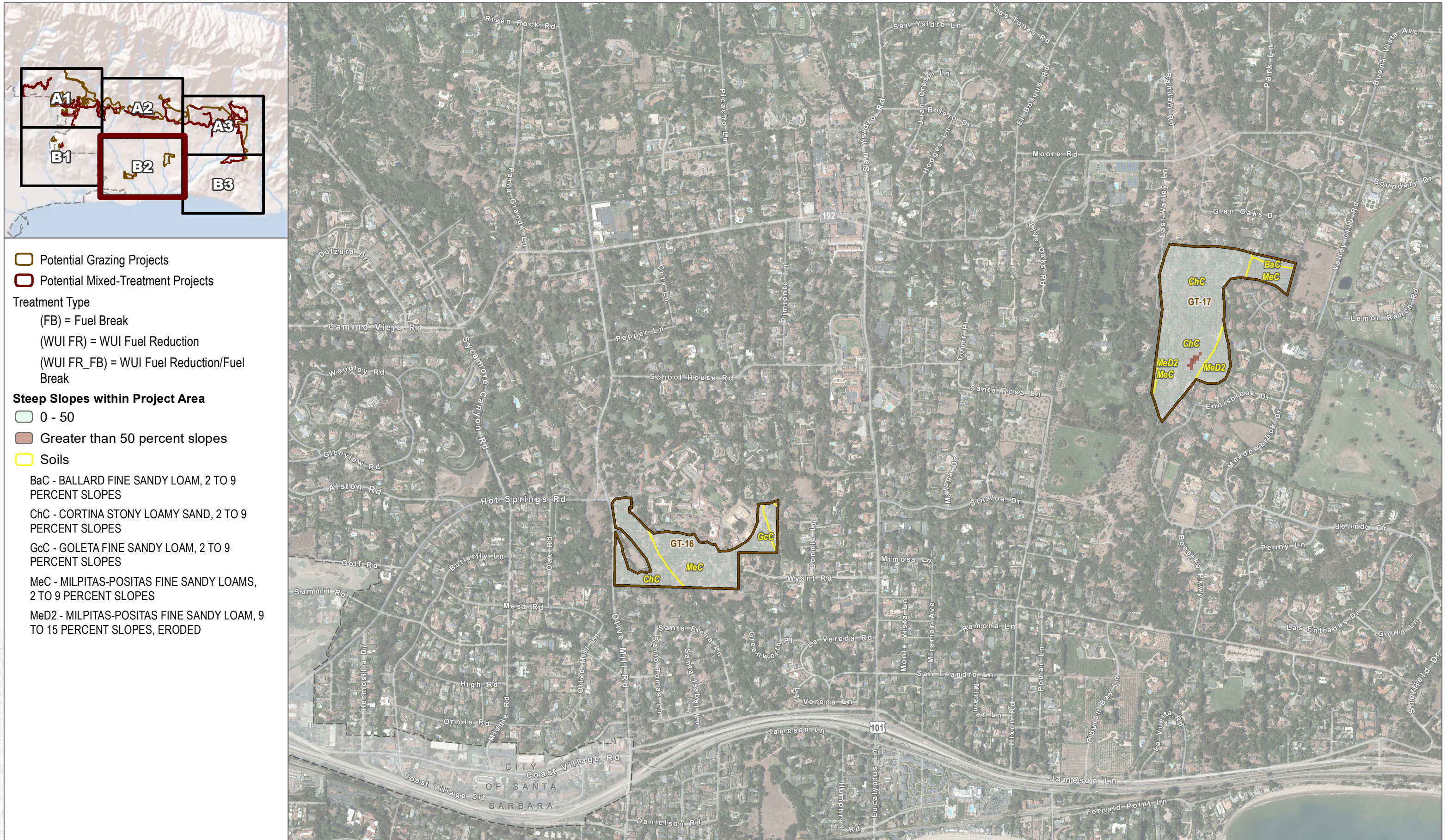
**FIGURE B1**

**Steep Slopes and Soils**

Montecito Fire Protection District Vegetation Treatment Program







SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles



FIGURE B2

Steep Slopes and Soils

Montecito Fire Protection District Vegetation Treatment Program





SOURCE: USGS Topo 7.5 Minute Series, Santa Barbara and Carpinteria Quadrangles

**FIGURE B3**

**Steep Slopes and Soils**



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# **Attachment F**

## Other Completed SPRs



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# MM HAZ-3





### ENVIROSTOR

montecito

Map | Satellite

**Sites and Facilities**

**Cleanup Sites**

- Federal Superfund
- State Response
- Voluntary Cleanup
- School Cleanup
- Evaluation
- School Investigation
- Military Evaluation
- Tiered Permit
- Corrective Action
- Field Points

**STATUS**

**Permitted Sites**

- Operating
- Post-Closure
- Non-Operating

**Other Sites**

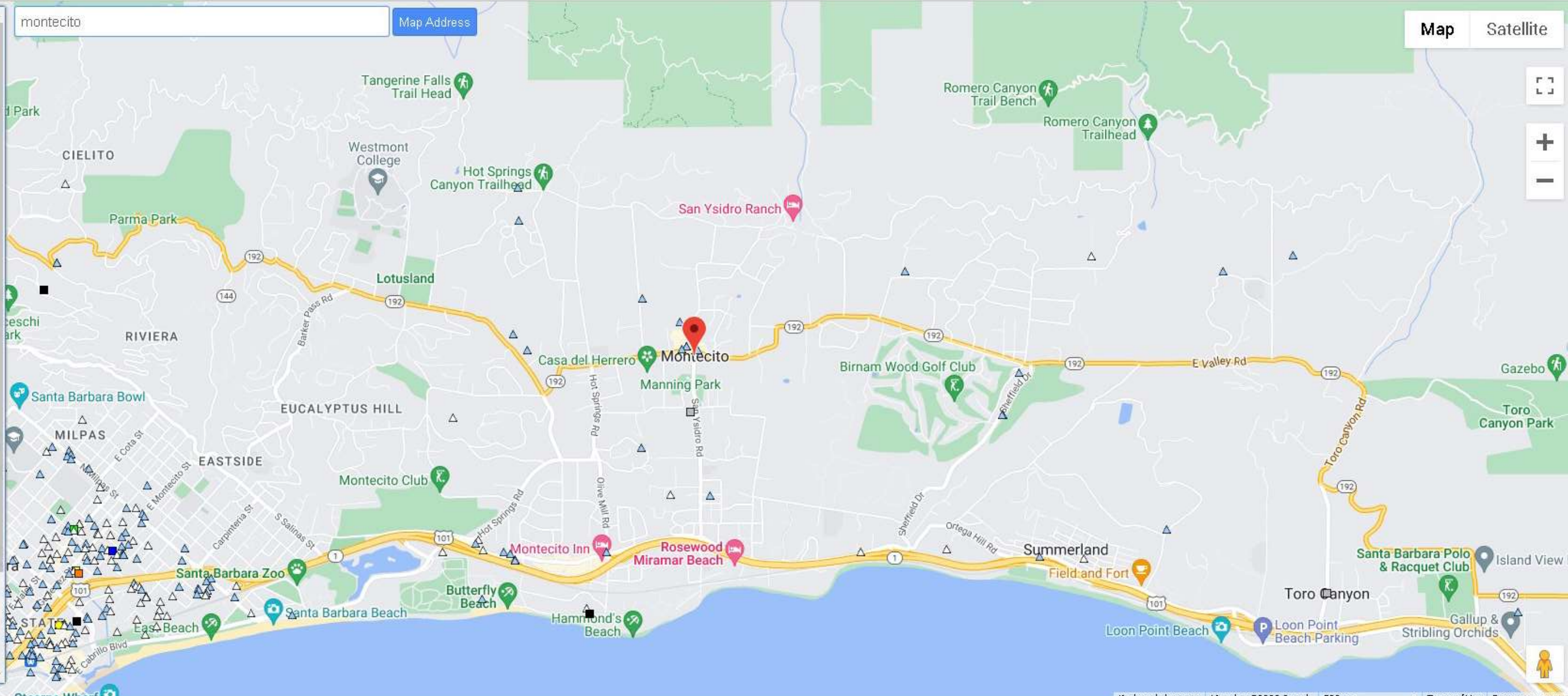
- GeoTracker LUST Cleanup
- GeoTracker Cleanup Program
- GeoTracker Military Cleanup
- GeoTracker Field Points

**GIS Layers**

- CalEnviroScreen Layer
- Assembly Districts
- Congressional Districts
- Senate Districts
- Counties

**Tools**

- Measure a Distance



**SITES CURRENTLY VISIBLE ON MAP** 17 SITES LISTED [EXPORT THIS LIST TO EXCEL](#)

PROJECT NAME	STATUS	PROJECT TYPE	ADDRESS	CITY
AGF&SF REDISTRIBUTION STATION	INACTIVE - NEEDS EVALUATION	MILITARY EVALUATION		SANTA BARBARA
BOMB STORAGE AREA	INACTIVE - NEEDS EVALUATION	MILITARY EVALUATION		SANTA BARBARA
CLAVERIA TRUST PROPERTIES	NO FURTHER ACTION	EVALUATION	510-520 NORTH SALSIPUEDES STREET AND 601 EAST HALEY STREET	SANTA BARBARA
EDISON/SANTA BARBARA (DE LA GUERRA) MGP	CERTIFIED O&M - LAND USE RESTRICTIONS ONLY	VOLUNTARY CLEANUP	136 E DE LA GUERRA ST	SANTA BARBARA
EL PUENTE COMMUNITY HIGH SCHOOL	NO FURTHER ACTION	SCHOOL CLEANUP	430 EAST GUTIERREZ STREET	SANTA BARBARA
FORMER GOLDBERG/GOSS-JEWETT	ACTIVE	VOLUNTARY CLEANUP	220 WEST GUTIERREZ STREET	SANTA BARBARA
MONTECITO UNION ELEMENTARY SCHOOL RENOVATION	INACTIVE - ACTION REQUIRED	SCHOOL INVESTIGATION	385 SAN YSIDRO ROAD	SANTA BARBARA
MUSOROVE TRUST PROPERTY	INACTIVE - NEEDS EVALUATION	EVALUATION	915 DE LA VINA	SANTA BARBARA
NAVAL RESERVE ARMORY	INACTIVE - NEEDS EVALUATION	MILITARY EVALUATION		SANTA BARBARA
PACIFIC SCIENTIFIC COMPANY	ACTIVE	VOLUNTARY CLEANUP	402 E. GUTIERREZ STREET	SANTA BARBARA



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# SPR UTIL-1



**From:** [Progressive Environmental Industries, Inc.](#)  
**To:** [Nic Elmquist](#)  
**Subject:** Re: Agri-Chips Support of Montecito Fire  
**Date:** Monday, June 27, 2022 2:20:24 PM  
**Attachments:** [image001.png](#)

---

Hi,

Agri-Chip will continue to accept green waste for the foreseeable future for the Montecito Fire Departments vegetation treatment projects.

Thank you,  
Brandon

---

**From:** Nic Elmquist <nelmquist@montecitofire.com>  
**Sent:** Monday, June 27, 2022 2:18 PM  
**To:** Progressive Environmental Industries, Inc. <Billing@peiinc.us>  
**Subject:** Agri-Chips Support of Montecito Fire

Hello –

We are currently in the process of conducting an environmental review of our Vegetation Treatment Program. Part of the process is to show a sustainable method of green-waste disposal. Agri-chip has been a great resource for our contractors to dispose of the chips created from the projects here in Montecito. Can you confirm that you intend to continue to accept the material delivered from Montecito Fire Department's vegetation treatment projects for the foreseeable future?

Thank you,  
Nic

