# Santa Monica Mountains Local Coastal Program Biological Assessment Report

2807 S. Foose Road
Los Angeles County, California
APN 4472-025-052

**Prepared for**
**Alan Webb**
**13488 Maxella Avenue, #318**
**Marina Del Rey, CA 90292**

**December 2018; Revised by Daryl Koutnik May 2025**

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**Prepared by**
**Environmental Science Associates**
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# Biological Assessment Report

2807 S. Foose Road (APN 4472-025-052)

# 1. Introduction

This report Biological Assessment Report has been prepared pursuant to Section 22.44.1800 *et seq* of the Santa Monica Mountains Local Coastal Program (LCP, 2014) and Local Implementation Program (LIP), administered by the County of Los Angeles (County). The Biological Assessment was conducted for the proposed construction of a residential development at 2807 S. Foose Road (APN 4472-025-052) within the coastal zone of the Santa Monica Mountains. For the purposes of this report, the "project site" represents the parcel (APN 4472-025-052) and the "study area" includes the project site (including the development footprint) and a 200-foot buffer that represents the 200-foot fuel modification zone. The entire study area was assessed for sensitive biological resources that could be directly or inadvertently impacted by the proposed project. This report provides an overview of the biological resources observed during a field assessment, as well as any sensitive biological resources that have the potential to occur within, or adjacent to, the project site and study area based on the presence of suitable habitat conditions. In addition, this report includes recommendations for avoiding or minimizing impacts to sensitive biological resources prior to the commencement of any ground-disturbing activities. In accordance with the LCP, a Santa Monica Mountains Biological Assessment Checklist is provided at the end of the report verifying that all necessary information has been included (**Appendix A – Santa Monica Mountains Biological Assessment Checklist**).

## 1.1 Statement of Qualifications

ESA has extensive experience analyzing biological resources in Los Angeles County; qualified ESA biologists conducted the biological assessment and prepared this report. Resumes for each ESA biologist involved in the preparation of this report are provided in **Appendix B - Resumes** and discussed briefly below:

> **Greg Ainsworth – Director – Biological Resources and Land Management:** Greg has over 18 years of experience as a professional biologist. Greg earned a B.S. in Environmental Horticulture Science and an M.S. in Environmental Planning from California Polytechnic State University, San Luis Obispo. Environmental Horticulture Science, California Polytechnic State University, San Luis Obispo. Greg has extensive experience conducting biological assessments in Southern California, including within the Santa Monica Mountains. As the project's Director, Greg managed and participated in the drafting of the document, and is responsible for the contents of this report.

**Travis Marella – Senior Biologist:** Travis has over 8 years of professional experience conducting various habitat assessments, focused wildlife, fisheries, aquatic, and benthic macroinvertebrate surveys and studies in Southern California. Travis earned a B.S. in Environmental Studies with an Aquatic Ecology emphasis from Sacramento State University. Travis conducted the biological assessment and prepared the subsequent report.

**Daryl Koutnik - Principal Biologist:** Daryl has over 30 years of experience as a professional biologist. Daryl earned a B.S. in Mathematics and Biology from California State University, Northridge and an M.S. and Ph.D. in Botany from University of California, Davis. Daryl has extensive experience conducting biological assessments in Southern California, including within the Santa Monica Mountains. As the project's subsequent Principal Biologist, Daryl conducted the site visit for revising the document, and is responsible for other contents of this report.

## 1.2 Project and Survey Description

### 1.2.1 Project Description

The proposed project includes the construction of a single-family residence within a previously disturbed portion of the property located at 2807 S. Foose Road (APN 4472-025-052). The residence will include a new garage, driveway, fire access walkways, a private water well, a water storage tank, fire hydrant, and an onsite wastewater treatment system (OWTS), all of which will be developed within a building site area of less than 10,000 square feet, exclusive of fuel modification areas.

- Applicant: Alan Webb
  13488 Maxella Avenue, #318
  Marina Del Rey, CA 90292
- Project Name: 2807 S. Foose Road
- Type of Report: Biological Assessment Report
- APN: 4472-025-052
- Area: 1.00 acre
- Development: Residential Development

### 1.2.2 Methods

#### *1.2.2.1 Literature Review*

Prior to conducting the field assessment, ESA conducted a query of available resource inventory databases to analyze the potential for sensitive resources to occur within the study area:

- California Department of Fish and Wildlife (CDFW). 2018a. California Natural Diversity Data Base (CNDDB). Database was queried for special status species records in the Triunfo Pass USGS 7.5-minute quadrangle and five surrounding quadrangles including Camarillo,

Newbury Park, Point Dume, Point Mugu, and Thousand Oaks. https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data: Accessed August 2, 2018.

- California Department of Fish and Wildlife (CDFW). 2018b. California Natural Community List. Sacramento, CA: CDFW, Natural Heritage Division, 2018. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline: Accessed August 2, 2018.

- California Department of Forestry and Fire Protection (CDFFP), Fire Resource and Assessment Program, Fire Perimeters: Wildfires 1950-2012. http://www.fire.ca.gov/: Accessed August 2, 2018.

- California Native Plant Society (CNPS). 2018. Inventory of Rare and Endangered Vascular Plants of California. Database was queried for special status species records in the Triunfo Pass USGS 7.5-minute quadrangle and five surrounding quadrangles including Camarillo, Newbury Park, Point Dume, Point Mugu, and Thousand Oaks. http://rareplants.cnps.org/: Accessed August 2, 2018.

- Natural Resource Conservation Service (NRCS). 2018. Web Soil Survey. https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm: Accessed August 2, 2018.

- U.S. Fish and Wildlife Service (USFWS). 2018. Critical Habitat Portal. https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77: Accessed August 2, 2018.

#### *1.2.2.2 Biological Resources Field Assessment*

A biological resources field assessment was conducted by Travis Marella and Greg Ainsworth on July 18, 2018. Additionally, Daryl Koutnik conducted a follow-up spring survey on March 14, 2024. The surveys consisted of walking the majority of the study area to characterize and map vegetation, assess soils and previous disturbances, and to determine the potential for special-status plants and wildlife to occur and to potentially be directly or indirectly impacted by the construction of the project.

All incidental and visual observations of flora and fauna, including sign (e.g., scat, tracks and burrows) and audible detections of avian species, were noted during the field assessment and are described further below in this report. All native and non-native plant communities and land uses were characterized and delineated on aerial photographs during the field survey, and then digitized on aerial maps using a Geographic Information System software (ArcGIS). Most descriptions of vegetation were characterized in the field in accordance with *Vegetation Classification of the Santa Monica Mountains National Recreation Area and Environs in Ventura and Los Angeles Counties, California, Version 1-Association Level and Specific Alliances* (CDFG et al, 2006); however, some communities were characterized based on dominant species or other visual characteristics if a suitable vegetation alliance is not identified. A detailed description of each plant community and land use is provided in Section 2.4 of this report.

# 2. Characteristics of the Study Area

## 2.1 Location and Legal Description of the Study Area

The study area includes the project site located at APN 4472-025-052, which includes the development footprint, and a 200-foot buffer (i.e., fuel modification zone) extending in all directions from the proposed single-family residence. The study area is located in Los Angeles County (**Figure 1 – Regional Location**), within the U.S. Geological Survey (USGS) Triunfo Pass, California, 7.5-minute topographic quadrangle (**Figure 2 - Project Location**). The study area is situated within the foothills of Santa Monica Mountain Range at an elevation of ranging between 900 to 1,050 feet above mean sea level. The City of Westlake Village is located approximately 7.5 miles to the northeast, the city of Camarillo is located approximately 12.5 miles to the northwest, and California State Route 1 and the Pacific Ocean are located approximately 1.8 miles to the south.

Much of the study area north and southwest of the proposed development footprint has been altered by fuel modification associated with existing residences that are adjacent to the proposed project site. As depicted in **Figure 3 – Existing Fuel Modification Zones**, the 200-foot fuel modification zone for these residences, required by the Los Angeles County Fire Department, extends into the study area and overlaps onto the project site.

## 2.2 Soils and Topography

The study area is situated along a ridge and topography generally slopes down from the east to west, with slopes ranging between approximately 20-45 percent. As shown in **Figure 4 - Soils**, one soil type occurs within the study area - Mipolomol-Topanga association, 30 to 75 percent slopes (NRCS, 2018).

### 2.2.1 Mipolomol-Topanga association; 30 to 75 percent slopes

Mipolomol-Topanga association occurs throughout the western portion of the study area; it is composed of two types, Mipolomol and Topanga.

#### *2.2.1.1 Mipolomol*

This soil type has formed from a parent material of colluvium and/or residuum derived from sandstone, shale and slate and is characterized as being well drained with a very low water capacity of 1.4 inches. Bedrock is usually present within 4 to 14 inches of the surface. The typical profile in this soil type is as follows: 0 to 12 inches, channery loam; and 12 to 22 inches, soft, weathered bedrock.

#### *2.2.1.2 Topanga*

This soil type formed from a parent material of colluvium and/or residuum derived from sandstone, shale and slate and is characterized as being well drained with a very low water capacity of 2.1 inches. Bedrock is usually present within 10 to 20 inches of the surface. The


Fig1 Regional Location.mxd... 8/29/2024

SOURCE: ESRI; DK Consulting, 2024

2807 S. Foose Road

**Figure 1**
Regional Location

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SOURCE: NearMap (Aerial); TEG; DK Consulting, 2024

2807 S. Foose Road

**Figure 2**

Project Location

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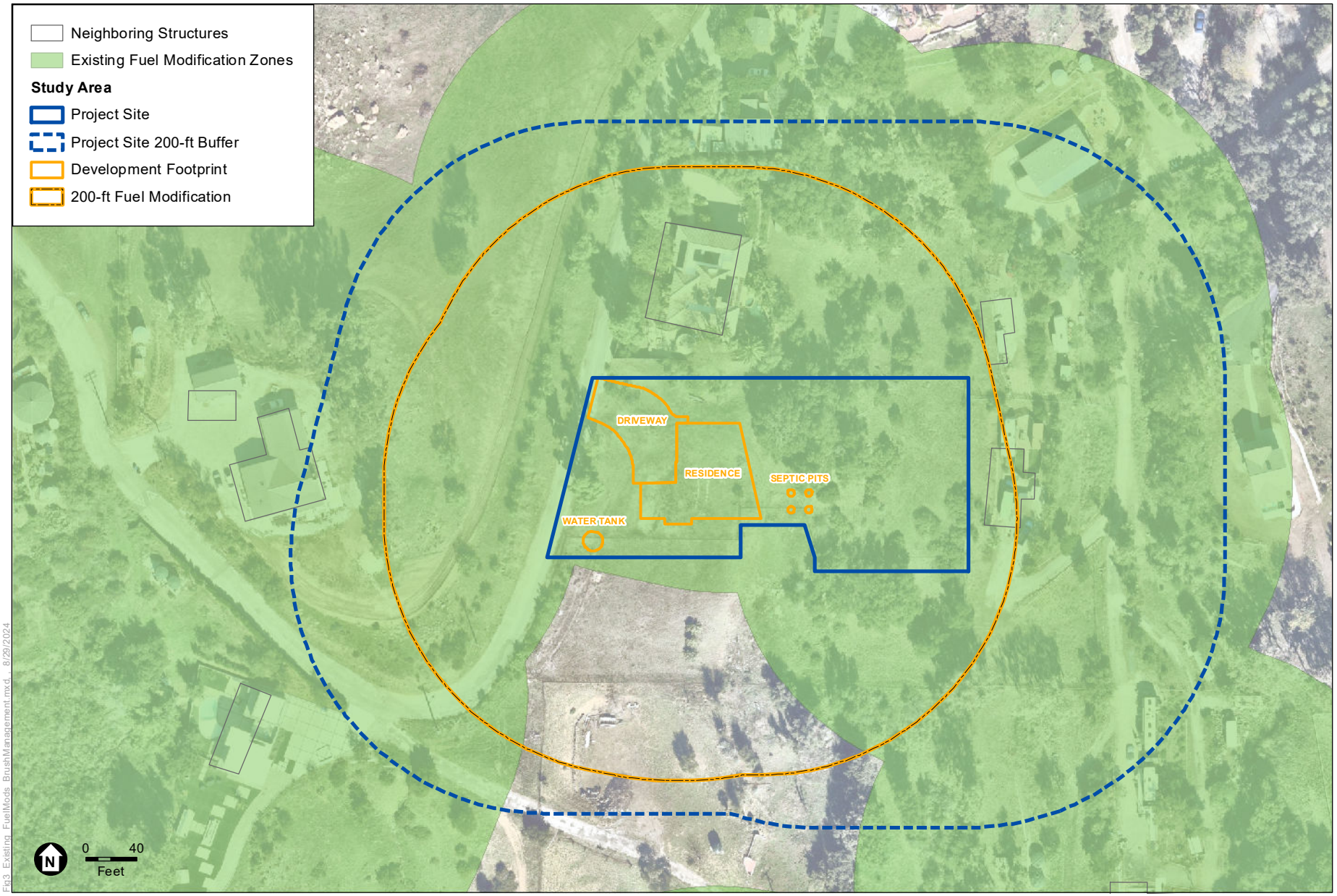


SOURCE: NearMap (Aerial); TEG; DK Consulting, 2024

2807 S. Foose Road

**Figure 3**

Existing Fuel Modification and Brush Management

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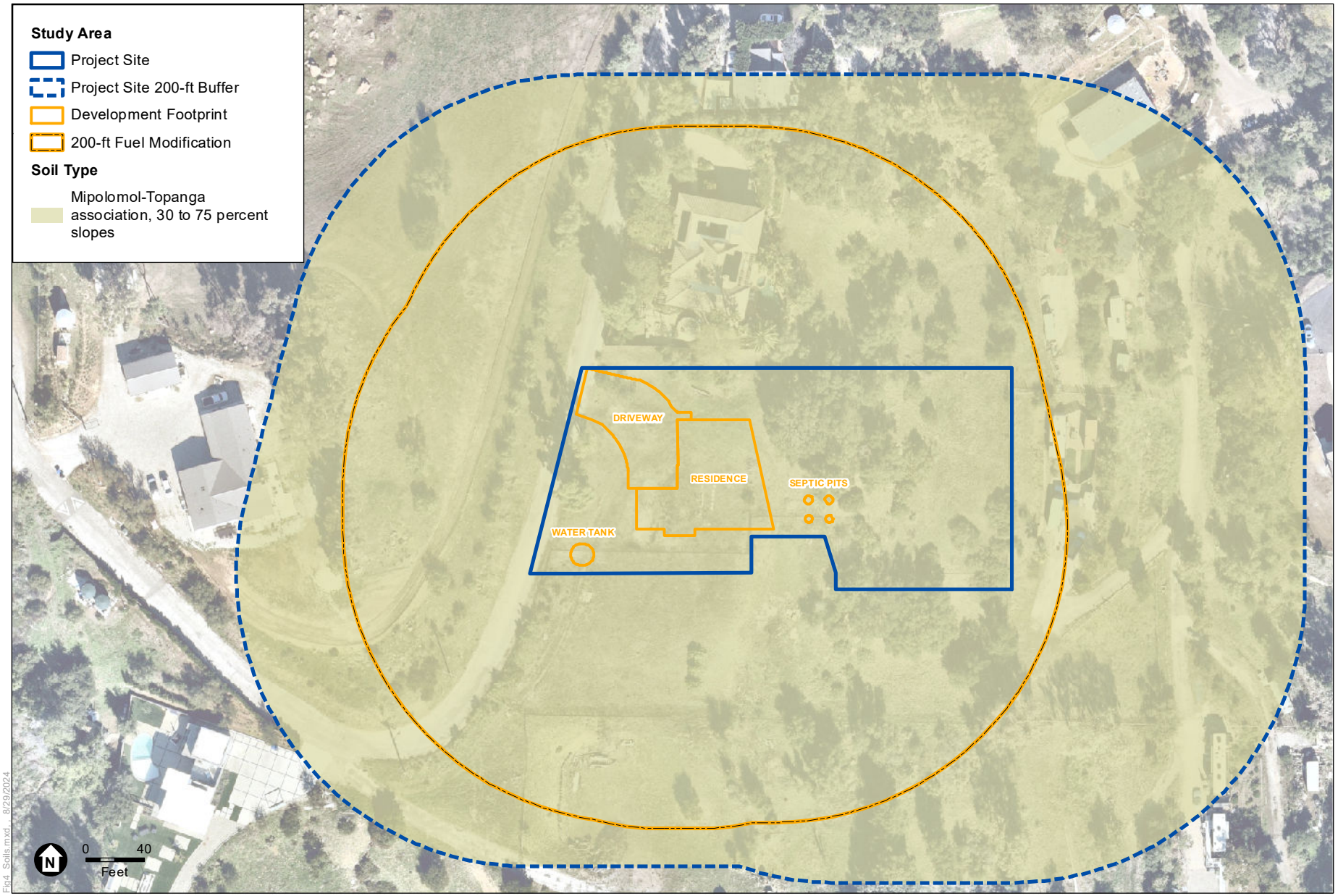



SOURCE: NearMap (Aerial); TEG; DK Consulting, 2024

2807 S. Foose Road

**Figure 4**

Soils

ESA

typical soil profile is as follows: 0 to 15 inches, gravelly loam; 15 to 18 inches, gravelly clay loam; and 18 to 27 inches, soft, weathered bedrock.

## 2.3 Micro Climate

Mean annual precipitation in the area is approximately 10.5 to 21.5 inches and mean annual air temperature is approximately 74 degrees F (https://www.meteoblue.com/en/weather/forecast/modelclimate/santa-monica-mountains_united-states-of-america_5393231).

## 2.4 Plant Communities and Land Uses

The plant communities and land uses located within the study area were characterized and mapped during the field assessment and are depicted in **Figure 5 – Plant Communities and Land Uses**; each plant community and land use within the study area is described in detail below. A list of plant species inventoried during the field assessment is provided in **Appendix C – Floral and Faunal Compendia**. Representative photographs taken during the site visit depicting the communities and land use within the study area are provided in **Appendix D – Photographic Log**.

### 2.4.1 *Avena* Herbaceous Semi-Natural Alliance (wild oat grassland)

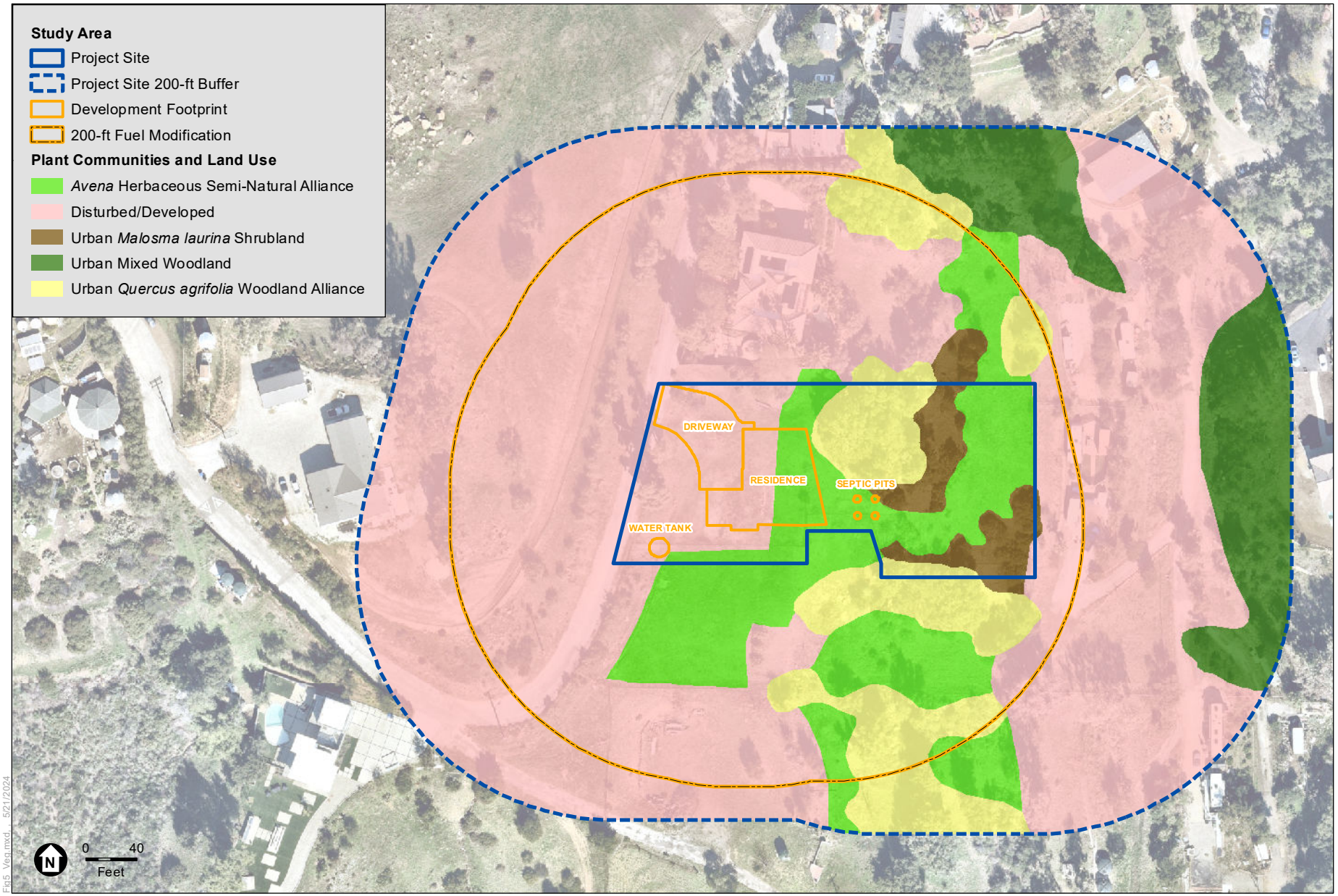
1.03 acre of *Avena* herbaceous semi-natural alliance is present within the study area. This community is characterized by a dominance of common wild oat (*Avena fatua*) interspersed with other non-native grasses including ripgut brome (*Bromus diandrus*), red brome (*B. rubens*), fountain grass (*Pennisetum setaceum*), and giant rye grass (*Elymus condensatus*). Black mustard (*Brassica nigra*), carnation weed (*Euphorbia terracina*), fennel (*Foeniculum vulgare*), and tree tobacco (*Nicotiana glauca*) were also lightly dispersed within this community.

This community is partially located within the development footprint; as depicted on Figure 5, 0.07 acre of this community is within the development footprint and 0.87 acre is within 200-foot fuel modification zone and thus may be affected by construction and fuel modification activities.

### 2.4.2 Urban *Quercus agrifolia* Woodland Alliance (coast live oak woodland)

0.80 acres of urban *Quercus agrifolia* (coast live oak) woodland alliance exists within the study area. This community is characterized by a dominance of coast live oak with an understory comprising mostly of non-native grasses and forbs including, Bermuda buttercup (*Oxalis pes-caprae*), ripgut brome, red brome, and chaparral nightshade (*Solanum xanti*), with native giant rye grass occasionally interspersed in some areas.

This community is not located within the development footprint; however, as depicted on Figure 5, 0.19 acre of this community is within the 200-foot fuel modification zone and thus may be affected by fuel modification activities. It is noted that all of the urban *Quercus agrifolia* woodland is currently within the brush thinning area of several surrounding residences.




SOURCE: NearMap (Aerial); TEG; DK Consulting, 2024

2807 S. Foose Road

**Figure 5**

Plant Communities and Land Use

ESA

### 2.4.3 Disturbed/Developed

5.37 acres of the study area have been disturbed and/or developed, including a significant portion of the proposed development footprint. Past disturbances appear to include mowing and brush clearance to control fuel load for fire suppression. There is currently a dirt access path that extends from Foose Road to an existing structure on the property. The vegetation within the disturbed/developed areas on the property, which includes the study area, is routinely mowed/cut and mostly consists of non-native grasses including common wild oat, ripgut brome, red brome, and fountain grass. Other species that are lightly scattered within the disturbed/developed areas that have been mapped in the study area include giant rye grass, deerweed (*Acmispon glaber),* Peruvian pepper tree (*Schinus molle*), Brazilian pepper tree (*Schinus terebinthifolia*), Canary Island pine (*Pinus canariensis*), and blue gum (*Eucalyptus globulus*). Additional non-native species include Bermuda buttercup, petty spurge (*Euphorbia peplus*), scarlet pimpernel (*Lysimachia arvensis*), and The disturbed/developed areas in the study area are consistent with fuel modification areas associated with adjacent properties.

0.33 acre of disturbed/developed area exists within the parcel boundary. The proposed development will be confined to the disturbed/developed and wild oat grassland areas on the property that comprise 0.19 acre. About 2.31 acres of disturbed/developed areas within the study area is within the 200-foot fuel modification zone and thus may be subjected to fuel modification activities.

### 2.4.4 Urban *Malosma laurina* Shrubland (laurel sumac shrubland)

0.26 acres of urban *Malosma laurina* (laurel sumac) shrubland alliance exists within the study area. This community is characterized by a dominance of laurel sumac scattered in an open shrubland because of brush thinning. Associated native shrubs include chaparral bush mallow (*Malacothamnus fasciculatus*) and deerweed (*Acmispon glaber*). The understory is comprised mostly of non-native grasses and forbs including, Bermuda buttercup (*Oxalis pes-caprae*), common wild oat, ripgut brome, panic veldt grass (*Ehrharta erecta*), and spiny sow thistle (*Sonchus asper*), with native purple needlegrass interspersed in some areas.

All of the urban *Malosma laurina* shrubland will be located within the 200-foot fuel modification.

### 2.4.5 Urban Mixed Woodland

0.66 acres of urban mixed woodland alliance exists within the study area. This community is characterized by a dominance of blue gum (*Eucalyptus globulus*), Peruvian peppertree (*Schinus molle*), and Canary Island pine (*Pinus canariensis*). The understory is comprised with mostly of non-native grasses and forbs including, common wild oat, ripgut brome, and red brome.

None of the urban mixed woodland will be impacted by the residential project.

## 2.5 Sensitive Natural Communities and Habitats

### 2.5.1 California Department of Fish and Wildlife

"Sensitive" natural communities and habitats are defined by the CDFW as those natural communities that have a reduced range and/or are imperiled as a result of residential and commercial development, agriculture, energy production and mining, or an influx of invasive and other problematic species. Vegetation communities are evaluated using NatureServe's Heritage Methodology (NatureServe, 2018) which is based on the knowledge of range and distribution of a specific vegetation type and the proportion of occurrences that are of good ecological integrity. Evaluation is done at both Global (natural range within and outside of California [G]) and Subnational (State level for California [S]), each ranked from 1 ("critically imperiled" or very rare and threatened) to 5 (demonstrably secure). Natural communities and habitats with state ranks of S1-S3 are considered Sensitive Natural Communities and require review when evaluating environmental impacts (CDFW, 2018b).

"Sensitive" natural communities and habitats were not observed within the study area during the survey.

### 2.5.2 Santa Monica Mountains Local Coastal Program

As described in Section 22.44.1800 *et seq.* of the LCP, various habitat categories are described as sensitive and require protection in the face of new development within the Coastal Zone. Certain habitats are designated as Sensitive Environmental Resource Areas (SERA), described as H1, H2 and H2 "High Scrutiny" habitat types; these take priority during the development process under the guidelines of the LCP. Habitats that would otherwise fall into the aforementioned designations if they had not been altered through approved developments or modifications (i.e. fuel modification) are categorized as H3 habitat (not SERA). As part of the LCP process, the County has generated a preliminary map depicting SERA based on available vegetation and habitat data within the plan area; this preliminary map is depicted in **Figure 6 – Sensitive Environmental Resource Areas (County-Designated)**.

#### *2.5.2.1 H1 Habitat*

Habitats of the highest biological significance including alluvial scrub, coastal bluff scrub, dunes, wetland, and native grassland and scrub (high concentration of native grasses or forbs), riparian, native oak, sycamore, walnut and bay woodlands, and rock outcrop habitat types.

Pursuant to Section 22.44.1800 *et seq.* of the LCP, the only habitat characterized as H1 habitat is the urban mixed woodland habitat associated with the drainage course. 0.39 acre of H1 habitat is present within the study area. No amount of H1 habitat exists within the development footprint or the 200-foot fuel modification.

#### *2.5.2.2 H1 Habitat (100-foot Buffer)*

All habitat mapped as H1 is afforded a 100-foot buffer to avoid indirect impact to the resource. An additional 100-foot "Quiet Zone" (measured from the outer edge of the 100-foot H1 habitat buffer) is required as well, where feasible, to avoid impact to wildlife that may utilize the habitat.

1.09 acres of H1 100-foot buffer habitat was identified within the study area, which is comprised entirely of disturbed/developed areas. No H1 habitat 100-foot buffer will be impacted by the residential project.

#### *2.5.2.3 H2 Habitat*

H2 habitat includes "Habitats of high biological significance, rarity, and sensitivity that are important for the ecological vitality and diversity of the Santa Monica Mediterranean Ecosystem" (LCP, 2014). H2 habitat generally includes contiguous portions of native vegetation communities that facilitate wildlife dispersal and migration, as well as supporting the persistence and growth of native plant populations.

H2 habitat was does not exist within the study area.

#### *2.5.2.4 H2 "High Scrutiny" Habitat*

H2 "high scrutiny" habitat is characterized as extra sensitive H2 habitat, that which supports species listed by the federal and state government as rare, threatened or endangered, CNPS "1B" and "2" listed plant species, California Species of Concern (SSC) or is designated as a "sensitive" natural community by the CDFW.

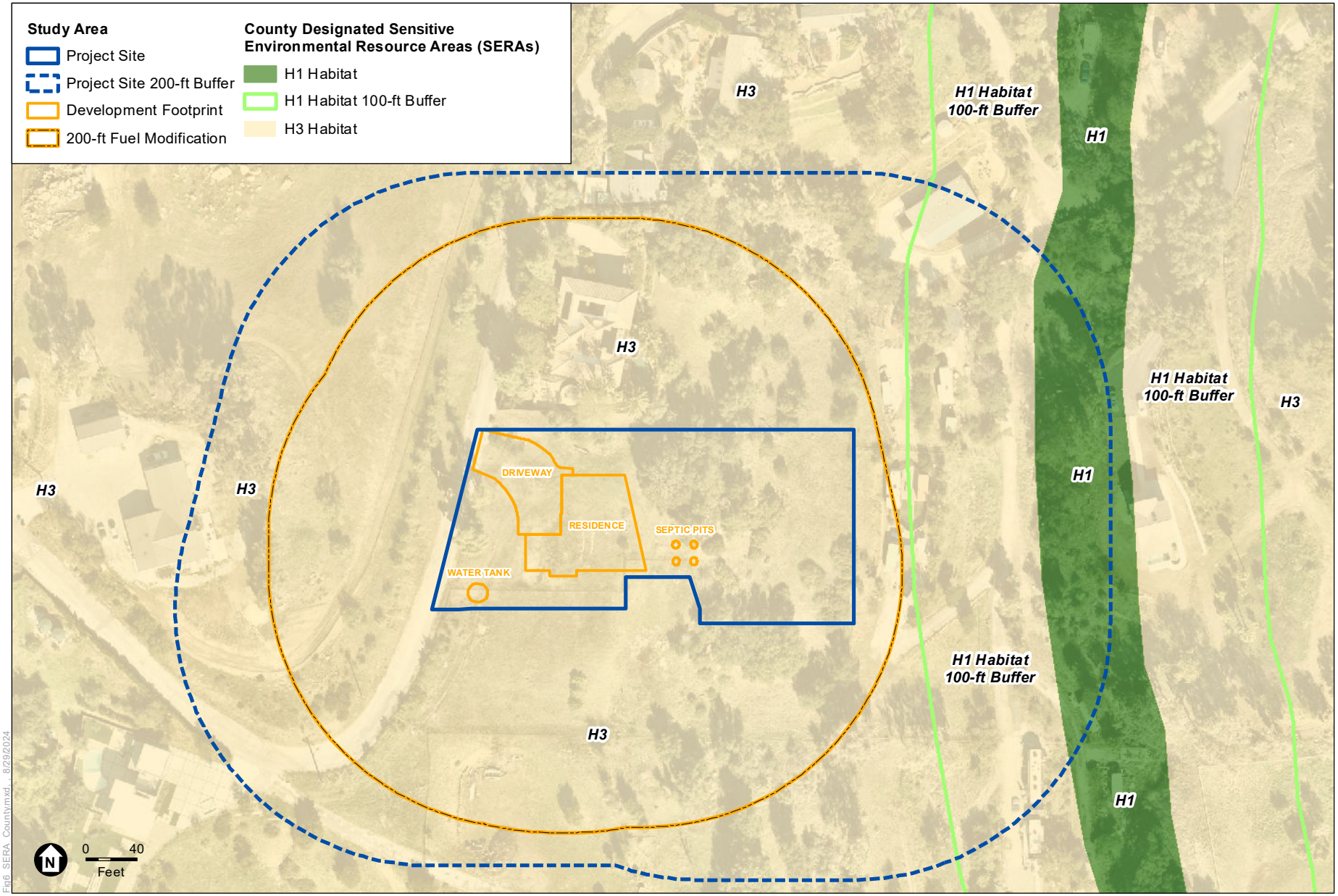
H2 "High Scrutiny" habitat does not exist within the study area.

#### *2.5.2.5 H3 Habitat*

H3 habitat is that which would otherwise be designated as SERA (H2 Habitat); however, as a consequence of lawful historic or past disturbance, the area has been fragmented, isolated, or completely removed, reducing its capability to support native plant and wildlife populations.

The disturbed/developed, non-native species dominated, and 'urban' habitat areas in the study area are characterized as H3 habitat, because these areas all show evidence of past disturbances and are mostly within onsite fuel modification or offsite brush thinning areas for existing residential uses. There is a high preponderance of non-native and invasive species present in all of the natural communities. For example, the understory of the project site urban *Quercus agrifolia* woodland alliance has Bermuda buttercup, common wild oat, ripgut brome, red brome, and panic veldt grass as dominant or co-dominant species. In addition, the urban *Quercus agrifolia* woodland alliance is isolated from contiguous native habitat areas as a result of existing rural residential land uses and associated fuel modification/brush thinning. The area where development is proposed totals less than 0.25 acre. As shown on Figure 6, up to 3.5 acres of this habitat type may be impacted as a result of fuel modification/brush thinning activities.

**Figure 6 – Sensitive Environmental Resource Areas (County-Designated)** on the previous page comports with the "surveyed" SERA mapped within the study area during the field assessment. **Table 1** below indicates the amount of each vegetation community and habitat type that occurs in the survey area, including those that would be impacted by development and that occur within fuel modification zone.




SOURCE: NearMap (Aerial); TEG; DK Consulting, 2024

2807 S. Foose Road

**Figure 6**

Sensitive Environmental Resource Areas (County-Designated)

ESA

**TABLE 1**
**VEGETATION AND HABITAT CATEGORIES WITHIN THE SURVEY AREA**

| Vegetation Communities | Habitat Category | Total (acres) | H1 Habitat (100-foot buffer) (acres) | Impact Area* (acres) | Fuel Modification/Brush Thinning Zone (acres) | | |
|---|---|---|---|---|---|---|---|
| | | | | | Proposed Project (Onsite) | Adjacent Properties (Offsite) | New Areas** |
| Urban *Quercus agrifolia* Woodland Alliance | H3 | 0.80 | -- | -- | 0.15 | 0.70 | 0.0 |
| *Avena Herbaceous* Semi-Natural Alliance | H3 | 1.03 | -- | 0.06 | 0.28 | 0.58 | 0.20 |
| Urban *Malosma laurina* Shrubland | H3 | 0.26 | -- | -- | 0.16 | 0.04 | 0.0 |
| Urban Mixed Woodland | H3 | 0.66 | -- | -- | -- | -- | 0.0 |
| Disturbed/Developed | H3 | 5.37 | 1.09 | 0.19 | 0.16 | 2.25 | 0.32 |
| **Total** | | **8.13** | **1.09** | **0.25** | **0.75** | **3.57** | **0.52** |

** Includes areas where construction impacts will occur.*

*** Includes areas that will be subject to fuel modification that are not currently within brush thinning zones from adjacent residences.*

## 2.6 Wildlife

The generally contiguous natural topography, friable soils and unimpaired connection with adjacent native habitats in all directions, mainly to the northwest and southeast, suggest that many species of wildlife are likely to utilize the site both for foraging and breeding. These features indefinitely support moderate to largescale migration and are likely to increase the influx into and sustained utilization of the immediate area by many forms of wildlife.

### 2.6.1 Common Wildlife

Avian species observed during the field assessment include bushtit (*Aegithalidae* ssp.), California scrub jay (*Aphelocoma californica*), red-tailed hawk *(Buteo jamaicensis*), Anna's hummingbird (*Calypte anna*), turkey vulture (*Cathartes aura*), wrentit (*Chamaea fasciata*), rock dove (*Columba livia*), American crow *(Corvus brachyrhynchos*), common yellowthroat (*Geothlypis trichas*), house finch (*Haemorhous mexicanus*), acorn woodpecker (*Melanerpes formicivorus*), northern mockingbird (*Mimus polyglottos*), spotted towhee (*Pipilo maculatus*), black phoebe (*Sayornis nigricans*), yellow-rumped warbler (*Setophaga coronate*), lesser goldfinch (*Spinus psaltria*), and mourning dove (*Zenaida macroura*). Additionally, three mammal species coyote (*Canis latrans*), deer mouse (*Peromyscus maniculatus*), and desert cottontail (*Sylvilagus audubonii*) and one reptile species, western fence lizard (*Sceloporus occidentalis*) were observed.

A number of additional common-occurring birds, reptiles and mammals not observed during the site assessment are likely to forage and/or breed throughout the study area as well. A list of wildlife species observed is included in **Appendix C**.

### 2.6.2 Special-Status Wildlife

Special-status wildlife is defined as those animals that, because of their recognized rarity or vulnerability to various forms of habitat loss or population decline, are considered by federal, state, or other agencies to be under threat from human-associated developments. Some of these species receive specific protection that is defined by this federal or state endangered species legislation and others have been designated as special-status on the basis of adopted local policies (i.e. city and county) or the educated opinion of respected resource interest groups (i.e. Western Bat Working Group). Special-status wildlife is defined as follows:

- Wildlife listed or proposed for listing as threatened or endangered, or are candidates for possible future listing as threatened or endangered, under the federal Endangered Species Act or the California Endangered Species Act;
- Wildlife that meet the definitions of rare or endangered under *California Environmental Quality Act* (*CEQA*) *Guidelines* Section 15380;
- Wildlife designated by CDFW as species of special concern, included on the Watch List or are considered Special Animals;
- Wildlife "fully protected" in California (Fish and Game Code Sections 3511, 4700, and 5050);
- Birds designated as “sensitive” by the Los Angeles Audubon Society or are included in the Bird Watch list;
- Bird species protected by the Migratory Bird Treaty Act (MBTA); and
- Bat species considered priority by the Western Bat Working Group (WBWG).

A review of the most recent CNDDB (CDFW, 2018a) records for the study area revealed that numerous special-status wildlife species have previously recorded within the six USGS quadrangle search area. Wildlife species generated in the query that are not expected to occur within the study area based on an absence of suitable habitat, known geographic distributions and/or range restrictions, were omitted and are not discussed further discussion in this report. A complete list of the species generated in the CNDDB query are provided in **Appendix E – CNDDB and CNPS Search Results**.

The Audubon’s Los Angeles County’s Sensitive Bird Species List [LAA] (Allen, LW, et al. 2009) was reviewed to determine the potential for “sensitive” or “watch list” bird species to occur within the study area. The special-status wildlife listed in **Table 3 – Potentially Occurring Special-Status Species within the Study Area** were determined to have varying levels of potential to occur based on the following criteria:

> **Low Potential:** The study area supports limited habitat for a particular species. For example, the appropriate vegetation assemblage may be present while the substrate preferred by the species may be absent.

**Moderate Potential:** The study area provides marginal habitat for a particular species. For example; the habitat may be heavily disturbed and/or may not support all stages of a species life cycle.

**High Potential:** The study area provides suitable habitat conditions for a particular species and/or known populations occur in the immediate area.

**Present:** The species was observed within the study area during the site visit.

Based on the vegetation and habitats that were characterized during the field assessment, it was determined that 17 wildlife species have a low-to-high potential to occur, including Cooper's hawk (*Accipiter cooperii*), Southern California rufous-crowned sparrow (*Aimophila ruficeps ssp. Canescens*), Southern California legless lizard (*Anniella pulchra ssp. Pulchra*), pallid bat (*Antrozous pallidus*), coastal western whiptail (*Aspidoscelis tigris ssp. Stejnegeri*), oak titmouse (*Baeolophus inornatus*), crotch bumble bee (*Bombus crotchii*), ferruginous hawk (*Buteo regalis*), turkey vulture (*Cathartes aura*), San Bernardino ringneck snake (*Diadophis punctatus ssp. Modestus*), California horned lark (*Eremophila alpestris actia*), greater western mastiff bat (*Eumops perotis ssp. Californicus*), California towhee (*Melozone crissalis*), San Diego desert woodrat (*Neotoma lepida ssp. Intermedia*), coast horned lizard (*Phrynosoma blainvillii*), California gnatcatcher (*Polioptila californica californica*), and Santa Monica grasshopper (*Trimerotropis occidentiloides*).

One avian species, designated as "sensitive" by the Los Angeles Audubon Society, turkey vulture, was observed flying overhead within the study area during the site visit. Species that were either observed during the site visit or have a medium-to-high potential to occur within the study area are discussed in detail in Section 5.0 of this report.

**TABLE 3**
**POTENTIALLY OCCURRING SPECIAL-STATUS WILDLIFE SPECIES WITHIN THE STUDY AREA**

| Common Name | Scientific Name | Status (Federal/State/Other) | Habitat | Potential to Occur |
|---|---|---|---|---|
| **Birds** | | | | |
| Cooper's hawk | *Accipiter cooperii* | None/WL, SA | Cismontane woodland, riparian forest and woodland and upper montane coniferous forest. | **Moderate.** Suitable foraging habitat is present within the study area. Marginal nesting habitat is present in the ornamental trees within 500 feet of the development footprint. One CNDDB observation was made in 2008 approximately 2.5 miles northeast. |
| Southern California rufous-crowned sparrow | *Aimophila ruficeps* ssp. *canescens* | None/WL, SA | Chaparral and coastal scrub. | **High.** Suitable foraging and breeding habitat for this species is present within the study area.<br>This species is non-migratory and maintains a territory year-round; therefore, there is a high potential that this species could nest within 500 feet of the development footprint (Cornell, 2015). |
| Oak titmouse | *Baeolophus inornatus* | None/SA/LAA | Dense, mature chaparral, forests and woodlands. | **High**. Foraging and breeding habitat for this species is present within the oak trees located within the study area. This species may forage and breed within 500 feet of the development footprint. |
| Ferruginous hawk | *Buteo regalis* | None/None/WL | Open grasslands, sagebrush flats, desert scrub, low foothills. | **Low.** Marginal habitat is present within study area. Last CNDDB occurrence was in 1991 in Mugu Lagoon, approximately 12.5 miles southeast**.** |
| Turkey vulture | *Cathartes aura* | None/None/LAA | Various habitat types including chaparral, forest, scrub and woodland communities | **Present**. Species was observed flying overhead of the study area. This species may forage on carcasses located within the study area but is not expected to nest in the study area. |
| California horned lark | *Eremophila alpestris actia* | None/None/WL | Short grass prairie, mountain meadows, open coastal plains, fallow grain fields | **Low**. Low quality foraging habitat not present within study area. Last CNDDB occurrences were in 2002 and 2004 in the cities of Camarillo and Thousand Oaks, approximately 13.5 miles and 6.5 miles away, respectively. |
| California towhee | *Melozone crissalis* | None/None/LAA | Chaparral, coastal scrub. Grasslands, | **High.** Suitable foraging and nesting habitat for this |

| | | | | |
|---|---|---|---|---|
| | | | forests and woodlands. | species is present within the project site and is expected to occur within the study area. |
| California gnatcatcher | *Polioptila californica californica* | Threatened/None/SSC | Coastal sagebrush scrub | **Low**. Sagebrush scrub is absent from the study area. Three CNDDB observations have been recorded in the cities of Camarillo (2008 and 2009) and Newbury Park (2016). These observations were 13.5 miles and 7 miles away, respectively. |
| **Mammals** | | | | |
| Pallid bat | *Antrozous pallidus* | None/SSC, SA/WBWG-H | Grasslands, shrublands, woodlands, and coniferous forests; most common in open, dry habitat with rocky areas for roosting, as well as abandon buildings and medal clad structures Species is known to roost in cavities of oak trees (WBWG, 2018). | **Low.** Marginal foraging habitat is present within the study area. No suitable cavities within the oak trees for roosting were observed. The only CNDDB occurrence was in Thousand Oaks in 2004. |
| Greater western mastiff bat | *Eumops perotis* ssp. *californicus* | None/SSC, SA/WBWG-H | Chaparral, cismontane woodland, coastal scrub and valley and foothill grassland. Roosts in small colonies in rock fissures in high cliff faces (WBWG, 2018). | **Low.** Marginal foraging habitat is present within the study area; however, substantial rock outcrops preferred for roosting/breeding are not present. |
| San Diego desert woodrat | *Neotoma lepida* ssp. *intermedia* | None/SSC, SA | Coastal scrub | **Low.** Suitable habitat for this species is not present within the study area. No woodrat middens were observed during the field assessment. One CNDDB occurrence was reporting in 2016 in Newbury Park. |
| **Reptiles** | | | | |
| Southern California legless lizard | *Anniella pulchra* ssp. *pulchra* | None/SSC, SA | Chaparral, coastal dunes and coastal scrub. | **High.** Suitable habitat for this species is present within the coast live oak woodland community. |
| Coastal western whiptail | *Aspidoscelis tigris* ssp. *stejnegeri* | None/SSC, SA | Deserts and semiarid areas with sparse vegetation and open areas, woodland and riparian areas. | **High.** Suitable habitat for this species is present within the coast live oak woodland community. This species could potentially occur within the project site and |

| | | | | |
|---|---|---|---|---|
| | | | | incidentally occur within the development footprint. |
| San Bernardino ringneck snake | *Diadophis punctatus* ssp. *modestus* | None/SA | Prefers mesic habitats (California Herps, 2018) within wet meadows, rocky hillsides, cultivated and disturbed areas, grassland, chaparral, coniferous forests and various woodlands. | **Low.** While marginal vegetation is located throughout the study area. mesic conditions preferred by the species are not present. |
| Coast horned lizard | *Phrynosoma blainvillii* | None/SSC, SA | Various habitats throughout the foothills of California including coast live oak woodland and the herbaceous cover and friable soils. | **High.** Suitable habitat for this species is present within the coast live oak woodland community. This species could potentially occur within the project site and incidentally occur within the development footprint. |
| **Invertebrates** | | | | |
| Crotch bumble bee | *Bombus crotchii* | None/SA/None | Coastal scrub and chaparral | **High.** Suitable habitat is located within the study area. This species may occur within the project site and incidentally within the development footprint. |
| Santa Monica grasshopper | *Trimerotropis occidentiloides* | None/SA | Chaparral | **High.** Suitable habitat is located within the study area. This species may occur within the project site and incidentally within the development footprint. |

Federal/State/Other Status: SSC – State Species of Special Concern, SA – State Special Animal, WL – State watch List; WBWG - Western Bat Working Group List (H – high priority)

## 2.7 Plants

Vegetation within the study area consists of a dominance of non-native grasses in varying states of disturbance interspersed with native laurel sumac shrubs, some of which have been cut from previous brush clearance activities. Disturbance appears to have been caused by various forces such as fuel modification and grading. Extensive development has occurred within the study area, including the construction of several private residences and public and private roadways that are adjacent to the proposed project.

All plants observed during site study were recorded and a comprehensive list is provided in **Appendix C**; those that were unidentified in the field were keyed to the species level using the 2012 Jepson Manual (Baldwin et al, 2012).

### 2.7.1 Special-Status Plants

Special-status plants are defined as those plants that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, or other agencies as under threat from human-associated developments. Some of these species receive specific protection that is defined by federal or state endangered species legislation. Others have been designated as special-status on the basis of adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. Special-status plants are defined as follows:

- Plants listed or proposed for listing as threatened or endangered, or are candidates for possible future listing as threatened or endangered, under the federal Endangered Species Act or the California Endangered Species Act;
- Plants that meet the definitions of rare or endangered under *State CEQA Guidelines* Section 15380;
- Plants considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered (Rank 1A, 1B, 2A and 2B plants) in California;
- Plants listed by the CNPS as plants in which more information is needed to determine their status and plants of limited distribution (Rank 3 and 4 plants); and
- Plants listed as rare under the California Native Plant Protection Act (Fish and Game Code 1900 et seq.)

A review of the CNDDB (CDFW, 2018a) and the CNPS Inventory of Rare and Endangered Plants (CNPS, 2018) revealed numerous special-status plant species recorded within the six USGS 7.5-minute topographic quadrangle search. The potential for special-status plant species to occur is based on on-site vegetation and habitat quality, topography, elevation, soils, surrounding land uses, habitat preferences and geographic ranges. Based on the level of disturbance within the study area and absence of suitable habitat, as well as, known geographic distributions and/or range restrictions, it was determined that many of the special-status plant species recorded to the

CNDDB and CNPS Inventory do not have the potential to occur within the study area and are therefore omitted from further discussion in this report.

As indicated in **Table 4 - Special-Status Plant Species within the Study Area**, the is a low potential for 18 special-status plants to occur in the study area. Low potential for a special-status plant to occur is based on there being limited and/or poor quality habitat for a particular species. For example, the appropriate vegetation assemblage may be present while the substrate preferred by the species may be absent or the study area may be out of the elevation range for the species or the level of disturbance in the study area is so great that it renders the potential for occurrence to be low. Moreover, due to the high level of previous disturbances on the project site from ongoing brush clearance and grading, there is no potential for any special-status plant to occur within the project's development footprint.

The 18 special-status plant species have a low potential to occur within the study area include western spleenwort (*Asplenium vespertinum*,) Davidson's saltscale (*Atriplex serenana var. davidsonii*), Malibu Baccharis (*Baccharis malibuensis*), Brewer's calandrinia (*Calandrina breweri*), slender mariposa lily (*Calochortus clavatus var. gracilis*), Plummer's mariposa lily (*Calochortus plummerae*), island mountain-mahogany (*Cercocarpus betuloides var. blancheae*), San Fernando Valley spineflower (*Chorizanthe parryi var. Fernandina*), Parry's spineflower (*Chorizanthe parryi var. parryi*), Agoura Hills dudleya (*Dudleya cymosa ssp. agourensis*), Santa Monica dudleya (*Dudleya cymosa ssp. ovatifolia*), many-stemmed dudleya (*Dudleya multicaulis*), Conejo buckwheat (*Eriogonum crocatum*), Santa Susana tarplant (*Hemizonia minthornii*), white-veined monardella (*Monardella hypoleuca ssp. hypoleuca*), Ojai navarretia (*Navarretia ojaiensis*), chaparral nolina (*Nolina cismontane*), Lyon's pentachaeta *(Pentachaeta lyonii*), and Hubby's phacelia (*Phacelia hubbyi*).

Catalina mariposa lily (*Calochortus catalinae*) was recently designated as 'considered but rejected' by the CNPS, indicating that the species is no longer given a CRPR.[1] However, the April 2025 CDFW Special Plant list retains Catalina mariposa lily as CRPR 4.2.[2] Additionally, Catalina mariposa lily is not included in the April 2025 CDFW summary of changes to the California Natural Diversity Database.[3] This species has a low potential to occur within the study area and the removal of the CRPR 4.2 designation by CNPS does not alter this potential, which remains low.

[1] California Native Plant Society. 2025. *Calochortus catalinae*. https://rareplants.cnps.org/Plants/Details/376. Accessed: April 30, 2025.

[2] California Department of Fish and Wildlife. 2025. Special Vascular Plants, Bryophytes, and Lichens List, April 2025. https://nrm.dfg.ca.gov/filehandler.ashx?documentid=109383&inline. Accessed: April 30, 2025.

[3] California Department of Fish and Wildlife. 2025. Changes to the CNDDB Special Vascular Plants, Bryophytes, and Lichens List, April 2025 (PDF Page 4). https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109389&inline. Accessed: April 30, 2025.

**TABLE 4**
**POTENTIALLY OCCURRING SPECIAL-STATUS PLANT SPECIES WITHIN THE STUDY AREA**

| Common Name | Scientific Name | Status (Federal/State/Other) | Habitat | Potential to Occur |
|---|---|---|---|---|
| **Plants** | | | | |
| Western spleenwort | *Asplenium vespertinum* | None/None/4.2 | Chaparral, coastal scrub and cismontane woodland. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. The nearest observation was made in 1963 and is approximately 5 miles northeast (Calflora). |
| Davidson's saltscale | *Atriplex serenana var. davidsonii* | None/None/1B.2 | Coast bluff scrub and coastal scrub | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. The nearest observation was made in 1974 and is approximately 4 miles to the east (Calflora). |
| Malibu Baccharis | *Baccharis malibuensis* | None/None/1B.1 | Chaparral, cismontane woodland, coastal scrub and riparian woodland. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. The nearest observation was made 1988 and is approximately 10.5 miles east (Calflora). |
| Brewer's calandrinia | *Calandrina breweri* | None/None/4.2 | Chaparral, Northern Coastal Scrub, Coastal Sage Scrub | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. There have been three observations within three miles of the study area; however, these observations were in 1931 (Calflora). |
| Catalina mariposa lily | *Calochortus catalinae* | None/None/4.2 | Chaparral, cismontane woodland, coastal scrub and valley and foothill grassland. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. Several Calflora observations have been made within two miles of the project site; however, these observations were made prior to 1940. CNPS removed this species from CRPR 4.2 in February 2025. |

**TABLE 4**
**POTENTIALLY OCCURRING SPECIAL-STATUS PLANT SPECIES WITHIN THE STUDY AREA**

| Common Name | Scientific Name | Status (Federal/State/Other) | Habitat | Potential to Occur |
|---|---|---|---|---|
| Slender mariposa lily | *Calochortus clavatus* var. *gracilis* | None/None/1B.2 | Chaparral, coastal scrub and valley and foothill grassland. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. The nearest observation was made in 1959, approximately 12 miles east (Calflora). |
| Plummer's mariposa lily | *Calochortus plummerae* | None/None/4 | Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest and valley and foothill grasslands. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. There have been two occurrences within 1.5 miles of the project site; however, the observations were in 1943 (Calflora). |
| Island mountain-mahogany | *Cercocarpus betuloides* var. *blancheae* | None/None/4.3 | Closed-cone coniferous forest and chaparral. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. The nearest observation was within 1.5 miles of the study area; however, the observation was in 2003 (Calflora). |
| San Fernando Valley spineflower | *Chorizanthe parryi* var. *fernandina* | FSC/SC/1B | Sandy soils within coastal scrub and valley and foothill grassland. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. The nearest observation was made in 1901, approximately 24 miles northeast (Calflora). |
| Parry's spineflower | *Chorizanthe parryi* var. *parryi* | None/None/1B.1 | Sandy or rocky, openings within chaparral, cismontane woodland, coastal scrub and valley and foothill grassland. | **Low**. Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. The nearest observation was made in 1957, approximately seven miles southeast (Calflora). |

**TABLE 4**
**POTENTIALLY OCCURRING SPECIAL-STATUS PLANT SPECIES WITHIN THE STUDY AREA**

| Common Name | Scientific Name | Status (Federal/State/Other) | Habitat | Potential to Occur |
|---|---|---|---|---|
| Agoura Hills dudleya | *Dudleya cymosa ssp. Agourensis* | FT/None/1B.2 | Sedimentary or volcanic, rocky substrate within chaparral or coastal scrub. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. The nearest observation was made in 1981 and is approximately 5.5 miles northeast (Calflora). |
| Santa Monica dudleya | *Dudleya cymosa* ssp. *ovatifolia* | FT/None/1B.1 | Sedimentary or volcanic, rocky substrate within chaparral or coastal scrub. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. There have been four observations of this species within 1.5 miles of the project site; however, the observations were made in 1960 (Calflora). |
| Many-stemmed dudleya | *Dudleya multicaulis* | None/None/1B.2 | Chaparral, coastal scrub, and valley and foothill grassland | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. The nearest observation was made in 189 and is approximately 15.4 miles southeast in Santa Monica (Calflora). |
| Conejo buckwheat | *Eriogonum crocatum* | None/CR/1B.2 | Conejo volcanic outcrops within chaparral, coastal scrub and valley and foothill grassland. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. The nearest observation was in 1978 and is approximately 6.5 miles northeast (Calflora). |
| Santa Susana tarplant | *Hemizonia minthornii* | None/CR/1B.2 | Rocky substrate within chaparral and coastal scrub. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. There have been two occurrences within two miles of the study area; however, they were in 1978 and 2002 (Calflora). |

**TABLE 4**
**POTENTIALLY OCCURRING SPECIAL-STATUS PLANT SPECIES WITHIN THE STUDY AREA**

| Common Name | Scientific Name | Status (Federal/State/Other) | Habitat | Potential to Occur |
|---|---|---|---|---|
| White-veined monardella | *Monardella hypoleuca* ssp. *hypoleuca* | None/None/1B.3 | Chaparral and cismontane woodland. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. The nearest observation made for this species was in 1898 and was approximately 10 miles east Calflora). |
| Ojai navarretia | *Navarretia ojaiensis* | None/None/1B.1 | Openings within chaparral, coastal scrub and throughout valley and foothill grassland. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. The nearest observation was made in 2012 and is approximately 5.8 miles northeast (Calflora). |
| Chaparral nolina | *Nolina cismontana* | None/None/1B.2 | Sandstone and gabbro substrate within chaparral and coastal scrub. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. The nearest observation was made near Thousand Oaks in 1985 Calflora). |
| Lyon's pentachaeta | *Pentachaeta lyonii* | FE/CE/1B.1 | Rocky, clay substrate within chaparral, coastal scrub and valley and foothill grassland. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. The nearest observation was made in 1944 and was approximately 5.5 miles northeast (Calflora) |
| Hubby's phacelia | *Phacelia hubbyi* | None/None/4.2 | Gravelly or rocky soils within chaparral. Coastal scrub and valley and foothill grassland. | **Low.** Suitable habitat within the study area is considered low due to the amount of past disturbances that have occurred. The nearest observation was made in 1926 and is approximately 7.5 miles southeast (Calflora). |

Federal/State/Other Status: FE – federally endangered, FT – federally threatened; FSC – Federal Species of Concern; SE – State endangered, SSC – State Species of Special Concern, WL – State watch List; CE – State Endangered Candidate
S1- 6 element occurrences (Eos) or less than 1,000 individuals or less than 2,000 acres; S2– 6-20 Eos or 1,000-3,000 individuals or 2,000-10,000 acres; S3 – 21-100 Eos or 3,000-10,000 individuals or 10,000-50,000 acres; SNR – Conservation status not yet assessed; California Native Plant Society (CNPS) 1B – Plants rare, threatened or endangered in California and elsewhere, 2 – Plants rare, threatened or endangered in California, but more common elsewhere, and 4 – Plants of limited distribution; 0.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat), 0.2 Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat) and 0.3 Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

## 2.8 Protected Trees

Pursuant to Section 22.44.1870 of the LCP (LCP, 2014), all new developments shall be sited and designed to preserve, oak, walnut, sycamore, bay or other individual native trees to the maximum extent feasible. Native trees include those that have at least one trunk measuring a total of 6 inches or more in diameter, or a combination of any two trunks measuring a total of eight inches or more in diameter at breast height. As depicted in **Figure 7 – Protected Trees**, approximately 14 coast live oak trees were observed within the project site during the field assessment. The proposed development footprint/site plan was intentionally designed to avoid protected trees; therefore, no protected trees will be removed or encroached during grading or construction of the proposed development. The OWTS is proposed less than 50 feet from the closest coast live oak tree canopy. The location for the OWTS is not expected to be detrimental to the health of the oak tree because the elevation of the oak tree and the OWTS are approximately the same and there are no oak trees located down slope (to the east) of the proposed OWTS location.

## 2.9 Critical Habitat

Under the Federal Endangered Species Act (FESA), to the extent feasible, the USFWS and National Marine Fisheries Service (NMFS) are required to designate critical habitat for endangered and threatened species. Critical habitat is defined as areas of land, water, and air space containing the physical and biological features essential for the survival and recovery of endangered and threatened species. Designated critical habitat includes sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. Designated critical habitats require special management and protection of existing resources, including water quality and quantity, host animals and plants, food availability, pollinators, sunlight, and specific soil types. Critical habitat delineates all suitable habitat, occupied or not, essential to the survival and recovery of the species.

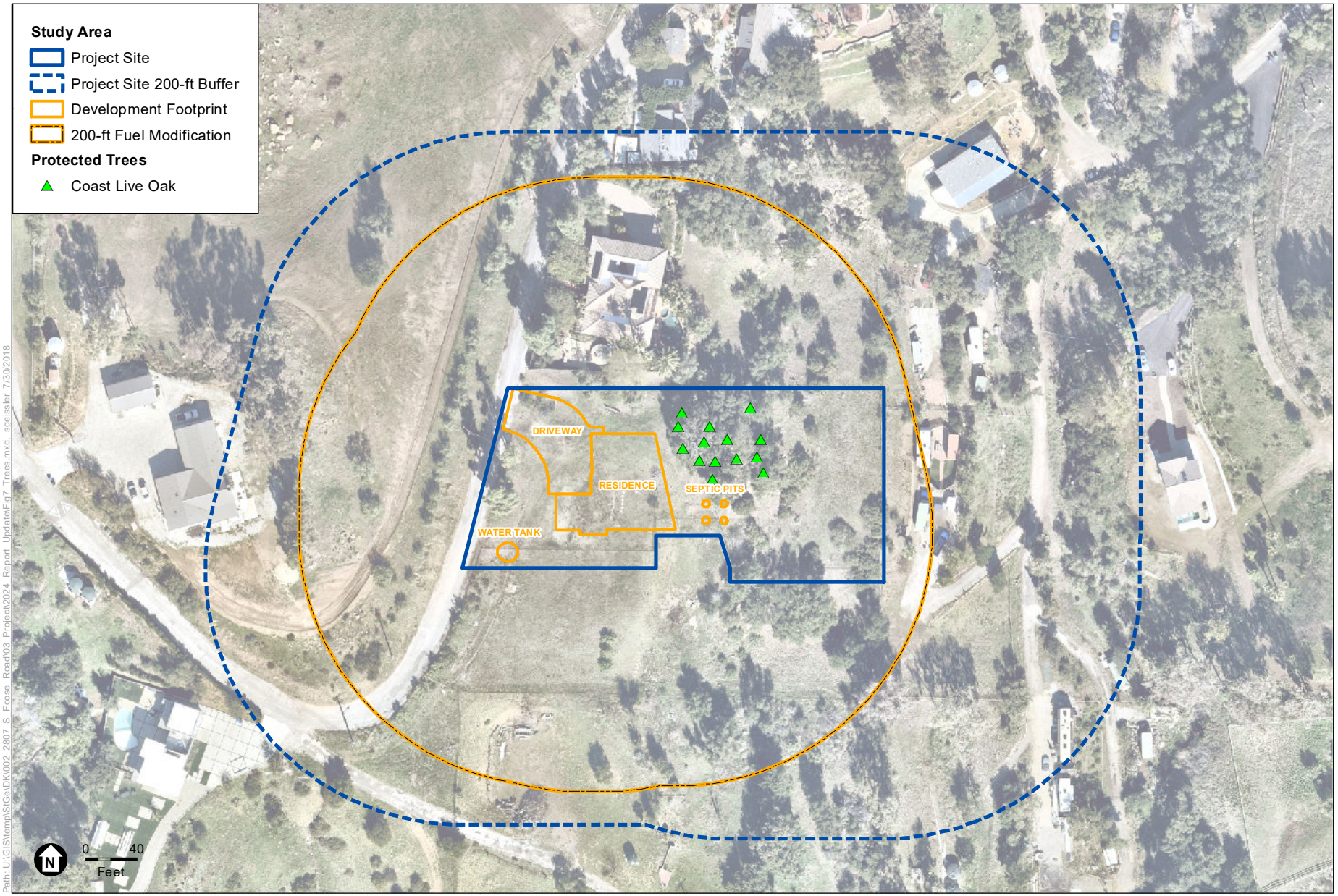
No critical habitat is located within the study area. The closest known critical habitat is for Southern California steelhead (*Oncorhynchus mykiss*), western snowy plover (*Charadrius nivosis* ssp. *nivosis*) and tidewater goby (*Eucyclogobius newberryi*), which are located approximately 2.50 miles west, 3.5 miles southeast, and 5 miles southeast, respectively. In addition, designated critical habitat for Braunton's milkvetch (*Astragalus brauntonii*) is about 3.6 miles southeast and Lyon's pentachaeta (*Pentachaeta lyonii*) is about 3.2 miles northeast of the project site.

## 2.10 Jurisdictional Resources

There are no wetlands, creeks, streams, or episodic features such as ephemeral drainages, located on or adjacent to the study area.

# 3. Characteristics of the Surrounding Area

This section discusses the characteristics of existing habitat and land use surrounding the study area based on review of aerial imagery and overall knowledge of the region.




SOURCE: NearMap (Aerial); TEG; DK Consulting, 2024

2807 S. Foose Road

**Figure 7**

Protected Trees

ESA

## 3.1 Existing Land Uses and Open Space

As described in Section 2.1 of this report, the study area is located in the County of Los Angeles, within the U.S. Geological Survey (USGS) Triunfo Pass, California, 7.5-minute topographic quadrangle. It is situated within the Transverse Range, and more specifically, the Santa Monica Mountains. Currently, land use immediately surrounding the study area consists of non-native grasslands and coast live oak woodlands fragmented by rural residential development, public and private roadways and various utilities. Land use elsewhere within the Santa Monica Mountains is similar in character; however, with and greater density and diversity of residential and commercial development to the south towards Pacific Coast Highway. Existing development to the north within the Santa Monica Mountains is generally sparser compared to the south (from the study area), until reaching the Conejo and San Fernando Valleys. Public and private roads provide a connection between the Conejo and San Fernando Valleys to the Pacific Coast Highway and Pacific Ocean.

## 3.2 Plant Communities and Habitats

Native vegetation similar to that observed within the study area also encompasses much of the surrounding landscape, as well as a significant portion of the Santa Monica Mountains. Similar to the study area, surrounding woodland associations in the vicinity support an overstory that is dominated with coast live oak with a somewhat sparse understory consisting of non-native grasses. Shrub communities in the vicinity of the study area predominantly consist of fire-adapted species with scleroyphyllous or drought-retardant and waxy foliage and are expected to be dominated by at least one of the following chaparral species: red shank (*Adenostema sparsifolium*), manzanita (*Arctostaphylos* spp.), big pod ceanothus, greenbark ceanothus, chamise, laurel sumac, scrub oak (*Quercus berberidifolia*), and toyon. Other chaparral-dominant communities exist in the region and throughout the Santa Monica Mountains as well.

Many annual and perennial herbaceous species generally occur in the vicinity and throughout the Santa Monica Mountains. While even dense tree and shrub communities support an herbaceous layer to some degree, herbaceous communities are the first to succeed in unvegetated areas as many associated species are quick to sprout, flower and seed, and therefore, become very dense and dominate areas of historic disturbance. Density and diversity of herbaceous communities throughout the Santa Monica Mountains are generally dependent on the degree to which natural and/or human disturbances, such as wildfires, private and public development, and off-road vehicular traffic have impacted the region. Dominant species expected to occur throughout herbaceous communities in the region include wild oat (*Avena* sp.), narrow leaf milkweed, ripgut brome (*Bromus diandrus*), Canterbury bells (*Phacelia cicutaria* ssp. *hispida*), and to a lesser degree, native grassland dominated by needlegrass (*Stipa* spp.) and/or other native species.

It is expected that the surrounding landscape provides similar habitat for most of the common and special-status species of wildlife that have been acknowledge previously in this report.

## 3.3 Cumulative Impacts

Cumulative impacts are defined as those created by various development projects situated within close geographical proximity of each other. Where one of these impacts occurring independently of the others may introduce a relatively limited impact to biological resources; their combined impact may have a much greater effect on biological resources within the region.

The project is proposed within an existing, previously developed community, located along Foose Road. A paved, private driveway will be created on the parcel and the development footprint is proposed almost exclusively within an existing graded pad. Construction of the residence will result in the limited removal of native vegetation, both through grading and fuel modification; however, these impacts are not expected to significantly reduce the value of the surrounding habitat within the immediate region and would not result in substantial cumulative impacts to native habitats and sensitive biological resources in the region.

## 3.4 Wildlife Movement and Habitat Linkages

The Santa Monica Mountains, and Western Transverse Ranges as a whole, have historically provided a vital connection between the coast and Sierra Nevada Ranges of northern and central California, as well as between the coast and the San Gabriel and San Bernardino Mountain Ranges in the southern portion of the state. In the face of ongoing commercial, industrial and residential development pressures occurring throughout the state of California, the foothills and mountainous topography of these ranges provide necessary patches of undeveloped habitat for many species of flora and fauna that is becoming increasingly absent throughout the valleys and inland basins. In addition to providing contiguous upland habitat for various terrestrial wildlife species, the canyons and waterways traversing through the Santa Monica Mountains and surrounding ranges provide invaluable habitat to various aquatic species as well.

Apex predators such as coyote and mountain lion (*Puma concolor*), and meso-predators including gray fox (*Urocyon cinereoargenteus*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*) and Virginia opossum (*Didelphis virginiana*), including various large mammals such as California mule deer (*Odocoileus hemionus californicus*), are known to utilize the vast open space of the Santa Monica Mountains for movement. While these species undoubtedly utilize the upland habitats for overland travel, the canyons and streams within these mountain landscapes are also known to support long-term migration, and they provide an invaluable resource for food, water, and shelter.

The study area and surrounding lands does not provide a substantial connection between areas of contiguous open space and habitat. While wildlife may utilize the study area to forage, breed and/or for overland travel, it is not likely that wildlife would use this area for any form of largescale or local migration and development of the project site would not impede or otherwise negatively affect regional wildlife movement throughout the Santa Monica Mountains.

# 4. Regulatory Setting

## 4.1 Federal and State Endangered Species Acts

FESA provides guidance for conserving federally listed species and the ecosystems upon which they depend. Section 9 of the FESA and its implementing regulations prohibit the "take" of any federally-listed endangered or threatened plant or animal species, unless otherwise authorized by federal regulations. "Take" includes the destruction of a listed species' habitat. Section 9 also prohibits a number of specified activities with respect to endangered and threatened plants.

The California Endangered Species Act (CESA) mandates that state agencies not approve a project that would jeopardize the continued existence of species if reasonable and prudent alternatives are available that would avoid a jeopardy finding. CESA also prohibits the take of any fish, wildlife, or plant species listed as endangered or threatened, or designated as candidates for listing, under CESA. Similar to the FESA, CESA contains a procedure for the CDFW to issue an incidental take permit authorizing the take of listed and candidate species incidental to an otherwise lawful activity, subject to specified conditions.

## 4.2 Migratory Bird Treaty Act

The federal MBTA prohibits the take of native birds "by any means or manner to pursue, hunt, take, capture (or) kill" any migratory birds except as permitted by regulations issued by the USFWS. The term "take" is defined by USFWS regulation to mean to "pursue, hunt, shoot, wound, kill, trap, capture or collect" any migratory bird or any part, nest, or egg of any migratory bird covered by the conventions, or to attempt those activities.

## 4.3 Clean Water Act

In accordance with Section 404 of the Clean Water Act (CWA), the USACE regulates discharge of dredged or fill material into waters of the U.S... Waters of the U.S. and their lateral limits are defined in 33 CFR 328.3(a) and includes navigable waters of the U.S., interstate waters, all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Waters of the U.S. are often categorized as "jurisdictional wetlands" (i.e., wetlands over which the USACE exercises jurisdiction under Section 404) and "other waters of the United States" when habitat values and characteristics are being described. "Fill" is defined as any material that replaces any portion of a water of the U.S. with dry land or that changes the bottom elevation of any portion of a water of the U.S. Any activity resulting in the placement of dredged or fill material within waters of the United States requires a permit from USACE. In accordance with Section 401 of the CWA, projects that apply for a Section 404 permit for discharge of dredged or fill material must obtain water quality certification from the appropriate RWQCB indicating that the proposed project would uphold State of California water quality standards.

## 4.4 Native Plant Protection Act

The Native Plant Protection Act includes measures to preserve, protect, and enhance rare and endangered native plants. The list of native plants afforded protection pursuant to the Native Plant Protection Act includes those listed as rare and endangered under the CESA. The Native Plant Protection Act provides limitations on take as follows: "No person will import into this state, or take, possess, or sell within this state" any rare or endangered native plant, except in compliance with provisions of the act. Individual landowners are required to notify the CDFW at least 10 days in advance of changing land uses to allow the CDFW to salvage any rare or endangered native plant material.

## 4.5 Section 15380 of the California Environmental Quality Act Guidelines

Although threatened and endangered species are protected by specific federal and state statutes, *State CEQA Guidelines* Section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in CEQA primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a candidate species that has not been listed by either USFWS or CDFW. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agencies have an opportunity to designate the species as protected, if warranted. CEQA also calls for the protection of other locally or regionally significant resources, including natural communities. Although natural communities do not at present have legal protection of any kind, CEQA calls for an assessment of whether any such resources would be affected, and requires findings of significance if there would be substantial losses. Natural communities listed in the CNDDB as sensitive are considered by CDFW to be significant resources and fall under the *State CEQA Guidelines* for addressing impacts. Local planning documents such as general plans often identify these resources as well.

## 4.6 Sections 3503 and 3513 of the California Fish and Game Code

Section 3503 of the California Fish and Game Code prohibits the killing of birds or the destruction of bird nests. Birds of prey are protected under Section 3503.5 of the California Fish and Game Code, which provides that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Section 3513 of the California Fish and Game Code prohibits any take or possession of birds that are designated by the MBTA as migratory nongame birds except as allowed by federal rules and regulations promulgated pursuant to the MBTA. Migratory birds include all native birds in the United States, except those non-migratory game species, such as quail and turkey, which are managed by individual states.

## 4.7 Section 1602 of the California Fish and Game Code

Section 1602 of the California Fish and Game Code requires a Streambed Alteration Agreement for any activity that may alter the bed and/or bank of a lake, stream, river, or channel. Typical activities that require a Streambed Alteration Agreement include, but are not limited to, excavation or fill placed within a channel, vegetation clearing, installation of culverts and bridge supports, and bank reinforcement. As part of the notification process, the CDFW requires documentation of any trees to be removed as part of the project. Trees that have a trunk diameter at breast height of greater than 2 inches are subject to regulation by the CDFW via the Streambed Alteration Agreement.

## 4.8 Santa Monica Mountains Local Coastal Program

In 1976, the California legislature enacted the California Coastal Act intended to manage the development of resources throughout coastal regions of the state. Individuals LCP's have been developed for various jurisdictions under the guidance of the California Coastal Commission, to regulate development within the coastal zone. The LCP specifically refers to and regulates all development within the Santa Monica Mountains west of the City of Los Angeles, east of Ventura County and south of the coastal zone boundary, excluding the City of Malibu. The LCP provides protection for various natural resources as part of the development process including but not limited to native vegetation communities, native trees of a specified size and species, various sensitive plant and wildlife species identified by the CNPS and/or CDFW, riparian corridors, etc.

# 5. Conclusions

## 5.1 Sensitive Natural Communities and Habitats

As described in Section 2.4.1, no sensitive natural communities occur within the study area. However, H1 and H3 habitat categories do occur within the study area. Below is a summary of the proposed impacts to these habitat categories that may occur during construction activities.

### 5.1.1 H1 Habitat (SERA)

Construction of the residence within the development footprint will not remove any H1 habitat. As described in Section 2.4.1none of this habitat type will be subjected to fuel modification. However, as indicated in Table 1 and Figure 3 – Existing Fuel Modification Zones, most of the study area and all of the project site are already subjected to fuel modification from adjacent developments, no H1 habitat is anticipated to be subjected to new fuel modification areas as a result of the proposed project.

### 5.1.2 H3 Habitat (Non-SERA)

Construction of the residence within the development footprint will remove 0.25 acre of H3 habitat (i.e., non-native habitat and disturbed/developed areas). As described in Section 2.4.1, 3.57 acres of H3 habitat is currently subjected to fuel modification or brush thinning from

adjacent developments and nearly all of H3 habitat is within the fuel modification/brush thinning zones of adjacent developments.

## 5.2 Special Status Plants and Wildlife

### 5.2.1 Nesting Birds and Raptors

Migratory and resident passerine/raptor species such as the California towhee, Cooper's hawk, southern California rufous-crowned sparrow, and oak titmouse, as well as dozens of common and migratory bird species, may utilize the habitats within the study area for foraging and breeding purposes. Therefore, the minimization measures recommended in Section 6 of this report should be implemented to avoid impacts to nesting birds.

### 5.2.2 Special-Status Plants

Due to previous disturbance on the property there is a low potential for 19 special-status plants to occur within the study area. It should be noted that there is no potential for these 19 species to occur within the project's development footprint due to absence of suitable habitat from previous disturbances that include brush clearance and ground disturbance.

### 5.2.3 Special-Status Wildlife

A turkey vulture was observed soaring above the study area during the site visit. Based on the presence of marginal-to-suitable habitat, there is a medium-to-high potential for seven (7) sensitive wildlife species to occur within or immediately adjacent to the study area, including coast horned lizard, coastal western whiptail, Cooper's hawk, crotch bumble bee, Santa Monica grasshopper, and Southern California rufous-crowned sparrow. In addition, Los Angeles Audubon sensitive species California towhee and oak titmouse may occur within the study area and nest within 500 feet of the development footprint. Therefore, the minimization measures recommended in Section 6 of this report should be implemented to avoid impacts to special-status wildlife species.

## 5.3 Critical Habitat

No critical habitat is present within the vicinity of the study area.

## 5.4 Cumulative Impacts

The project is proposed within an existing, previously developed community and construction of the residence is not expected to reduce the value of the surrounding habitat, nor would it present substantial cumulative impacts due to the overall lack of pristine, native habitat that is present on the project site and within the study area.

## 5.5 Jurisdictional Resources

No jurisdictional resources are present within or adjacent to the study area.

## 5.6 Wildlife Movement and Habitat Linkages

The study area is not located within a "pinch point" or movement corridor between one or more contiguous open space areas. Therefore, the proposed project would not have an effect on wildlife movement throughout the Santa Monica Mountains.

# 6. Minimization and Avoidance Measures

## 6.1 Sensitive Habitats

The Resource Conservation Program was developed to address and compensate for unavoidable impacts to H1 habitats. Pursuant to Section 22.44.1950.A.3.f *et seq* of the LCP, the following In-Lieu Fee has been established for permitted impacts to these habitat types: $83,478 per acre for an approved building site area, driveway/access roads and turnaround areas, any required irrigated fuel modification zones and required off-site brush clearance areas; and $20,870 per acre for non-irrigated fuel modification areas.

### 6.1.1 H1 Habitat

As previously discussed, construction of the residence within the development footprint will not remove any H1 habitat. As indicated in Table 1 and depicted in Figure 3, 0.80 acre of H1 habitat is already subjected to fuel modification from adjacent developments, no H1 habitat will be subjected to new fuel modification areas as a result of the proposed project. Therefore, compensation required through the county's In-Lieu Fee program should be based on 0.0 acre that will be subjected to fuel modification from the proposed project.

## 6.2 Nesting Birds

Project activities could negatively impact nesting birds that are protected in accordance with the MBTA and Fish and Game Code. Therefore, the following measures shall be implemented to avoid nesting birds:

- If work activities occur within the bird nesting season (generally defined as January 15 through September 15), a qualified biologist should conduct a nesting bird study within 30 days of the anticipated start date, and no less than 3 days prior to ground disturbance, to identify any active nests within 500 feet of the development footprint. If an active nest is found, the nest shall be avoided, and a suitable buffer zone shall be delineated in the field where no impacts shall occur until the chicks have fledged the nest as determined by a qualified biologist. Construction avoidance buffers are typically 300 feet for passerines or up to 500 feet for raptors; however, avoidance buffers may be reduced at the discretion of the biologist depending on the location of the nest, the species tolerance to human presence, adjacent land uses, and/or the type of construction that will occur (e.g., grading, framing, concrete pouring, etc.).

## 6.3 Special-Status Wildlife

The following measures shall be implemented to avoid impacts to special-status wildlife during project construction activities.

- To avoid impacts to Cooper's hawk, southern California rufous-crowned sparrow, oak titmouse, turkey vulture, and California towhee, a qualified biologist should perform pre-construction surveys prior to proposed construction activities during the nesting season. The surveys shall be focused within the development footprint, as well as a surrounding 500-foot buffer. If no active nests are identified, no further action is required. However, if an active

nest is found, the nest shall be avoided and avoidance measures shall be implemented similar to those described above for nesting birds, including installation of suitable construction avoidance buffers to avoid interference with nesting success.

- A qualified biologist shall conduct a preconstruction clearance survey throughout the development footprint for coastal western whiptail, coast horned lizard, crotch bumble bee, and Santa Monica grasshopper. If any of these species are observed within or near the project work areas during preconstruction clearance surveys, a qualified biologist should relocate the individuals to suitable habitat outside of the project site to ensure that construction-related impacts are avoided. Relocation of crotch bumble bee and Santa Monica grasshopper may not be feasible; therefore, if presence of these species is determined, the applicant shall consult with the Los Angeles County Biologist to verify an approach to minimize impacts to these invertebrate species.
- Prior to the commencement of construction activities, construction personnel shall check under stationary equipment to ensure no wildlife species are present.
- All trash shall be collected daily and taken offsite for proper disposal.
- Prior to project implementation, a Workers Environmental Awareness Program (WEAP) shall be prepared and presented to construction crews regarding all sensitive resources with the potential to occur onsite during construction activities. The WEAP training should concentrate on the proper identification of sensitive resources while in the field, suggested strategies in avoiding impact to sensitive resources, and proper reporting methods for field crews in the event that sensitive resources are observed during construction activities.

## 6.4 Jurisdictional Resources

- Erosion control measures (i.e. silt fencing, straw wattles, etc.) should be implemented within the work area to prevent sediment from entering any drainage features, private residences, or public or private roadways downslope of the study area.
- Drip pans should be placed underneath all mechanical machinery that will be staged within work areas during the construction period.

# 7. References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# APPENDIX A

Santa Monica Mountains Biological Assessment Checklist

| Santa Monica Mountains Biological Assessment Checklist | Page | Initials |
|---|---|---|
| Title Page | | |
| A. Project name. | Title page | GCA |
| B. County identification numbers (Project number, Permit number, APNs) | Title page | GCA |
| C. Applicant name and contact information | Title page, 2 | GCA |
| D. Name and affiliation of preparer. | Title page | GCA |
| E. Date. | Cover | GCA |
| I. Project and Survey Description | | GCA |
| A. Project description. | 2 | GCA |
| 1. Project name, type of report, address of project. | 2 | GCA |
| 2. County application identification numbers including APNs. | N/A | GCA |
| 3. Applicant name and contact information. | 2 | GCA |
| 4. Parcel and acreage information. | 2 | GCA |
| 5. Location. | 4 | GCA |
| a. Map of regional features showing project location, including watershed boundaries, proximity to public lands, streams, drainages, and roads in region. | 5 and 6 | GCA |
| b. Color aerial photograph(s) showing regional context of project, project parcels), existing development, open space, etc. | 6 and 7; Figures 2 and 3 | GCA |
| 6. Detailed description of proposed project, including area of vegetation removal, modification, or disturbance, grading volumes, etc. | 2 | GCA |
| B. Description of major natural features.<br>1. Landforms and geomorphology.<br>2. Drainage and wetland features.<br>3. Soils (soil/geological map optional). | 4 and 9 | GCA |
| C. Methodology of biological survey.<br>1. Date(s) of survey(s).<br>2. Detailed description of survey methods. | 2 and 3 | GCA |
| II. Biological Characteristics of the site | | |
| A. Flora. | 9-11, 21-26, 28-29 | GCA |
| 1. Map of vegetation communities, specifying system used (the use of Sawyer et al. 2009 is recommended) | 9 and 10, Figure 5 | GCA |
| 2. Map of project site showing the habitat areas (HI, H2, H2 "High Scrutiny", H3 Habitat) from the LUP Biological Resources map. | 14 and 15, Figure 6 | GCA |
| 3. Vegetation cover table, with acreages of each vegetation type (can be a legend in map) | 15 (Table 1) | GCA |
| 4. Location, trunk, diameter, and canopy extent mapped for each protected tree (oak, sycamore, walnut, bay) that is within 25 feet of any portion of the proposed development (on-site or off-site). Note: for protected oaks (>5" DBH) on or within 200' of property, an oak tree report is required. Include oak tree reports in an appendix | Oak trees were observed within project site but a formal survey has not been conducted. Figure 7 (Pg. 28) | GCA |
| B. Fauna. | 15-20 | GCA |
| 1. Discussion of species observed; description of wildlife community. | 15 | GCA |
| C. Sensitive Species | 16-26 | GCA |
| 2. Maps of occurrence for sensitive species observed | N/A | |

| | | |
|---|---|---|
| D. List of flora and fauna observed or known from site | 15 and Appendix C | GCA |
| E. Survey Checklist (see Part B, Survey Checklist, above) | | |
| III. Bibliography | 38-39 | GCA |
| A. Bibliography of references cited in text | 38-39 | GCA |
| IV. Appendices | A-E | GCA |
| A. Site photographs (color) | Appendix D | GCA |
| B. Qualifications of biologists and other contributors | 1, 2, Appendix B | GCA |
| C. Oak tree report for sites with jurisdictional native oak trees (if applicable) | Oak tree survey and report has not been conducted at this time. | GCA |
| Digital copies of biological assessments must be provided to DRP as.pdf for final version, including georeferenced files of vegetative data and sensitive species occurrences. | N/A | |

# APPENDIX B

Resumes

# Gregory C. Ainsworth

## Director, Biological Resources

**EDUCATION**

M.C.R.P., Environmental Planning, California Polytechnic State University, San Luis Obispo

B.S., Environmental Horticulture Science, California Polytechnic State University, San Luis Obispo

**17 YEARS EXPERIENCE**

**CERTIFICATIONS AND TRAININGS**

California Rapid Assessment Methodology (CRAM) Practitioner, 2016

International Society of Arboriculture Certified Arborist (Cert# WE 7473A)

International Society of Arboriculture, Tree Risk Assessor Qualified (TRAQ)

Certified wetland delineator, Wetland Delineation & Management (ACOE, #2128), 2003

**REFERENCES**

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mtamuri@cityofcalabasas.com
(818) 224-1701

Doug Hooper, City of Agoura Hills, Planning Director
dhooper@ci.agoura-hills.ca.us
(818) 597-7342

Kelly Kim, Los Angeles County Fire Department-Urban Forestry Division.
kkim@fire.lacounty.gov

Greg is a Southern California native and has 17 years of experience conducting biological asessments on properties within and around the Santa Monica Mountains. He prepared numerous technical reports for the County of Los Angeles for projects located within the county's Sensitive Ecological Area or Local Coastal Program areas. Greg is knowledgeable of the local regulations, ordinances and municipal codes, is an expert at conducting impact analyses and developing mitigation strategies for various project types. He is well-versed in CEQA, the Endangered Species Acts, and the Clean Water Act. Greg is a certified arborist and seasoned wetland delineator, and has been trained in conducted wetland and riverine functional assessments.

## Relevant Experience

**Little Las Flores, APN 4448-023-006, Biological Assessment, Los Angeles County, CA.** *Project Manager.* Greg managed biological field surveys and the preparation of the Biological Assessment Report that was prepared for a potential project located within the Santa Monica Mountain Local Coastal Program area. Field surveys included detailed vegetation mapping, focused rare plant surveys; evaluation of oak trees, wetlands and waters under the jurisdiction of state and federal agencies, and any potential wildlife movement corridors. A detailed technical report was prepared in accordance with the Los Angeles County Local Coastal Program Implementation Plan, intended to accompany a project submittal package to the county.

**Little Las Flores, APN 4448-023-007, Biological Assessment, Los Angeles County, CA.** *Project Manager.* Greg managed biological field surveys and the preparation of the Biological Assessment Report that was prepared for a potential project located within the Santa Monica Mountain Local Coastal Program area. Field surveys included detailed vegetation mapping, focused rare plant surveys; evaluation of oak trees, wetlands and waters under the jurisdiction of state and federal agencies, and any potential wildlife movement corridors. A detailed technical report was prepared in accordance with the Los Angeles County Local Coastal Program Implementation Plan, intended to accompany a project submittal package to the county.

**Biological Assessment for 28906 Verde Mesa Lane – Lots 5 and 6, Los Angeles County, CA.** *Project Manager.* The proposed project consists of the development of a single-family residence on the northern portion of the property. Greg managed biological field surveys and the preparation of the Biological Assessment Report that was prepared for a proposed project located within the City of Malibu Local Coastal Program area. Field surveys included detailed vegetation mapping, focused rare plant surveys; evaluation of city protected trees, wetlands and waters under the jurisdiction of state and federal agencies, onsite or adjacent Environmentally Sensitive Habitat Areas (ESHA), and any potential wildlife

movement corridors. A detailed technical report was prepared in accordance with the Malibu Local Coastal Program Implementation Plan.

**Moonshadows Restaurant Revetment and Wastewater Upgrade Project, Biological Inventory, Malibu, CA.** *Lead Biologist.* Greg conducted a biological inventory and prepared biological report for the proposed project located at 20356 Pacific Coast Highway, Malibu, CA. The proposed project was located within the City of Malibu Local Coastal Program area. Field surveys included detailed habitat assessment and mapping, and an evaluation of any potentially occurring sensitive plant and animal species. A detailed Biological Inventory Report was prepared in accordance with the Malibu Local Coastal Program Implementation Plan.

**Biological Inventory for 6306 Bonsall Road, Malibu, CA.***Project Manager.* The proposed project consists of the development of a single-family residence on the northern portion of the property. Greg managed biological field surveys and the preparation of the Biological Inventory Report for a proposed project located within the City of Malibu Local Coastal Program area. Field surveys included detailed vegetation mapping, focused rare plant surveys; evaluation of city-protected trees, wetlands and waters under the jurisdiction of state and federal agencies, onsite or adjacent Environmentally Sensitive Habitat Areas (ESHA), and any potential wildlife movement corridors. A detailed technical report was prepared in accordance with the Malibu Local Coastal Program Implementation Plan.

**Ben Weston Road Realignment Project, Catalina Island, California Biological Assessment Report, Los Angeles County, CA.** *Biological Task Manager.* Greg was retained by a prime consultant to prepare a Biological Assessment Report for a proposed new campground and road improvements for the Catalina Island Conservancy. The project is located within a Los Angeles County Sensitive Ecological Area (SEA), and therefore, required to comply with the County's biological assessment requirements for projects within SEAs . Field surveys included detailed vegetation mapping, focused rare plant surveys; evaluation of oak trees, wetlands and waters under the jurisdiction of state and federal agencies, and any potential wildlife movement corridors. A Biological Assessment Report was prepared in accordance with the Los Angeles County Local Coastal Program Implementation Plan, intended to accompany a project submittal package to the county.

**H1 Habitat Assessment, 20800 Hillside Drive, Topanga Canyon, CA.** *Project Manager.* Greg managed an assessment to determine the distance of H1 habitat as defined in Section 22.44.1870 of the Santa Monica Mountains Local Coastal Program (SMM LCP) from an existing, unpermitted 500 square foot structure located at 20800 Hillside Drive (APN 4444006008), Topanga Canyon. The assessment was based on a review of the structure and oak woodland habitat as depicted on aerial photograph (Google Earth Pro, 2015) followed by a ground-level assessment of the oak woodlands located in the vicinity of the property.

**Focused Rare Plant Survey at 32675 Mulholland Highway, Los Angeles County, CA 90265.** *Project Manager.* Greg conducted and managed a focused rare plant survey for a property located at 32675 Mulholland Highway. The survey included an inventory of all plant species and the vegetation communities on the property. A technical survey report was prepared for the client.

**Nesting Bird Survey for Proposed Renovations and New Construction of a Single-family Home at 5838 Deerhead Road, Malibu, CA.** *Lead Biologist.* Greg managed a focused bird survey that was conducted within, and immediately adjacent 5838 Deerhead Road to determine whether birds were nesting prior to the initiation of proposed disturbance activities. The survey was completed pursuant to the Malibu Local Coastal Program, as part of a Coastal Development Permit.

**Preliminary Biological Assessment, 621 Thrift Road, Los Angeles County, CA.** *Project Manager.* Greg managed biological field surveys and the preparation of a Preliminary Biological Assessment Report that was prepared for a potential project located within the Santa Monica Mountain Local Coastal Program area. Field surveys included detailed vegetation mapping, focused rare plant survey, oak tree survey, assessment of wetlands and waters under the jurisdiction of state and federal agencies, and an evaluation of any potential wildlife movement corridors. A preliminary technical report was prepared in accordance with the Los Angeles County Local Coastal Program Implementation Plan.

**Las Flores Canyon Road (APN 4448-026-079) Biological Constraints Assessment and Plant Survey, Los Angeles County, CA.** *Project Manager.* Greg managed a biological field survey and the preparation of a Preliminary Biological Assessment Report that was prepared for a potential project located within the Santa Monica Mountain Local Coastal Program area. Field surveys included detailed vegetation mapping, focused rare plant survey, assessment of wetlands and waters under the jurisdiction of state and federal agencies, and an evaluation of any potential wildlife movement corridors. A preliminary technical report was prepared in accordance with the Los Angeles County Local Coastal Program Implementation Plan.

**Malibu Bluffs and Corral Canyon Park Focused Rare Plant Survey for the Malibu Parks Public Access Enhancement Project, Malibu, CA.** *Project Manager.* Greg managed a focused rare plant survey and prepared a technical report for the Santa Monica Mountains Conservancy's Malibu Bluffs and Corral Canyon properties. Field surveys included detailed vegetation mapping and focused rare plant surveys. A detailed technical report was prepared, intended to accompany a project submittal package to the California Coastal Commission.

**2110 Stunt Road Biological Assessment, Los Angeles County, CA.** *Project Manager.* Greg managed the preparation of a Biological Assessment Report that was prepared for potential unauthorized developments that occurred at 2110 Stunt Road in the mid 1970's. The report described impacts to biological resources that had occurred, including a description of the property's existing environmental conditions, historic environmental conditions prior to unauthorized development, and included an analysis of the impacts to biological resources that occurred from the development of the property. The report was written in accordance with the California Coastal Commission's *Guidelines for Preparing a Biological Study for Property Located Within or Adjacent to Potential Environmentally Sensitive Habitat Areas*.

**Las Virgenes Municipal Water District Seminole Check Valve Project, Los Angeles County, CA.** *Lead Biologist.* Greg conducted a Biological Assessment for a project that consisted of installing two check valve sites and maintenance of a

permanent footpath a LVMWD easement for future operation and maintenance activities. Greg managed and conducted biological field surveys and the preparation of a Biological Assessment Report. Field surveys included detailed vegetation mapping, focused rare plant survey, bird nest surveys, assessment of wetlands and waters under the jurisdiction of state and federal agencies, and an evaluation of any potential wildlife movement corridors. A focused Biological Assessment report was prepared at the request of the California Department of Fish and Wildlife. Greg also prepared a revegetation to replant native species within the disturbed areas of the LVMWD Seminole Check Valve project site that included revegetating the areas where construction activities occurred to a self-sustaining native plant community. Greg managed and conducted quarterly and annual monitoring of the revegetation area in accordance with the CDFW-approved revegetation plan that was prepared by Greg.

**City of Calabasas, City Arborist, Los Angeles County, CA.** *Arborist.* Greg is the City of Calabasas' arborist. His services include verification of tree survey reports, tree damage assessments, tree appraisals, tree risk assessments, expert witness testimony, review of Healthy Tree Permit Applications, and overall implementation of the City's Oak Tree Preservation Guidelines (Ordinance) for the City's Planning Department and Code Enforcement Division. Greg works closely with planning staff, code enforcement personnel, and legal counsel, providing recommendations for preserving and mitigating the city's oak tree population, as well as support in determining retribution for oak tree violation cases.

**City of Agoura Hills, City Oak Tree Consultant, Los Angeles County, CA.** *Oak Tree Consultant.* Greg is the City of Agoura Hills' consulting arborist. His services include verification of tree survey reports, tree damage assessments, tree appraisals, tree risk assessments, review of Oak Tree Permit Applications, and overall implementation of the City's Oak Tree Ordinance. Greg works closely with planning staff in determining project effects on native oak trees and in determining appropriate replacement mitigation and/or in-lieu fees.

**Las Virgenes Municipal Water District, April Road Reservoir Environmental Constraints Analysis, Agoura Hills, CA.** *Senior Biologist.* Greg is preparing a Biological Constraints Analysis for the proposed April Road Recycled Water Reservoir Site for the Las Virgenes Municipal Water District. The purpose of the assessment is to identify fatal flaws of the site and to characterize key biological resource hurdles. His analysis includes an assessment of potential incompatibilities with Los Angeles County's Sensitive Ecological Areas, impacts to wildlife migration corridors and sensitive plants and wildlife, and potential mitigation options. Greg prepared a draft oak tree appraisal to assessment the potential cost of impacting approximately 200 coast live oak trees and conducted a rare plant survey of the proposed project site.

**CA Department of Toxic Substances Control, Santa Susana Field Laboratory, Ventura County, CA.** *Lead Biologist.* The Santa Susana Field Laboratory is a former rocket engine test, nuclear and liquid metals research facility located on a 2,849- acre portion of the Simi Hills in Simi Valley, California. The use of hazardous substances at the field laboratory such as trichloroethylene and other solvents, heavy metals, and radioactive material has resulted in soil and/or groundwater contamination. The field laboratory is currently the focus of a comprehensive environmental investigation and cleanup program, conducted by Boeing, the United States Department of Energy and the National Aeronautics and Space

Administration, and overseen by the Department of Toxic Substances Control. ESA is preparing a Program EIR which will evaluate soil and groundwater remediation activities. Because there are multiple responsible parties with separate cleanup actions, the Program EIR will provide a framework for tiered environmental documents to be prepared to address the development and refinement of remediation approaches and actions. Greg is managing the biological resource analysis of the programmatic EIR for the Santa Susana Field Laboratory Cleanup Project and providing peer review of all biological technical studies provided to support the analysis.

**Las Virgenes Water District Seminole Check Valve Project. Los Angeles County, CA.** *Senior Biologist.* Greg conducted nesting bird surveys within the project area in accordance with the California Department of Fish and Game (CDFG) Streambed Alteration Agreement Conditions of Approval. He prepared a focused bird monitoring report for submittal to the CDFG.

**Los Angeles County Department of Public Works, Flood Maintenance Division, Los Angeles County, CA.** *Lead Biologist.* Greg has conducted several tree inventories and focused surveys and reports for various flood maintenance projects in support of permitting and/or environmental review. Surveys have included county-protected oak trees, as well as inventories of riparian tree species in support of regulatory permit applications to determine impacts and mitigation. Greg has prepared restoration plans and implemented restoration for channel maintenance projects that have impacted riparian trees.

**The Old Road SEATAC Biota Report, Los Angeles County, CA.** *Lead Biologist/Arborist.* Greg prepared an Initial Biological Study and Habitat Assessment for a proposed vintage automobile structure and site improvements on underdeveloped private land in Los Angeles County. Focused studies included a bird survey, botanical inventory and oak tree survey. A Biota Report was prepared, submitted, and approved by the Los Angeles County Sensitive Area Technical Ecological Advisory Committee and the Division of Planning.

**Air Design Movie Ranch SEATAC Biota Report, Los Angeles County, CA.** *Lead Biologist.* Greg prepared a Biological Constraints Assessment (BCA) for an existing movie set known as the Air Design Movie Ranch, located in Acton, Los Angeles County. The BCA was prepared in accordance with the Los Angeles County SEATAC Guidelines in support of a retroactive Conditional Use Permit for unpermitted grading and façade structures located in a Los Angeles County Sensitive Ecological Area (SEA). Tasks included a detailed literature and database review, field investigation, spring plant survey, focused bird surveys, wetland delineation, BCA report, and negotiations on behalf of the applicant.

**City of Los Angeles, Mountain Gate Development, Los Angeles, CA.** *Consulting Arborist.* Greg surveyed over 1000 trees on the Mountain Gate Development project and submitted a detailed tree inventory report for project permitting. The project is located on Mountain Gate Drive, just west of the San Diego Freeway (405) in the City of Los Angeles.

**Oak Woodland Habitat Conservation Strategic Alliance, Los Angeles County, CA.** *Consulting Arborist*. Greg was a member of group or arborists and academic professors that developed an Oak Woodlands Conservation Management Plan for

Los Angeles County that provides a pragmatic, economically equitable and defensible framework to guide the protection and restoration of Oak Woodlands. The plan serves as a blueprint for community outreach and identifies economic, social and ecological benefits associated with functional Oak Woodlands.

**County of Los Angeles, Newhall Land and Farming, Los Angeles, CA.** *Consulting Arborist/Biologist.* Greg managed and performed annual biological surveys for a 13,000-acre Specific Plan area located in northwestern Los Angeles County, California. Surveys conducted include over 4,000 oak trees in accordance with the County of Los Angeles Oak Tree Ordinance and identification of suitable trees for relocation.

**Corporate Ridge Development Project, City of Agoura Hills, CA.** Lead Arborist. Greg served as the lead arborist in providing construction monitoring support for the development of the Corporate Ridge Development Project. Job duties that were performed included monitoring of work conducted near oak trees, spontaneous development of methods to avoid construction impacts to protected oak trees, monitoring of the health of oak trees following construction, preparation of daily monitoring reports, and coordination with the construction manager and the City of Agoura Hills' Arborist, Anne Burroughs.

**Las Virgenes Municipal Water District, April Road Reservoir Environmental Constraints Analysis, Agoura Hills, CA.** *Senior Arborist/Biologist.* Greg prepared a Biological Constraints Analysis for the proposed April Road Recycled Water Reservoir Site for the Las Virgenes Municipal Water District. The purpose of the assessment is to identify fatal flaws of the site and to characterize key biological resource hurdles. His analysis includes an assessment of potential incompatibilities with Los Angeles County's Sensitive Ecological Areas, impacts to wildlife migration corridors and sensitive plants and wildlife, and potential mitigation options. Greg prepared a draft oak tree appraisal to assessment the potential cost of impacting approximately 200 coast live oak trees and conducted a rare plant survey of the proposed project site.

**City of Agoura Hills, Corporate Ridge Development Project, Agoura Hills, CA.** *Consulting Arborist*. Greg provided on-call arborist and construction monitoring support for the development of the Corporate Ridge Development Project. Job duties that were performed included construction monitoring of work conducted near oak trees, spontaneous development of methods to avoid construction impacts to protected oak trees, monitored the health of oak trees following construction, prepared daily monitoring reports, and coordinated with the construction manager and the Agoura Hills' Arborist, Anne Burroughs.

**Apollo Real Estate Group and Big Rock Partners, Biological Resources Impact Study, Los Angeles County, CA.** *Lead Biologist.* Greg prepared the biological resource impact study for a two separate development projects known in Malibu, California. Responsibilities also include focused botanical surveys, raptor surveys, and wildlife surveys, and a tree survey and report in accordance with the City of Malibu's Protected Tree Ordinance.

**Eric Lloyd Wright & Associates, Arborist Support, Los Angeles County, CA.** *Consulting Arborist*. Conducted a protected tree survey for two separate residential project sites located in unincorporated Los Angeles County, near the City of Malibu, California.

# Travis S. Marella

## Fisheries/Aquatic Biologist – Senior Associate

Mr. Marella is a fisheries/aquatic biologist with eight years of extensive experience in freshwater, estuarine, and marine ecosystems, sensitive species surveys, water quality sampling, data collection, monitoring and analysis, permitting, technical reporting, and project management. He has worked with numerous sensitive fish, reptile, amphibian, avian, and invertebrate species, many of which are listed as threatened or endangered under the Federal Engendered Species Act and California Endangered Species Act. Additionally, he has thorough experience with terrestrial species in desert, upland, and chaparral habitats. Mr. Marella has over 600 hours of desert tortoise, desert kit fox, San Joaquin kit fox, and burrowing owl related work. Before his current position at ESA, Mr. Marella has been employed both as an aquatic biologist and a marine scientist, respectively. Other surveying and monitoring experience includes: water quality monitoring and testing in freshwater, estuarine, and marine ecosystems and testing lower trophic levels (phytoplankton, zooplankton and aquatic insects), hydrology and physical conditions. For surveying aquatic project experience, he has experience in collecting aquatic species by net (dip, beach seine) and trap (rotary screw, fyke), for the purpose of identifying and measuring for scientific research, surveys, collection, and relocations. Mr. Marella holds numerous certifications and permits, including USFWS Recovery Permit TE-08293C-0 to handle the federally endangered fish species, tidewater goby (*Eucyclogobius newberryi*). Additionally, he has been authorized by the National Marine Fisheries Service (NMFS) as a steelhead (*Oncorhynchus mykiss irideus*)

**EDUCATION**

B.S., Environmental Studies, California State University, Sacramento, 2012

Senior thesis on The Decline of Delta smelt in the Sacramento-San Joaquin Delta

**8 YEARS EXPERIENCE**

**CERTIFICATIONS/ REGISTRATION**

USFWS Recovery Permit TE-08293C-0 for tidewater goby

NMFS authorized steelhead fisheries biologist

NOAA certified *Caulerpa* surveyor

NOAA and NMFS certified/approved Marine Mammal Observer

Qualified Storm Water Practitioner (QSP), # 25535

Certified Inspector of Sediment and Erosion Control (CISEC), # 1697

California Department of Fish and Wildlife, Scientific Collecting Permit #13233

**PROFESSIONAL AFFILIATIONS**

American Fisheries Society

Society for Freshwater Science

## Relevant Experience

### *Fisheries, Aquatic, and Marine*

**County of Los Angeles Department of Public Works, Big Dalton Dam Sediment Removal Project, Glendora, CA.** Senior Fisheries/Aquatic Biologist. Served as Project Manager and Lead. Electrofishing surveys were conducted in Big Dalton Reservoir and Big Dalton Wash for Santa Ana speckled dace and arroyo chub, both California Species of Special Concern. Collection of benthic macroinvertebrates and water quality was also conducted and reported

**California Department of Water Resources, Predator Relocation Electrofishing Study, Clifton Court Forebay, Contra Costa County, CA**. Senior *Fisheries Biologist.* Provided fisheries support for a six-month long electrofishing study of predatory fish in Clifton Court Forebay. Predatory fish species were captured via net and boat after being stunned, then measured and relocated to nearby Bethany Reservoir.

**Global Diving and Salvage, Santa Barbara Desalination Reactivation Project, Santa Barbara, CA.** *Marine Fisheries Biologist*. Served as a marine fisheries biologist conducting spawning surveys for California grunion (*Leuresthes tenuis*) at

East Beach in Santa Barbara. The predicted grunion run is surveyed the night following either the full or new moon phase and two subsequent nights. The surveys begin at high tide and continue for three hours following the tide, or until grunion stop running. Approximately 750,000 California grunion were observed, analyzed, and recorded during surveys.

**California Department of Water Resources, Pyramid and Castaic Lake Creel Surveys, Los Angeles County, CA**. Senior *Fisheries Biologist.* Assisted with a 10-month creel survey to determine angler fishing success and catch rates of stocked rainbow trout.

**City of Santa Barbara, Goleta Slough Mouth Management Biological Services, Goleta, CA.** *Marine Fisheries Biologist*. Served as a fisheries biologist conducting surveys for stranded fish at tidal influenced habitats at Santa Barbara Municipal Airport and Goleta Slough. Water quality sampling and analysis is also conducted, analyzed, and recorded.

**Ventura County Watershed Protection District, San Antonio Creek Spreading Grounds Rehabilitation Project, Ojai, CA.** *Fisheries Biologist***.** Served as a CDFW and NOAA approved fisheries biologist conducting surveys for steelhead (*Oncorhynchus mykiss*) in Santa Antonio Creek, located in Ojai, CA. Ventura County Watershed Protection District is required to conduct yearly spawn surveys for steelhead redds and snorkel surveys to determine if juveniles are using the San Antonio Creek as rearing habitat.

**Global Diving and Salvage, Santa Barbara Desalination Reactivation Project, Santa Barbara, CA.** *Marine Mammal Observer*. Served as a NOAA and NMFS marine mammal observer to ensure Pinnipde, Otariidea, and Cetacea species did not enter project area. Project activities were under water at approximately 30 feet while the marine mammal observing took place from an anchored barge adjacent to underwater activities. Mr. Marella also assisted in the writing of the Marine Species Monitoring Plan.

**City of Santa Barbara, Mason Street Bridge Replacement Project, Santa Barbara, CA.** *Fisheries Biologist*. Served as a fisheries biologist for the Mason Street Bridge Replacement project, located in Santa Barbara. The project activities included the widening, restoration and the replacement of a bridge that went over Mission Creek. Over 5,000 tidewater gobies were relocated as part of the project. As an authorized fisheries biologist, Mr. Marella also assisted in water quality sampling (non-storm water).

**City of Thousand Oaks Public Works, Calleguas Creek Western Pond Turtle Surveys – Camarillo, CA.** *Aquatic Biologist*. Served as an aquatic biologist to provide surveys for western pond turtle *(Clemmys marmorata*) in the lower reach of Calleguas Creek.

**California Department of Fish and Wildlife, Long-term surveying and monitoring for steelhead and Chinook salmon, Knight's Landing, CA.** *Aquatic Biologist*. Assisted in surveying and monitoring on a long-term research project on the Sacramento River in Knight's Landing, CA. A rotary screw trap was used to capture juvenile steelhead and juvenile Chinook salmon (*Oncorhynchus tshawytscha*) and to monitor trends. Each of the targeted species captured, were measured, weighed, and determined age and sex.

**California Department of Water Resources, Yolo Bypass Fish Monitoring Program, Yolo Bypass, CA.** *Fisheries Biologist*. Assisted with fish collections for the Yolo Bypass Fish Monitoring Program (YBFMP). YBFMP collects long-term data on fish, invertebrates, chlorophyll, and water quality in the Yolo Bypass. The goal of the program is to better understand the life history of native fishes using the habitat, and the ecological role the floodplain plays in the larger San Francisco Estuary. Tools used to capture fish included seine nets, dip nets, fyke traps, and rotary screw traps.

**California Department of Water Resources/State Parks, Aquatic Surveys for tidewater goby – San Luis Obispo County, CA.** *Fisheries Biologist*. Assisted California State Parks in a long-term surveying effort for tidewater goby in Arroyo Grande Creek and Lagoon, and Meadow Creek. Each fish species captured was identified and measured.

**University of California, Los Angeles (UCLA), Assisted PhD student with tidewater goby collections, Ventura and Santa Barbara Counties, CA.** *Fisheries Biologist*. Assisted Brenton Species, PhD student with UCLA in the collection of tidewater goby for genetics research. Approximately 40 tidewater goby are collected at each location to undergo genetics testing and analysis. Systems where fish were located include Ormond Lagoon, Oxnard, CA; Rincon Creek, Carpinteria, CA, and Ventura River Estuary, Ventura, CA.

## *Water Quality*

**California Department of Water Resources, Oroville Emergency Spillways Project, Oroville, CA.** *Water Quality Analyst and Compliance Monitor.* Provided water quality expertise and support to keep project in compliance with water quality measures and standards. Daily water quality testing, sampling and analysis and compliance monitoring was conducted throughout the project site.

**California Department of Water Resources, Emergency Levee Repairs Project, Sacramento – San Joaquin Delta, CA**. *Water Quality Analyst and Aquatic Biologist*. Provided water quality sampling and analysis in the San Joaquin River and other waterways. Also surveyed for giant garter snake, delta smelt, green sturgeon and other listed species at these locations.

**Ventura County Watershed Protection District, Santa Clara River Estuary and Reach 3 Bacteria Total Maximum Daily Load (TMDL) Requirements, Santa Paula, CA.** *Aquatic Biologist*. Mr. Marella served as an Aquatic Biologist for the Santa Clara River Estuary and Reach 3 Bacteria Total Maximum Daily Load Requirements on-going study. Responsible for taking weekly water quality samples from the Santa Clara River for TMDL monitoring and reporting requirements.

**Sharma Engineers, Simi Valley Landfill Project, Simi Valley, CA.** *QSP*. Mr. Marella served as the QSP or the Simi Valley Landfill Project located in Simi Valley. Responsible for weekly SWPPP compliance inspections, qualifying pre and post storm rain event inspections, and qualifying storm water sampling and analysis. Mr. Marella also prepared and assisted with quarterly non-storm water reports and storm water annual reports.

**Global Diving and Salvage, Santa Barbara Desalination Reactivation Project, Santa Barbara, CA.** *Turbidity Monitor*. Served as a turbidity monitor for the Santa Barbara Desalination Reactivation Project in Santa Barbara. Turbidity was sampled at four locations in the Pacific Ocean to ensure thresholds weren't exceeded outlined in the California Ocean Plan. Mr. Marella also assisted in authoring the Turbidity Minimization and Monitoring Plan.

**KB Homes, Springville Camarillo Project, Camarillo, CA.** *Water Quality Analyst*. Provided water quality analysis of water that was drained into a storm drain. All water quality data had to be under Numeric Action Levels set forth by the Los Angeles Regional Water Quality Control Board (LARWCQB).

**Ventura County Watershed Protection District, Somis Drain Repairs Project, Camarillo, CA.** *Water Quality Analyst*. Mr. Marella provided biological and water quality monitoring services for the Somis Drain Repairs Project located in Camarillo. Water quality sampling for the project was conducted from a daily to weekly basis. Parameters measured were pH, dissolved oxygen, temperature, salinity, and total suspended solids (TSS). Water quality data was reported to the LARWQCB.

**Ventura County Watershed Protection District, Camarillo Drain Repairs Project, Camarillo, CA.** *Aquatic Biologist*. Mr. Marella provided biological and water quality monitoring services for the Camarillo Drain Repair Project located in Camarillo. Water quality sampling for the project was conducted from a daily to weekly basis. Parameters measured were pH, dissolved oxygen, temperature, salinity, and total suspended solids (TSS). Water quality data was reported to the LARWQCB.

## *Terrestrial*

**2807 S. Foose Road, APN: 4472-025-052, Malibu, CA.** *Biological Assessment***.** Mr. Marella provided biological field surveys and the preparation of the Biological Assessment Report that was prepared for a potential project located within the Santa Monica Mountain Local Coastal Program area. Field surveys included detailed vegetation mapping, mapping of oak trees, wetlands and waters under the jurisdiction of state and federal agencies, and any potential wildlife movement corridors. A detailed technical report was prepared in accordance with the Los Angeles County Local Coastal Program Implementation Plan, intended to accompany a project submittal package to the county.

**3605 Noranda Lane Tree Survey, Malibu, CA.** *Oak Tree Surveyor***.** Mr. Marella assisted in gathering data during an oak tree assessment on an undeveloped property within the Malibu LCP.

**Recurrent Energy, Cinco Solar Project, Mojave, CA.** *Burrow Surveyor*. Mr. Marella provided remote camera installations, surveying, and burrow monitoring for desert tortoise and other sensitive desert species. Cameras were checked daily for species activity and burrow use. Over 300 hours was spent as a result of project activities and schedule.

**Recurrent Energy, Astoria Solar Project, Lancaster, CA.** *Burrow Surveyor*. Mr. Marella provided remote camera installations, surveying, and burrow monitoring for desert tortoise and other sensitive desert species. Cameras were checked daily

for species activity and burrow use. Over 100 hours was spent as a result of project activities and schedule.

**Recurrent Energy, Mustang Solar Project, Leemore, CA.** *Burrow Surveyor*. Mr. Marella spent 40 hours surveying for burrowing owl and San Joaquin kit fox as part of this project.

**Recurrent Energy, Tranquility Solar Project, Fresno County, CA.** *Burrow Surveyor*. Mr. Marella spent 40 hours surveying for burrowing owl and San Joaquin kit fox as part of this project. United Water Conservation District, California least tern surveys, Ventura, CA Accompanied and under the supervision of Senior Ornithologists, Mr. Marella assisted in California least tern surveys along and adjacent to the Santa Clara River during the species breeding season.

**Camp Hess Kramer, Camp Hess Kramer Project, Malibu, CA.** *Surveyor and Compliance Monitor*. Mr. Marella provided surveying and monitoring for monarch butterfly and native tree species. Additionally, he provided compliance monitoring for Environmentally Sensitive Habitat Areas (ESHA) along the Malibu coast and Santa Monica Mountains that were highlighted in the County of Ventura Conditional Use Permit (CUP).

**Southern California Gas Company, Goleta Storage Facility Project, Goleta, CA.** *Surveyor*. Mr. Marella provided surveying and monitoring for monarch butterfly and potential suitable habitat for the species. Additionally, he wrote a constraints analysis for the survey area that included ESHA, riparian areas, and jurisdictional area.

**KB Homes, Cavaletto Tree Farm Project, Goleta, CA.** *Biological Surveyor*. Mr. Marella assisted bat biologists with daytime and nighttime surveys for bat species as part of this project. Building structures and adjacent trees were surveyed for bats.

**Angeles National Forest, Botanical surveys, Los Angeles County, CA.** *Botanical Surveyor*. Mr. Marella assisted botanists with botanical surveys for special-status species in the Angeles National Forest located near Castaic, CA and Pyramid Lake, CA.

**Southern California Gas Company, Restoration for Native Vegetation, Santa Barbara County, CA.** *Botanical Surveyor*. Mr. Marella assisted botanists with native vegetation surveys for a restoration site in Santa Barbara County, CA.

**Various pre-construction and post-construction surveys, CA.** *Pre- and Post-Construction Surveyor*. Mr. Marella has performed over 50 pre-construction and post-construction surveys throughout the state of California. Projects include oil and gas pipelines, residential, solar facilities, and development. All pre-construction surveys were followed by a report of special status species and mitigation measures were observed and encountered.

**Compliance and Biological Monitoring, CA.** *Compliance Monitoring*. Mr. Marella has over 1,000 hours of compliance and biological monitoring experience. Compliance Monitoring was performed to keep clients in compliance with CDFW 1600 Streambed Alteration Agreements, Army Corps of Engineers permits, Clean

Water Act 401 permits, and other local permits. Biological monitoring was performed when special status species had potential or were occurring on site.

Daryl Koutnik
Consulting Biologist

# Resume

**Address**: 3892 Chapman Place
Riverside, CA 92506

**Telephone**: (949) 275-3904

**Education**: Doctor of Philosophy and Master of Science, Botany, University of California, Davis
Bachelor of Arts, Mathematics and Biology, California State University, Northridge

Daryl Koutnik has over 25 years of experience managing and conducting biological resources field studies for environmental compliance and planning. For 14 years he worked in and latterly managed the environmental review section of the Los Angeles County Department of Regional Planning.

As Senior Biologist and Supervising Regional Planner for the Department of Regional Planning, Dr. Koutnik managed the preparation of more than 30 EIRs for a wide variety of project types. In addition to EIRs, he managed and prepared a report on the biological resources of the Los Angeles County Santa Monica Mountains Local Coastal Program with the inclusion of resource protection provisions and criteria for the designation of Coastal Zone environmentally sensitive habitat areas (ESHA). Daryl was also the Significant Ecological Area Technical Advisory Committee (SEATAC) coordinator for the Department. As a result, he has unparalleled insight into the County's procedures and preferences relative to processing environmental documents.

Dr. Koutnik has directed, managed, and performed hundreds of biological resources inventories, special-status species surveys and identification, environmental impact assessments, biological constraints analyses, plant and wildlife studies, habitat restoration plans, and mitigation and monitoring plans for a wide variety of private and public sector clients. These have been prepared in compliance and/or coordination with CEQA, NEPA, USACE, USFWS, CDFW, RWQCB as well as local programs, and related to residential, commercial, industrial, infrastructure, and educational developments.

In addition to biology, he is an expert in the application of federal and State Endangered Species Acts, the California Environmental Quality Act (CEQA), and other regulations relevant to biological resources, as well as processing and acquisition of Coastal Development Permits within the California Coastal Zone.

## Selected Project Experience

**County of Los Angeles General Plan EIR, Los Angeles County, CA.** *Biological Resources Task Lead.* Dr. Koutnik oversaw the preparation of the biological resources analysis for the County's General Plan Update EIR, which was prepared by another consultant for the County. The County's General Plan Update was focused on the designated Significant Ecological Areas (SEAs), for which Dr. Koutnik was invaluable in providing insights. The General Plan Update EIR was used to also provide approval for the update to the County's Antelope Valley Area Plan.

**One Valley One Vision Plan EIR, City of Santa Clarita, Los Angeles County, CA.** *Biological Resources Task Lead.* Dr. Koutnik oversaw the preparation of the biological resources analysis for the EIR for the City of Santa Clarita's adopted General Plan, commonly known as One Valley One Vision. The creation of this plan was a joint effort between the County of Los Angeles, the City of Santa Clarita and the community residents and businesses. The goal was to create a single vision within the County and City's jurisdictions for future growth of the Santa Clarita Valley, with emphasis to preservation of natural resources.

**Los Angeles City Planning, Los Angeles Wildlife Habitat Blocks, Los Angeles, CA.** *Lead Biologist.* Dr. Koutnik managed a mapping analysis of areas throughout the City of Los Angeles with potential to support wildlife habitat and movement. Potential areas identified were based on Significant Ecological Areas within the city's limits that were identified by the County of Los Angeles, as well as other natural areas, parks, and open space, which were then ground-truthed by team biologists to verify potential to support wildlife with emphasis of medium and large mammals as target species. The study also utilized data compiled from species occurrences databases (e.g., California Natural Diversity Database [CNDDB]), citizen science databases (e.g., eBird, iNaturalist), and available roadkill data. A report prepared by ESA identifying important Protected Areas for Wildlife (PAWs) and Wildlife Movement Pathways (WMPs) within the City, as well as recommendations that the Planning Department could use to create development standards to avoid and minimize impacts to PAWs and WMPs, and balance needs for development with needs for wildlife habitat and connectivity.

**Los Angeles County Department of Public Works, San Francisquito Canyon Road Bridge Replacement Project, Angeles National Forest, Unincorporated Los Angeles County, CA.** *Biological Project Manager.* The project involves the County of Los Angeles bridge replacement on public road within the Angeles National Forest. As the manager for biological resource Dr. Koutnik is responsible for reporting, including preparation of the project Biological Assessment/ Biological Evaluation, Natural Environmental Study, and jurisdictional evaluation, and managed the biological resource field surveys, and recommendations for special-status species protection.

**Los Angeles County Department of Public Works, Bridge Preventative Maintenance Program – Group 23, Los Angeles County, CA.** *Biological Project Manager.* As a part of an on-call contract with the Los Angeles County Department of Public Works for federally-funded projects, professional/technical support services were provided for 12 bridges in Group 23 of the Bridge Preventative Maintenance Program. These bridges, located in the cities of Claremont, Pomona, Rosemead and San Gabriel, Los Angeles County will undergo a variety of maintenance activities geared towards extending their service. A Natural Environmental Study – Minimal Impact Report was prepared to evaluate the potential biological impacts of the maintenance activities.

**Mulberry Drive and Painter Avenue Intersection Improvement Project, South Whittier, Unincorporated Los Angeles County, CA.** *Project Manager.* The project involved the County of Los Angeles intersection improvements to enhance traffic operations at the intersection of Mulberry Drive and Painter Avenue, South Whittier. As project manager for entire CEQA process, Dr. Koutnik was responsible for the preparation of the project Initial Study/Mitigated Negative Declaration, including the cultural resources report, noise assessment, air quality and greenhouse gas emissions analysis.

**Aidlin Hills Residential Development EIR, Stevenson Ranch, Unincorporated Los Angeles County, CA**. *Project Manager.* The project proposed a 102-unit residential project on 210 acres in Stevenson Ranch with roadway access from Pico Canyon Road. Dr. Koutnik served as the project manager for entire CEQA process, including preparation of the project EIR, coordination with Native America Tribal Consultation, manage biological resource field surveys, and processing of regulatory permits.

**Fairmont Butte Motorsports Park EIR, Los Angeles County, CA.** *Project Manager.* The proposed project request for a land division application to subdivide the 320-acre subject property into three (3) parcels. The proposed primary development was a 3.6-mile racetrack and its accessory facilities totaling 186,808 square feet in 36 buildings. The racetrack facility would regularly be leased out for use by private racing clubs or automobile companies for car testing purposes. Visitors are generally participants and their family members and friends. Racing events would occur during the day, but nighttime vehicle maintenance could occur and 24-hour security protection was proposed. Dr. Koutnik managed the preparation of the project EIR and the biological surveys for the project biological technical report. The environmental analysis included preparation of a water supply assessment consistent with the Antelope Valley groundwater pumping adjudication process.

**Newhall Ranch Specific Plan EIR, Valencia, Los Angeles County, CA.** *Project Manager.* Dr. Koutnik managed the preparation and certification of the EIR for the 13,000-acre Newhall Ranch Specific Plan area located near Magic Mountain Entertainment Center in Valencia, California. Environmental factors analyzed included detailed water resource analysis, oak resource management per County of Los Angeles requirements, and Significant Ecological Area stewardship for both the Santa Clara River, including unarmored three spine stickleback and the Santa Susana Mountains in completing recertification of the EIR. He coordinated all subsequent environmental reports through 2006, including individual residential and wastewater treatment development located within the Specific Plan area.

**City of Diamond Bar, Crooked Creek Residential Project, Diamond Bar, CA.** *Project Biologist.* Dr. Koutnik directed and conducted the biological resources surveys to support the preparation of a Mitigated Negative Declaration for the development of seven single-family residences and associated infrastructure including a southward expansion of the existing Crooked Creek Drive and a maintenance access road within the Proposed Development Area of the approximately 12.9-acre vacant Project Site. The Project consists of nine total lots: seven residential lots; one lot designated for the private roadway (i.e., southward expansion of Crooked Creek Drive); and one lot which includes the maintenance access road and approximately 10.4 acres of retained undeveloped area. The primary environmental issues included aesthetics/visual, biological resources, drainage, and construction noise.

**Lytle Creek Ranch Specific Plan, City of Rialto and San Bernardino County, CA.** *Botanist.* Dr. Koutnik participated in the data collection and analysis regarding the listing status of the woolly star population (*Eriastrum densifolium*) within the project boundaries. In addition, Dr. Koutnik collected seed of the project site woolly star population for future propagation. Dr. Koutnik assisted in the annual vegetation surveys for forage plants within the San Bernardino kangaroo rat (*Dipodomys merriami parvus*) mitigation preserve.

**City of Menifee On-Call Adjunct Staff, City of Menifee, CA.** *Biological and CEQA Task Leads.* Dr. Koutnik oversaw the biological services for the City of Menifee in providing Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) technical advice for City Community Development staff. Services include review and determination of project consistency with the MSHCP. In addition, Dr. Koutnik coordinated assistance with CEQA compliance on EIR projects including peer review of EIR documents or preparation of EIR Addenda.

**Travertine Point Specific Plan, Riverside and Imperial Counties, CA.** *Project Manager.* Dr. Koutnik Managed the biological resource surveys and report for the 5,131-acre proposed master and land use plan on Travertine Point Specific Plan in Riverside and Imperial Counties located along the northwestern shore of the Salton Sea. Project was approved for up to 16,655 residential units, and includes include residential, business park, mixed use commercial, regional commercial, resort/tourism, and open space land uses. Tasks included environmental review of potential impacts associated with development of prime agricultural land, cultural resources of tribal lands, water supply assessment, hydrologic and flooding studies, air quality and greenhouse gas studies, biological and jurisdictional surveys, and other studies related to development of a new town. This project involved working with several environmental groups (e.g., California Department of Parks and Recreation, Friends of the Desert Mountains) and the accommodation of the Coachella Valley Multiple Species Habitat Conservation Plan provisions. Dr. Koutnik worked closely with the project principal in addressing general environmental issues including Native American tribal representation, cultural resource protection, and greenhouse gas analyses.

**Eastern Municipal Water District (EMWD), Mountain Avenue East Project, Riverside County, CA.** *Project Biologist.* As part of an on-call environmental and biological services contract with the EMWD, Dr. Koutnik provided biological support services and coordination with the Western Riverside County Regional Conservation Authority (RCA) for MSHCP consistency for a proposed recharge basin installation project in the City of San Jacinto and negotiate potential mitigation options for San Bernardino kangaroo rat (*Dipodomys merriami parvus*) and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*).

**Highland Fairview, World Logistics Center Specific Plan, Moreno Valley, CA.** *Project Biology Lead.* Dr. Koutnik was responsible for coordinating updated biological surveys for the Specific Plan area and in preparing the revised Biological Resources section for a revised EIR to address deficiencies found in the original project EIR. The World Logistics Center includes 40.4 million square feet of logistics warehouse space and related land uses on a 2,650-acre site. Major issues in the Revised Final EIR included air quality, biological resources, climate change, traffic, noise, aesthetics and cumulative impacts. The Revised Final Programmatic EIR was considered and approved by the Moreno Valley City Council.

**Cachuma Project EIR, Santa Ynez Valley, Santa Barbara County, CA.** *Biological Resources Task Lead.* Dr. Koutnik oversaw the preparation of the biological resources analysis for the EIR for the consideration of modifications to the U.S. Bureau of Reclamation's Water Rights Permits 11308 and 11310 (Applications 11331 and 11332) to protect public trust resources and downstream water rights on the Santa Ynez River below Bradbury Dam for the State Water Resources Control Board, including the impact on and benefit to the endangered steelhead.

# APPENDIX C

Floral and Faunal Compendia

## Faunal Compendium

| Scientific name | Common name |
|---|---|
| **Birds** | |
| *Aegithalidae ssp.* | bushtit |
| *Aphelocoma californica* | California scrub jay |
| *Baeolophus inornatus* | oak titmouse |
| *Buteo jamaicensis* | red-tailed hawk |
| *Calypte anna* | Anna's hummingbird |
| *Cathartes aura* | turkey vulture |
| *Chamaea fasciata* | wrentit |
| *Columba livia* | rock dove |
| *Corvus brachyrhynchos* | American crow |
| *Corvus corax* | common raven |
| *Geothlypis trichas* | common yellowthroat |
| *Haemorhous mexicanus* | house finch |
| *Melanerpes formicivorus* | acorn woodpecker |
| *Mimus polyglottos* | northern mockingbird |
| *Pipilo maculatus* | spotted towhee |
| *Sayornis nigricans* | black phoebe |
| *Setophaga coronata* | yellow-rumped warbler |
| *Spinus psaltria* | lesser goldfinch |
| *Zenaida macroura* | mourning dove |
| **Mammals** | |
| *Canis latrans* | coyote (scat) |
| *Otospermophilus beecheyi* | California ground squirrel |
| *Peromyscus maniculatus* | deer mouse |
| *Sylvilagus audubonii* | desert cottontail |
| *Thomomys bottae* | Botta's pocket gopher |
| **Reptiles** | |
| *Sceloporus occidentalis* | western fence lizard |

## Floral Compendium

| Scientific name | Common name |
|---|---|
| **Gymnosperms** | |
| **Pinaceae** | **Pine Family** |
| *Pinus canariensis** | Canary Island pine |
| **Angiosperms (Dicots)** | |
| **Anacardiaceae** | **Cashew/Sumac Family** |
| *Malosma laurina* | laurel sumac |
| *Rhus ovata* | sugar bush |
| *Schinus molle** | Peruvian peppertree |
| *Schinus terebinthifolia** | Brazilian peppertree |
| **Apiaceae** | **Carrot Family** |
| *Foeniculum vulgare** | fennel |
| **Apocynaceae** | **Dogbane Family** |
| *Nerium oleander** | oleander |
| *Vinca major** | greater periwinkle |
| **Asteraceae** | **Aster Family** |
| *Artemisia californica* | California sagebrush |
| *Centaurea melitensis** | tocalote |
| *Hazardia squarrosa* | sawtoothed goldenbush |
| *Hedypnois rhagadioloides** | Crete weed |
| *Hypochaeris glabra** | smooth cat's ear |
| *Malacothrix saxatilis* | cliff aster |
| *Pseudognaphalium biolettii* | rabbit tobacco |
| *Pseudognaphalium californicum* | ladies' tobacco |
| *Rafinesquia californica* | California chicory |
| *Silybum marianum** | milk thistle |
| *Sonchus asper** | spiny sow thistle |
| *Sonchus oleraceus** | common sow thistle |
| **Boraginaceae** | **Borage Family** |
| *Amsinckia menziesii* | small flowered fiddleneck |
| **Brassicaceae** | **Mustard Family** |
| *Brassica nigra** | black mustard |
| *Hirschfeldia incana** | shortpod mustard |
| **Convolvulaceae** | **Morning Glory Family** |
| *Calystegia macrostegia* | island morning glory |
| **Cucurbitaceae** | **Cucumber/Gourd Family** |
| *Marah macrocarpa* | wild cucumber |
| **Euphorbiaceae** | **Spurge Family** |
| *Euphorbia peplus** | petty spurge |
| *Euphorbia terracina** | carnation weed |
| **Fabaceae** | **Pea/Legume Family** |
| *Acmispon glaber* | deerweed |
| *Medicago polymorpha** | bur clover |
| *Melilotus officinalis** | yellow sweetclover |
| *Vicia benghalensis** | purple vetch |
| **Fagaceae** | **Oak/Beech Family** |
| *Quercus agrifolia* | coast live oak |
| **Geraniaceae** | **Geranium Family** |
| *Erodium cicutarium** | red stemmed filaree |

| | |
|---|---|
| **Hydrophyllaceae** | **Waterleaf Family** |
| *Eucrypta chrysanthemifolia* | common eucrypta |
| **Lamiaceae** | **Mint Family** |
| *Salvia leucophylla* | purple sage |
| **Malvaceae** | **Mallow Family** |
| *Malacothamnus fasciculatus* | chaparral bush mallow |
| *Malva parviflora** | cheeseweed mallow |
| **Myrsinaceae** | **Myrsine Family** |
| *Lysimachia arvensis** | scarlet pimpernel |
| **Myrtaceae** | **Myrtle Family** |
| *Eucalyptus globulus** | blue gum |
| **Oleaceae** | **Olive Family** |
| *Fraxinus pennsylvanica** | green ash |
| **Oxalidaceae** | **Oxalis Family** |
| *Oxalis pes-caprae** | Bermuda buttercup |
| **Platanaceae** | **Sycamore Family** |
| *Platanus racemosa* | western sycamore |
| **Polygonaceae** | **Buckwheat Family** |
| *Eriogonum fasciculatum ssp. fasciculatum* | California buckwheat |
| *Rumex crispus** | curly dock |
| **Rosaceae** | **Rose Family** |
| *Heteromeles arbutifolia* | toyon |
| **Rubiaceae** | **Madder Family** |
| *Galium aparine** | common bedstraw |
| **Solanaceae** | **Nightshade Family** |
| *Nicotiana glauca** | tree tobacco |
| *Solanum xanti* | chaparral nightshade |
| **Angiosperms (Monocots)** | |
| **Agavaceae** | **Agave Family** |
| *Chlorogalum pomeridianum* | wavyleaf soap plant |
| **Amaryllidaceae** | **Amaryllis Family** |
| *Narcissus tazetta** | cream narcissus |
| **Arecaceae** | **Palm Family** |
| *Phoenix canariensis** | Canary Island date palm |
| *Washingtonia robusta** | Mexican fan palm |
| **Iridaceae** | **Iris Family** |
| *Sisyrhinchium bellum* | blue-eyed grass |
| **Poaceae** | **Grass Family** |
| *Avena barbata** | slender wild oat |
| *Avena fatua** | common wild oat |
| *Bromus diandrus** | ripgut brome |
| *Bromus rubens** | red brome |
| *Elymus condensatus* | giant wild rye |
| *Ehrharta erecta** | panic veldt grass |
| *Hordeum murinum** | foxtail barley |
| *Pennisetum setaceum** | fountain grass |
| *Stipa pulchra* | purple needlegrass |
| **Themidaceae** | **Brodiaea Family** |
| *Dipterostemon capitatus* | blue dicks |

- Non-native

# APPENDIX D

Photographic Log

**Photo 1.** Facing south from Foose Road. Photo depicts recently mowed vegetation within development footprint. Canary Island pines located on the property near Foose Road can be seen in the foreground.

**Photo 2.** Facing north from Foose Road. Photo depicts recently mowed vegetation on the property.

**Photo 3.** Facing northeast from Foose Road. Photo depicts recently mowed vegetation on property. A coast live oak woodland can be seen in the background.

**Photo 4.** Facing east from the southern portion of the property. Photo depicts several coast live oaks and *Avena* herbaceous semi-natural alliance. Regrowth of laurel sumacs from brush clearance activities can be seen intermittingly throughout the alliance.

**Photo 5.** Facing east from the southeastern portion of the property. Photo depicts *Avena* herbaceous semi-natural alliance on eastside of property.

**Photo 6.** Facing south from the northern perimeter of the property. Photo depicts a coast live oak woodland located on property.

**Photo 7.** Facing south from the Foose Road. Photo depicts the proposed development footprint where the residence will be constructed.

**Photo 8.** Facing south from Foose Road. Photo depicts Canary Island pines along Foose Road, located along the western perimeter of the property.

# APPENDIX E

CNDDB and CNPS Database Search Results

# Selected Elements by Common Name

## California Department of Fish and Wildlife

## California Natural Diversity Database

**Query Criteria:** Quad IS (Camarillo (3411921) OR Thousand Oaks (3411827) OR Newbury Park (3411828) OR Point Mugu (3411911) OR Triunfo Pass (3411818) OR Point Dume (3411817))<br /> AND Taxonomic Group IS (Dune OR Scrub OR Herbaceous OR Marsh OR Riparian OR Woodland OR Forest OR Alpine OR Inland Waters OR Marine OR Estuarine OR Riverine OR Palustrine OR Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes)

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **Agoura Hills dudleya**<br>*Dudleya cymosa ssp. agourensis* | PDCRA040A7 | Threatened | None | G5T1 | S1 | 1B.2 |
| **American badger**<br>*Taxidea taxus* | AMAJF04010 | None | None | G5 | S3 | SSC |
| **arroyo chub**<br>*Gila orcuttii* | AFCJB13120 | None | None | G2 | S2 | SSC |
| **bank swallow**<br>*Riparia riparia* | ABPAU08010 | None | Threatened | G5 | S2 | |
| **Belding's savannah sparrow**<br>*Passerculus sandwichensis beldingi* | ABPBX99015 | None | Endangered | G5T3 | S3 | |
| **Blochman's dudleya**<br>*Dudleya blochmaniae ssp. blochmaniae* | PDCRA04051 | None | None | G3T2 | S2 | 1B.1 |
| **Braunton's milk-vetch**<br>*Astragalus brauntonii* | PDFAB0F1G0 | Endangered | None | G2 | S2 | 1B.1 |
| **burrowing owl**<br>*Athene cunicularia* | ABNSB10010 | None | None | G4 | S3 | SSC |
| **California brown pelican**<br>*Pelecanus occidentalis californicus* | ABNFC01021 | Delisted | Delisted | G4T3T4 | S3 | FP |
| **California horned lark**<br>*Eremophila alpestris actia* | ABPAT02011 | None | None | G5T4Q | S4 | WL |
| **California least tern**<br>*Sternula antillarum browni* | ABNNM08103 | Endangered | Endangered | G4T2T3Q | S2 | FP |
| **California legless lizard**<br>*Anniella sp.* | ARACC01070 | None | None | G3G4 | S3S4 | SSC |
| **California Orcutt grass**<br>*Orcuttia californica* | PMPOA4G010 | Endangered | Endangered | G1 | S1 | 1B.1 |
| **California screw moss**<br>*Tortula californica* | NBMUS7L090 | None | None | G2G3 | S2S3 | 1B.2 |
| **chaparral nolina**<br>*Nolina cismontana* | PMAGA080E0 | None | None | G3 | S3 | 1B.2 |
| **chaparral ragwort**<br>*Senecio aphanactis* | PDAST8H060 | None | None | G3 | S2 | 2B.2 |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **coast horned lizard**<br>*Phrynosoma blainvillii* | ARACF12100 | None | None | G3G4 | S3S4 | SSC |
| **coastal California gnatcatcher**<br>*Polioptila californica californica* | ABPBJ08081 | Threatened | None | G4G5T2Q | S2 | SSC |
| **coastal whiptail**<br>*Aspidoscelis tigris stejnegeri* | ARACJ02143 | None | None | G5T5 | S3 | SSC |
| **conejo buckwheat**<br>*Eriogonum crocatum* | PDPGN081G0 | None | Rare | G1 | S1 | 1B.2 |
| **Conejo dudleya**<br>*Dudleya parva* | PDCRA04016 | Threatened | None | G1 | S1 | 1B.2 |
| **Cooper's hawk**<br>*Accipiter cooperii* | ABNKC12040 | None | None | G5 | S4 | WL |
| **Coulter's goldfields**<br>*Lasthenia glabrata ssp. coulteri* | PDAST5L0A1 | None | None | G4T2 | S2 | 1B.1 |
| **Coulter's saltbush**<br>*Atriplex coulteri* | PDCHE040E0 | None | None | G3 | S1S2 | 1B.2 |
| **Crotch bumble bee**<br>*Bombus crotchii* | IIHYM24480 | None | None | G3G4 | S1S2 | |
| **dune larkspur**<br>*Delphinium parryi ssp. blochmaniae* | PDRAN0B1B1 | None | None | G4T2 | S2 | 1B.2 |
| **estuary seablite**<br>*Suaeda esteroa* | PDCHE0P0D0 | None | None | G3 | S2 | 1B.2 |
| **ferruginous hawk**<br>*Buteo regalis* | ABNKC19120 | None | None | G4 | S3S4 | WL |
| **Gerry's curly-leaved monardella**<br>*Monardella sinuata ssp. gerryi* | PDLAM18163 | None | None | G3T1 | S1 | 1B.1 |
| **globose dune beetle**<br>*Coelus globosus* | IICOL4A010 | None | None | G1G2 | S1S2 | |
| **golden eagle**<br>*Aquila chrysaetos* | ABNKC22010 | None | None | G5 | S3 | FP |
| **hoary bat**<br>*Lasiurus cinereus* | AMACC05030 | None | None | G5 | S4 | |
| **least Bell's vireo**<br>*Vireo bellii pusillus* | ABPBW01114 | Endangered | Endangered | G5T2 | S2 | |
| **light-footed Ridgway's rail**<br>*Rallus obsoletus levipes* | ABNME05014 | Endangered | Endangered | G5T1T2 | S1 | FP |
| **Lyon's pentachaeta**<br>*Pentachaeta lyonii* | PDAST6X060 | Endangered | Endangered | G1 | S1 | 1B.1 |
| **Malibu baccharis**<br>*Baccharis malibuensis* | PDAST0W0W0 | None | None | G1 | S1 | 1B.1 |
| **marcescent dudleya**<br>*Dudleya cymosa ssp. marcescens* | PDCRA040A3 | Threatened | Rare | G5T2 | S2 | 1B.2 |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **mesa horkelia**<br>*Horkelia cuneata var. puberula* | PDROS0W045 | None | None | G4T1 | S1 | 1B.1 |
| **mimic tryonia (=California brackishwater snail)**<br>*Tryonia imitator* | IMGASJ7040 | None | None | G2 | S2 | |
| **monarch - California overwintering population**<br>*Danaus plexippus pop. 1* | IILEPP2012 | None | None | G4T2T3 | S2S3 | |
| **Ojai navarretia**<br>*Navarretia ojaiensis* | PDPLM0C130 | None | None | G2 | S2 | 1B.1 |
| **Orcutt's pincushion**<br>*Chaenactis glabriuscula var. orcuttiana* | PDAST20095 | None | None | G5T1T2 | S1 | 1B.1 |
| **pallid bat**<br>*Antrozous pallidus* | AMACC10010 | None | None | G5 | S3 | SSC |
| **Parry's spineflower**<br>*Chorizanthe parryi var. parryi* | PDPGN040J2 | None | None | G3T2 | S2 | 1B.1 |
| **Plummer's mariposa-lily**<br>*Calochortus plummerae* | PMLIL0D150 | None | None | G4 | S4 | 4.2 |
| **quino checkerspot butterfly**<br>*Euphydryas editha quino* | IILEPK405L | Endangered | None | G5T1T2 | S1S2 | |
| **salt marsh bird's-beak**<br>*Chloropyron maritimum ssp. maritimum* | PDSCR0J0C2 | Endangered | Endangered | G4?T1 | S1 | 1B.2 |
| **San Bernardino ringneck snake**<br>*Diadophis punctatus modestus* | ARADB10015 | None | None | G5T2T3 | S2? | |
| **San Diego desert woodrat**<br>*Neotoma lepida intermedia* | AMAFF08041 | None | None | G5T3T4 | S3S4 | SSC |
| **sandy beach tiger beetle**<br>*Cicindela hirticollis gravida* | IICOL02101 | None | None | G5T2 | S2 | |
| **Santa Monica dudleya**<br>*Dudleya cymosa ssp. ovatifolia* | PDCRA040A5 | Threatened | None | G5T1 | S1 | 1B.1 |
| **Santa Monica grasshopper**<br>*Trimerotropis occidentiloides* | IIORT36300 | None | None | G1G2 | S1S2 | |
| **Santa Susana tarplant**<br>*Deinandra minthornii* | PDAST4R0J0 | None | Rare | G2 | S2 | 1B.2 |
| **senile tiger beetle**<br>*Cicindela senilis frosti* | IICOL02121 | None | None | G2G3T1T3 | S1 | |
| **slender mariposa-lily**<br>*Calochortus clavatus var. gracilis* | PMLIL0D096 | None | None | G4T2T3 | S2S3 | 1B.2 |
| **Sonoran maiden fern**<br>*Thelypteris puberula var. sonorensis* | PPTHE05192 | None | None | G5T3 | S2 | 2B.2 |
| **south coast marsh vole**<br>*Microtus californicus stephensi* | AMAFF11035 | None | None | G5T1T2 | S1S2 | SSC |
| **southern California legless lizard**<br>*Anniella stebbinsi* | ARACC01060 | None | None | G3 | S3 | SSC |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **southern California rufous-crowned sparrow**<br>*Aimophila ruficeps canescens* | ABPBX91091 | None | None | G5T3 | S3 | WL |
| **southern California saltmarsh shrew**<br>*Sorex ornatus salicornicus* | AMABA01104 | None | None | G5T1? | S1 | SSC |
| **Southern Coast Live Oak Riparian Forest**<br>*Southern Coast Live Oak Riparian Forest* | CTT61310CA | None | None | G4 | S4 | |
| **Southern Coastal Salt Marsh**<br>*Southern Coastal Salt Marsh* | CTT52120CA | None | None | G2 | S2.1 | |
| **Southern Riparian Forest**<br>*Southern Riparian Forest* | CTT61300CA | None | None | G4 | S4 | |
| **Southern Sycamore Alder Riparian Woodland**<br>*Southern Sycamore Alder Riparian Woodland* | CTT62400CA | None | None | G4 | S4 | |
| **southern tarplant**<br>*Centromadia parryi ssp. australis* | PDAST4R0P4 | None | None | G3T2 | S2 | 1B.1 |
| **steelhead - southern California DPS**<br>*Oncorhynchus mykiss irideus pop. 10* | AFCHA0209J | Endangered | None | G5T1Q | S1 | |
| **tidewater goby**<br>*Eucyclogobius newberryi* | AFCQN04010 | Endangered | None | G3 | S3 | SSC |
| **Trask shoulderband**<br>*Helminthoglypta traskii traskii* | IMGASC2473 | None | None | G1G2T1 | S1 | |
| **tricolored blackbird**<br>*Agelaius tricolor* | ABPBXB0020 | None | Candidate Endangered | G2G3 | S1S2 | SSC |
| **two-striped gartersnake**<br>*Thamnophis hammondii* | ARADB36160 | None | None | G4 | S3S4 | SSC |
| **Valley Needlegrass Grassland**<br>*Valley Needlegrass Grassland* | CTT42110CA | None | None | G3 | S3.1 | |
| **Valley Oak Woodland**<br>*Valley Oak Woodland* | CTT71130CA | None | None | G3 | S2.1 | |
| **Verity's dudleya**<br>*Dudleya verityi* | PDCRA040U0 | Threatened | None | G1 | S1 | 1B.1 |
| **wandering (=saltmarsh) skipper**<br>*Panoquina errans* | IILEP84030 | None | None | G4G5 | S2 | |
| **western mastiff bat**<br>*Eumops perotis californicus* | AMACD02011 | None | None | G5T4 | S3S4 | SSC |
| **western pond turtle**<br>*Emys marmorata* | ARAAD02030 | None | None | G3G4 | S3 | SSC |
| **western red bat**<br>*Lasiurus blossevillii* | AMACC05060 | None | None | G5 | S3 | SSC |
| **western small-footed myotis**<br>*Myotis ciliolabrum* | AMACC01140 | None | None | G5 | S3 | |
| **western snowy plover**<br>*Charadrius alexandrinus nivosus* | ABNNB03031 | Threatened | None | G3T3 | S2S3 | SSC |

| Species | Element Code | Federal Status | State Status | Global Rank | State Rank | Rare Plant Rank/CDFW SSC or FP |
|---|---|---|---|---|---|---|
| **white rabbit-tobacco**<br>*Pseudognaphalium leucocephalum* | PDAST440C0 | None | None | G4 | S2 | 2B.2 |
| **white-tailed kite**<br>*Elanus leucurus* | ABNKC06010 | None | None | G5 | S3S4 | FP |
| **white-veined monardella**<br>*Monardella hypoleuca ssp. hypoleuca* | PDLAM180A3 | None | None | G4T3 | S3 | 1B.3 |
| **woven-spored lichen**<br>*Texosporium sancti-jacobi* | NLTEST7980 | None | None | G3 | S1 | 3 |
| **Yuma myotis**<br>*Myotis yumanensis* | AMACC01020 | None | None | G5 | S4 | |

**Record Count: 84**

CNPS California Native Plant Society

Inventory of Rare and Endangered Plants

## Plant List

**45** matches found. *Click on scientific name for details*

**Search Criteria**

California Rare Plant Rank is one of [1A, 1B, 2A, 2B, 3, 4], FESA is one of [Endangered, Threatened, Candidate, Not Listed], CESA is one of [Endangered, Threatened, Rare, Not Listed], Found in Quads 3411827, 3411826, 3411825, 3411817, 3411816 and 3411815, Lifeform is one of [Tree, Shrub, Leaf succulent, Herb, Vine, Stem succulent, Lichen, Moss, Liverwort], Duration is one of [ann, per, ephem], Bloom Time is one of [January, February, March, April, May, June, July, August, September, October, November, December]

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

| Scientific Name | Common Name | Family | Lifeform | Blooming Period | CA Rare Plant Rank | State Rank | Global Rank |
|---|---|---|---|---|---|---|---|
| Asplenium vespertinum | western spleenwort | Aspleniaceae | perennial rhizomatous herb | Feb-Jun | 4.2 | S4 | G4 |
| Astragalus brauntonii | Braunton's milk-vetch | Fabaceae | perennial herb | Jan-Aug | 1B.1 | S2 | G2 |
| Astragalus pycnostachyus var. lanosissimus | Ventura marsh milk-vetch | Fabaceae | perennial herb | (Jun)Aug-Oct | 1B.1 | S1 | G2T1 |
| Astragalus tener var. titi | coastal dunes milk-vetch | Fabaceae | annual herb | Mar-May | 1B.1 | S1 | G2T1 |
| Atriplex coulteri | Coulter's saltbush | Chenopodiaceae | perennial herb | Mar-Oct | 1B.2 | S1S2 | G3 |
| Atriplex serenana var. davidsonii | Davidson's saltscale | Chenopodiaceae | annual herb | Apr-Oct | 1B.2 | S1 | G5T1 |
| Baccharis malibuensis | Malibu baccharis | Asteraceae | perennial deciduous shrub | Aug | 1B.1 | S1 | G1 |
| Calandrinia breweri | Brewer's calandrinia | Montiaceae | annual herb | (Jan)Mar-Jun | 4.2 | S4 | G4 |
| Calochortus catalinae | Catalina mariposa lily | Liliaceae | perennial bulbiferous herb | (Feb)Mar-Jun | 4.2 | S3S4 | G3G4 |
| Calochortus clavatus var. clavatus | club-haired mariposa lily | Liliaceae | perennial bulbiferous herb | (Mar)May-Jun | 4.3 | S3 | G4T3 |
| Calochortus clavatus var. gracilis | slender mariposa lily | Liliaceae | perennial bulbiferous herb | Mar-Jun(Nov) | 1B.2 | S2S3 | G4T2T3 |
| Calochortus plummerae | Plummer's mariposa lily | Liliaceae | perennial bulbiferous herb | May-Jul | 4.2 | S4 | G4 |
| Camissoniopsis lewisii | Lewis' evening-primrose | Onagraceae | annual herb | Mar-May(Jun) | 3 | S4 | G4 |
| Cercocarpus betuloides var. blancheae | island mountain-mahogany | Rosaceae | perennial evergreen shrub | Feb-May | 4.3 | S4 | G5T4 |
| Chloropyron maritimum ssp. maritimum | salt marsh bird's-beak | Orobanchaceae | annual herb (hemiparasitic) | May-Oct(Nov) | 1B.2 | S1 | G4?T1 |
| Chorizanthe parryi var. fernandina | San Fernando Valley spineflower | Polygonaceae | annual herb | Apr-Jul | 1B.1 | S1 | G2T1 |
| Chorizanthe parryi var. parryi | Parry's spineflower | Polygonaceae | annual herb | Apr-Jun | 1B.1 | S2 | G3T2 |
| Convolvulus simulans | small-flowered morning-glory | Convolvulaceae | annual herb | Mar-Jul | 4.2 | S4 | G4 |
| Deinandra minthornii | Santa Susana tarplant | Asteraceae | perennial deciduous shrub | Jul-Nov | 1B.2 | S2 | G2 |
| Delphinium parryi ssp. blochmaniae | dune larkspur | Ranunculaceae | perennial herb | Apr-Jun | 1B.2 | S2 | G4T2 |

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| Delphinium parryi ssp. purpureum | Mt. Pinos larkspur | Ranunculaceae | perennial herb | May-Jun | 4.3 | S4 | G4T4 |
| Dithyrea maritima | beach spectaclepod | Brassicaceae | perennial rhizomatous herb | Mar-May | 1B.1 | S1 | G1 |
| Dudleya blochmaniae ssp. blochmaniae | Blochman's dudleya | Crassulaceae | perennial herb | Apr-Jun | 1B.1 | S2 | G3T2 |
| Dudleya cymosa ssp. agourensis | Agoura Hills dudleya | Crassulaceae | perennial herb | May-Jun | 1B.2 | S1 | G5T1 |
| Dudleya cymosa ssp. marcescens | marcescent dudleya | Crassulaceae | perennial herb | Apr-Jul | 1B.2 | S2 | G5T2 |
| Dudleya cymosa ssp. ovatifolia | Santa Monica dudleya | Crassulaceae | perennial herb | Mar-Jun | 1B.1 | S1 | G5T1 |
| Dudleya multicaulis | many-stemmed dudleya | Crassulaceae | perennial herb | Apr-Jul | 1B.2 | S2 | G2 |
| Dudleya parva | Conejo dudleya | Crassulaceae | perennial herb | May-Jun | 1B.2 | S1 | G1 |
| Eriogonum crocatum | conejo buckwheat | Polygonaceae | perennial herb | Apr-Jul | 1B.2 | S1 | G1 |
| Hordeum intercedens | vernal barley | Poaceae | annual herb | Mar-Jun | 3.2 | S3S4 | G3G4 |
| Horkelia cuneata var. puberula | mesa horkelia | Rosaceae | perennial herb | Feb-Jul(Sep) | 1B.1 | S1 | G4T1 |
| Isocoma menziesii var. decumbens | decumbent goldenbush | Asteraceae | perennial shrub | Apr-Nov | 1B.2 | S2 | G3G5T2T3 |
| Juglans californica | Southern California black walnut | Juglandaceae | perennial deciduous tree | Mar-Aug | 4.2 | S3 | G3 |
| Lasthenia glabrata ssp. coulteri | Coulter's goldfields | Asteraceae | annual herb | Feb-Jun | 1B.1 | S2 | G4T2 |
| Lilium humboldtii ssp. ocellatum | ocellated Humboldt lily | Liliaceae | perennial bulbiferous herb | Mar-Jul(Aug) | 4.2 | S4? | G4T4? |
| Monardella hypoleuca ssp. hypoleuca | white-veined monardella | Lamiaceae | perennial herb | (Apr)May-Aug (Sep-Dec) | 1B.3 | S3 | G4T3 |
| Navarretia ojaiensis | Ojai navarretia | Polemoniaceae | annual herb | May-Jul | 1B.1 | S2 | G2 |
| Nolina cismontana | chaparral nolina | Ruscaceae | perennial evergreen shrub | (Mar)May-Jul | 1B.2 | S3 | G3 |
| Orcuttia californica | California Orcutt grass | Poaceae | annual herb | Apr-Aug | 1B.1 | S1 | G1 |
| Pentachaeta lyonii | Lyon's pentachaeta | Asteraceae | annual herb | (Feb)Mar-Aug | 1B.1 | S1 | G1 |
| Phacelia hubbyi | Hubby's phacelia | Hydrophyllaceae | annual herb | Apr-Jul | 4.2 | S4 | G4 |
| Phacelia ramosissima var. austrolitoralis | south coast branching phacelia | Hydrophyllaceae | perennial herb | Mar-Aug | 3.2 | S3 | G5?T3 |
| Senecio aphanactis | chaparral ragwort | Asteraceae | annual herb | Jan-Apr(May) | 2B.2 | S2 | G3 |
| Spermolepis lateriflora | western bristly scaleseed | Apiaceae | annual herb | Mar-Apr | 2A | SH | G5 |
| Thelypteris puberula var. sonorensis | Sonoran maiden fern | Thelypteridaceae | perennial rhizomatous herb | Jan-Sep | 2B.2 | S2 | G5T3 |

**Suggested Citation**

California Native Plant Society, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 23 July 2018].

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