



P.O. Box 5214  
Petaluma, CA 94955  
(707) 241-7718  
www.solecology.com

---

July 23, 2025

Nancy Wang  
nannanwang88@yahoo.com

**RE: Update on Site Conditions for VIO2019-00206 Project, La Honda Road Driveway Project (APN 078-190-200), Woodside, San Mateo County, CA:**

Dear Ms. Wang,

The purpose of this letter is to document that existing changes on your property remain unchanged as of the date of this letter, since first reported by us in the Biological Resources Report for the La Honda Road Driveway Project, on December 10, 2020.

A Sol Ecology biologist visited the site on July 23, 2025 and found no evidence of new or increased erosion, no evidence of any rare plants or changes in vegetation composition, and no evidence of habitat use by any special status animals not addressed previously.

Please do not hesitate to contact me at [driggs@solecology.com](mailto:driggs@solecology.com) should you have any questions.

Respectfully,

A handwritten signature in black ink, appearing to read "Dana Riggs".

Dana Riggs, CEO



# BIOLOGICAL RESOURCES REPORT

**La Honda Road Driveway Project  
(APN 078-190-200), Woodside, San  
Mateo County, CA**

## **Prepared For:**

Arancha Casal  
arancha@mac.com

Project No. 2054

## **Prepared By:**

Dana Riggs  
Principal Biologist  
P.O.Box 5214  
Petaluma, CA 94955  
[driggs@solecology.com](mailto:driggs@solecology.com)  
707-241-7718

December 10, 2020



## TABLE OF CONTENTS

---

1.0 INTRODUCTION.....	1
1.1 Project Setting .....	1
1.2 Project Description .....	1
2.0 METHODS.....	2
2.1 Literature Review .....	2
2.2 Field Survey .....	2
3.0 RESULTS .....	3
3.1 Existing Conditions and General Wildlife Use .....	3
3.2 Special Status Plants .....	4
3.3 Special Status Wildlife.....	6
4.0 CONCLUSION AND RECOMMENDATIONS .....	8
5.0 REFERENCES .....	10

## LIST OF APPENDICES

Appendix A – Project Figures  
Appendix B – CNDDDB and IPaC Summary Tables  
Appendix C – Field Surveyor Qualifications  
Appendix D – Observed Species Table  
Appendix E – Site Photographs

## LIST OF ACRONYMS AND ABBREVIATIONS

CDFG/CDFW	California Department of Fish and Game/Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
ESA	Federal Endangered Species Act
MBTA	Migratory Bird Treaty Act
RWQCB	Regional Water Quality Control Board
SFDW	San Francisco Dusky-footed Woodrat
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service

## **1.0 INTRODUCTION**

---

On October 6, 2020, Sol Ecology, Inc. (Sol Ecology) performed a biological resource survey within APN 078-190-200 in Woodside, San Mateo County, California (Project Study Area, see Appendix A, Figure 1).

The purpose of the survey was to gather information necessary to complete a review of potential biological resources subject to federal and state regulation and/or local San Mateo County ordinances that may potentially be impacted by the proposed project. This report describes the results of the Project Study Area survey and assessment for the presence of sensitive biological resources protected by local, state, and federal laws and regulations. This report also contains an evaluation of potential impacts to sensitive biological resources that may occur from the proposed project and recommendations for avoidance as warranted. This report is based on information available at the time of the study and on-site conditions that were observed on the dates of the site visit.

### **1.1 Project Setting**

The proposed project is in San Mateo County, accessed directly off California State Route 84 (SR 84)/La Honda Road in Woodside, California. The less than one (1) acre Project Study Area is within APN 078-190-200 (Appendix A, Figure 1) (San Mateo County 2020). The study area is bounded by agricultural land and forest and has gentle sloping to hilly terrain.

### **1.2 Project Description**

The purpose of the proposed project is to grade/improve a driveway which accesses the parcel east of SR 84/La Honda Road.

## 2.0 METHODS

---

On October 6, 2020, the Project Study Area was traversed on foot to determine the presence of (1) plant communities both sensitive and non-sensitive, (2) special status plant and wildlife species, (3) presence of essential habitat elements for any special status plant or wildlife species, and (4) the presence and extent of wetland and non-wetland waters.

### 2.1 Literature Review

To evaluate whether special status species or other sensitive biological resources (e.g., wetlands) could occur in the study area and vicinity, Sol Ecology biologists reviewed the following:

- California Native Plant Society's (CNPS's) Inventory of Rare and Endangered Plants of California search for U.S. Geological Survey (USGS) 7.5-minute La Honda quadrangle and eight adjacent quadrangles (CNPS 2020a);
- California Natural Diversity Database (CNDDDB) records search for USGS 7.5-minute La Honda quadrangle and eight adjacent quadrangles (California Department of Fish and Wildlife [CDFW] 2020);
- U.S. Fish and Wildlife Service (USFWS) list of threatened and endangered species for the Project Study Area (USFWS 2020a);
- CDFG publication "California's Wildlife, Volumes I-III" (Zeiner et al. 1990)
- CDFG publication *California Bird Species of Special Concern* (Shuford and Gardali 2008)
- CDFW and University of California Press publication *California Amphibian and Reptile Species of Special Concern* (Thomson et al. 2016)
- USFWS National Wetlands Inventory, Wetlands Mapper (USFWS 2020b); and
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Web Soil Survey (USDA 2019).

Based on information from the above sources, Sol Ecology developed lists of special status species and natural communities of special concern that could be present in the Project vicinity (Appendix B). Figures 2 and 3 present the results of a 5-mile CNDDDB record search around the study area for special status plants and wildlife (Appendix A). All biological resources are evaluated for their potential to occur within the study area in Section 3.0 of this report.

### 2.2 Field Survey

Sol Ecology biologists conducted a biological resource survey on October 6, 2020. Field surveyor qualifications are in Appendix C. Biologists walked throughout the entire study area identifying all plant and wildlife species encountered and mapping vegetation communities. Plant species were recorded and identified to a taxonomic level sufficient to determine rarity using the second edition of the Jepson Manual (Baldwin et al. 2012). All plant species observed in the study area are included in Appendix D – Observed Species Table. Vegetation communities were identified using the online version of A Manual of California Vegetation (CNPS 2020). Dispersal habitat,

foraging habitat, refugia or estivation habitat, and breeding (or nesting habitat) were noted for wildlife species.

In cases where little information is known about species occurrences and habitat requirements, the species evaluation was based on best professional judgment of Sol Ecology biologists with experience working with the species and habitats. If a special status species was observed during the site visit, its presence is recorded and discussed. For some threatened and endangered species, a site survey at the level conducted for this report may not be sufficient to determine presence or absence of a species to the specifications of regulatory agencies.

### 3.0 RESULTS

---

#### 3.1 Existing Conditions and General Wildlife Use

Elevations within the Project Study Area range from approximately 223 to 241 meters (731 to 790 feet) above mean sea level. The study area encompasses three soil map units identified by the USDA, NRCS (USDA 2019):

- **Laughlin-Sweeney loams, steep, eroded:** The Laughlin soil map unit occurs on mountain slopes and is well drained. Soil parent material is sandstone and shale. Laughlin is not rated as hydric. The Sweeney soil map unit occurs on mountain slopes and is well drained. Soil parent material is diabase and basalt. Sweeney is not rated as hydric. Minor components include Hugo (10%) and Gazos (10%).
- **Sweeney clay loam, deep, moderately steep, eroded:** The Sweeney clay loam soil map unit is similar to the Sweeney soil map unit described above. Minor components include Santa Lucia (5%), Butano (5%), and Mindego (5%).
- **Sweeney clay loam, deep, sloping, eroded:** The Sweeney clay loam soil map unit is similar to the Sweeney soil map unit described above. Minor components include Santa Lucia (5%), Butano (5%), and Mindego (5%).

Vegetation communities present in the study area were classified using the online version of *A Manual of California Vegetation* (CNPS 2020b). However, in some cases it is necessary to identify variants of community types or to describe non-vegetated areas that are not described in the literature. Vegetation communities were classified as non-sensitive or sensitive as defined by CEQA and other applicable laws and regulations. Photographs of the study area are provided in Appendix E.

##### 3.1.1 Non-Sensitive Natural Communities

###### California Broadleaf Forest and Woodland

This vegetation community is dominated by broadleaved trees, 10-30 meters tall, and forms an intermittent to closed canopy with relatively little understory. This includes the Coast live oak (*Quercus agrifolia*) Forest and Woodland Alliance [S4 G5]. Other tree species observed in this

community include Arroyo willow (*Salix lasiolepis*), California bay (*Umbellularia californica*), oak (*Quercus* sp.), Pacific madrone (*Arbutus menziesii*), and pine (*Pinus* sp.). California Broadleaf Forest and Woodland primarily occurs along SR-84 within the study area.

#### Valley and Foothill Grassland

Grasslands are found east of the gravel driveway development and as understory in the California Broadleaf Forest and Woodland. Grassland within the study area is dominated by non-native annual grasses and non-native forbs. Species observed include blue wild-rye (*Elymus glaucus*), bristly ox-tongue (*Helminthotheca echioides*), hairy vetch (*Vicia villosa*), and rattlesnake grass (*Briza maxima*).

#### Developed and Disturbed

Developed and disturbed portions of the study area are associated with the existing driveway that will be improved. Plastic netting was observed over eroded topsoil on the northeast side of the driveway. A large, eroded hillslope was observed about 6 meters south of the driveway. There is a drainage ditch at the bottom of the driveway before it meets SR 84. Within the drainage ditch, underneath the driveway, is a 12" plastic culvert. Straw wattles were observed surrounding the culvert. The drainage ditch runs parallel to SR 84. There was no evidence of hydrophytic vegetation or hydrology within the ditch at the time of the site visit. No change in substrate and/or defined bed and bank was observed. Therefore, it is unlikely that the drainage ditch is jurisdictional.

#### *3.1.2 Sensitive Natural Communities*

No sensitive natural communities were observed within the Project Study Area.

### **3.2 Special Status Plants**

Special status species include plant species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the Federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These acts afford protection to both listed species and those that are formal candidates for listing. Plant species on CNPS' Inventory of Rare and Endangered Plants of California with California Rare Plant Ranks of 1 and 2 are also considered special status plant species and must be considered under CEQA.

Based upon a review of the resources and databases given in Section 2.1, seventy (70) special status plant species have been documented within a 9-quad search of the study area (Appendix B). Based on the presence of vegetation communities described above and soils at the site, the study area has a low potential to support five (5) special status plant species (Table 1).

**Table 1. Special Status Plants with Potential to Occur in the Study Area**

Scientific Name/ Common Name	Status <sup>1</sup>	Habitat	Blooming Period	Potential for Occurrence
<i>Arctostaphylos andersonii</i> Anderson's manzanita	1B.2.	Openings and edges of broadleaved upland forest, North Coast coniferous forest, and chaparral habitats. Generally southwest-facing aspect; 60-760 meters.	Nov-May	<b>Low Potential.</b> Suitable habitat, well drained soils and mild sloping terrain present on site. Nearest CNDDDB occurrence is within 4 miles of the study area. Not observed during site assessment.
<i>Dirca occidentalis</i> western leatherwood	1B.2	Mesic habitat, Broadleaved upland forest, Closed-cone coniferous forest, Chaparral, Cismontane woodland, North Coast coniferous forest, Riparian forest, Riparian woodland; 25-425 meters.	Jan-Mar (Apr)	<b>Low Potential.</b> Marginal suitable habitat is present on site. There are multiple CNDDDB occurrences surrounding the site. Not observed during site assessment.
<i>Malacothamnus arcuatus</i> arcuate bush-mallow	1B.2	Chaparral and cismontane woodland; 160-220 meters.	Apr-Sep	<b>Low potential.</b> Suitable habitat is present on site and there are CNDDDB occurrences within five miles. The study area's elevation is on the edge of this species habitat.
<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i> Choris' popcornflower	1B.2	Mesic habitat, chaparral, coastal prairie, coastal scrub; 15-160 meters.	Mar-Jun	<b>Low potential.</b> Suitable habitat does not occur within the study area. However, there are multiple, recent CNDDDB occurrences nearby observed along roadsides and in oak woodland.
<i>Trifolium buckwestiorum</i> Santa Cruz clover	1B.1	Moist grassy areas on margins of broadleaved upland forest, cismontane woodland, and coastal prairie, sometimes in disturbed areas; 105-610 meters.	Apr-Oct	<b>Low potential.</b> Suitable habitat occurs within the study area. There are no recent CNDDDB occurrences within or adjacent to the study area.

<sup>1</sup> FT/FE – Federally threatened/endangered  
 CT/CE – California threatened/endangered  
 California Rare Plant Rank

1B – Plants rare, threatened, or endangered in California and elsewhere.  
 2B – Plants rare, threatened, or endangered in California but more common elsewhere.  
 0.1 – Seriously threatened in California  
 0.2 – Moderately threatened in California  
 0.3 – Not very threatened in California

Other special status plant species documented within the 9-quad search are unlikely or have no potential to occur in the study area for one or more of the following reasons:

- Hydrologic conditions (e.g. marsh habitat, seeps, pond habitat) necessary to support the special status plants do not exist on site;
- Edaphic (soil) conditions (e.g. rocky soils) necessary to support the special status plants do not exist on site;
- Topographic conditions (e.g. slopes) necessary to support the special status plants do not exist on site;
- Unique pH conditions (e.g. serpentine) necessary to support the special status plant species are not present on site; and
- Associated vegetation communities (e.g. redwood forest, chaparral) necessary to support the special status plants do not exist on site.

### **3.3 Special Status Wildlife**

In addition to wildlife listed as federal or state endangered and/or threatened, federal and state candidate species, CDFW Species of Special Concern, CDFW California Fully Protected species, USFWS Birds of Conservation Concern, and CDFW Special-status Invertebrates are all considered special-status species. Although these species generally have no special legal status, they are given special consideration under CEQA. The federal Bald and Golden Eagle Protection Act also provides broad protections to both eagle species that are roughly analogous to those of listed species. Bat species are also evaluated for conservation status by the Western Bat Working Group (WBWG), a non-governmental entity; bats named as a “High Priority” or “Medium Priority” species for conservation by the WBWG are typically considered special-status and also considered under CEQA; bat roosts are protected under CDFW Fish and Game Code. In addition to regulations for special-status species, most native birds in the United States (including non-status species) are protected by the federal Migratory Bird Treaty Act of 1918 (MBTA) and the California Fish and Game Code (CFGC), i.e., sections 3503, 3503.5 and 3513. Under these laws, deliberately destroying active bird nests, eggs, and/or young is illegal.

Twelve (12) special status wildlife species have been documented within five miles of the study area (Appendix A, Figure 3). Based on the presence of biological communities described above, the Project Study Area has the potential to support three (3) of these species; none of these species are federal and/or state listed species. Species with potential to occur on the study area are described in more detail below. A discussion of potential impacts or unlikelihood for impacts to occur is also provided in Section 4.0.

The remaining species found in the review of background literature were determined to be unlikely to occur due to absence of suitable habitat elements in and immediately adjacent to the Project Site.

**Table 2. Special Status Animals with the Potential to Occur in the Study Area**

Scientific Name/ Common Name	Status <sup>1</sup>	Habitat Type/Alliance	Potential for Occurrence
<b>Birds</b>			
<i>Picoides nuttallii</i> Nuttall's woodpecker	BCC	Year-round resident in lowland woodlands throughout much of California west of the Sierra Nevada. Typical habitat is dominated by oaks; also occurs in riparian woodland. Nests in tree cavities.	<b>Moderate potential.</b> Suitable nesting habitat is present adjacent to the project footprint in tree cavities.
<i>Baeolophus inornatus</i> Oak titmouse	BCC	Occurs year-round in woodland and savannah habitats where oaks are present, as well as riparian areas. Nests in tree cavities.	<b>Moderate potential.</b> Suitable nesting habitat is present adjacent to the project footprint in tree cavities.
<b>Mammals</b>			
<i>Neotoma fuscipes annectens</i> San Francisco dusky-footed woodrat	SSC	Forest habitats of moderate canopy and moderate to dense understory. Also, in chaparral habitats. Constructs nests of shredded grass, leaves, and other material. May be limited by availability of nest-building materials.	<b>Present.</b> Several stick nests were observed immediately adjacent to the project footprint.

<sup>1</sup> FE/SE – Federal/State Endangered

SCE – State Candidate Endangered

SSC – Species of Special Concern

WBWG – Western Bat Working Group Medium or High Priority Species

FT/ST – Federal/State Threatened

CFP – California Fully Protected

BCC – Bird of Conservation Concern

Habitat elements that were evaluated but found to be absent from the immediate area of the study area or surrounding habitats subject to potential indirect impacts include the following:

- Absence of friable soils and/or suitably sized burrows or evidence of potential dens on or immediately adjacent to the study area (e.g., for burrowing owl, Santa Cruz kangaroo rat, or American badger); note that while there is suitable habitat adjacent to the project site, proximity to woodland habitats and steep slopes likely preclude both species; American badger may opportunistically forage in the area but is not likely to be impacted.
- No streams or ponds on or adjacent to the study area (e.g., California freshwater shrimp, California giant salamander, Santa Cruz black salamander, California red-legged frog, foothill yellow-legged frog, western pond turtle, San Francisco garter snake, etc.).
- No suitable roosting habitats such as barns, old buildings, rock outcrops, or large snags (e.g., for Townsend's big-eared bat).
- No suitable forested habitat (e.g., marbled murrelet, long-eared owl, or hoary bat); note, that oak woodland habitat is too thin and lacking nesting platforms for long-eared owl).
- No open grassland habitat (e.g., burrowing owl, bay checkerspot butterfly, San Bruno elfin butterfly, western bumble bee).
- No rock outcrops or cliff wall habitat (e.g., American peregrine falcon).

#### 4.0 CONCLUSION AND RECOMMENDATIONS

---

There are no sensitive natural communities within the Project Study Area; a roadside drainage ditch was observed but determined unlikely to be jurisdictional by under federal or state law due to the absence of hydrologic indicators. Furthermore, no tree removal is proposed, and no evidence of tree removal was observed. As such, no impacts to sensitive natural communities are anticipated.

Five (5) special status plants have low potential to occur within the Project Study Area (Table 1). None of the species were observed at the time of the site visit on October 6, 2020. Anderson's manzanita (*Arctostaphylos andersonii*), arcuate bush-mallow (*Malacothamnus arcuatus*), and western leatherwood (*Dirca occidentalis*) are shrub like species that are observable year-round. Since these species or others in their genus were not observed within the Project Study Area at the time of the site visit, it is unlikely that they occur. As such, no impacts to Anderson's manzanita, arcuate bush-mallow, and western leatherwood are anticipated. Choris' popcornflower (*Plagiobothrys chorisianus* var. *chorisianus*) and Santa Cruz clover (*Trifolium buckwestiorum*) are annual herbs with low potential to occur within the Project Study Area due to the disturbed nature of the site as evidenced by many non-native and invasive species. No federal or state listed species are likely to be present.

Three special status species have potential to occur on or adjacent to the site including Nuttall's woodpecker, oak titmouse, and San Francisco dusky-footed woodrat (SFDW). There is no evidence that impacts to any of these species have occurred from work performed to date. To

avoid future impacts to nesting birds on or adjacent to the project footprint the following measures are recommended.

1. To the extent feasible, noise-producing activities should be initiated during the non-nesting season from September 1 to January 31.
2. If work cannot be initiated during this period, or if there is a break in activity lasting more than 14 days after February 1 then nesting bird surveys should be performed within 500 feet of proposed activities.
3. If nests are found, a no-disturbance buffer should be placed around the nest until young have fledged or the nest is determined to be no longer active by the biologist. The size of the buffer may be determined by the biologist based on species, status of the nest, and proximity to proposed activities.

To avoid impacts to SFDW during to road construction, the following measures are recommended:

Pre-construction surveys for SFDW houses shall be performed no less than 30 days prior to construction. If stick houses are found and avoidance is not feasible, the houses shall be dismantled by hand under the supervision of a biologist. If young are encountered during the dismantling process, the material shall be placed back on the house and a buffer of 25 feet shall be established for a minimum of 3 weeks to allow young time to mature and leave the nest. Nest material shall be moved to a suitable adjacent area for reuse.

## 5.0 REFERENCES

---

- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson manual: vascular plants of California, second edition. University of California Press, Berkeley.
- CDFW. 2020. California Natural Diversity Database (CNDDDB) Maps and Data, RareFind 5. Available at: <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Most recently accessed: November 2020.
- CNPS, Rare Plant Program. 2020a. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Available at: <http://www.rareplants.cnps.org>. Most recently accessed: November 2020.
- CNPS. 2020b. A Manual of California Vegetation, Online Edition. Available at: <http://www.cnps.org/cnps/vegetation/>. Most recently accessed: November 2020.
- San Mateo County. 2020. Assessor Maps. Online at: <https://www.smcacre.org/assessor-maps-0>. Most recently accessed: November 2020.
- Shuford, WD, and T Gardali (eds). 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and CDFG, Sacramento.
- Thomson, Robert C., Amber N. Wright, and H. Bradley Shaffer. 2016. California Amphibian and Reptile Species of Special Concern. California Department of Fish and Wildlife University Press.
- U.S. Fish and Wildlife Service (USFWS). 2020a. Information for Conservation and Planning Database. Available online at: <https://ecos.fws.gov/ipac/>. Most recently accessed: November 2020.
- USFWS. 2020b. National Wetlands Inventory, Wetlands Mapper. Available at: <https://www.fws.gov/wetlands/data/mapper.html>. Most recently accessed: November 2020.
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). 2019. Web Soil Survey. Web application. Last updated: July 31, 2019. Available online at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Most recently accessed: November 2020.

Western Bat Working Group (WBWG). 2015. Species Accounts. Available online at:  
<http://wbwg.org/western-bat-species/>; most recently accessed: November 2019.

Zeiner, DC, WF Laudenslayer, Jr., KE Juneer, and M White. 1990. California's Wildlife, Volume I-III: Amphibians and Reptiles, Birds, Mammals. California Statewide Wildlife Habitat Relationships System, California Department of Fish and Game, Sacramento, CA.

APPENDIX A

---

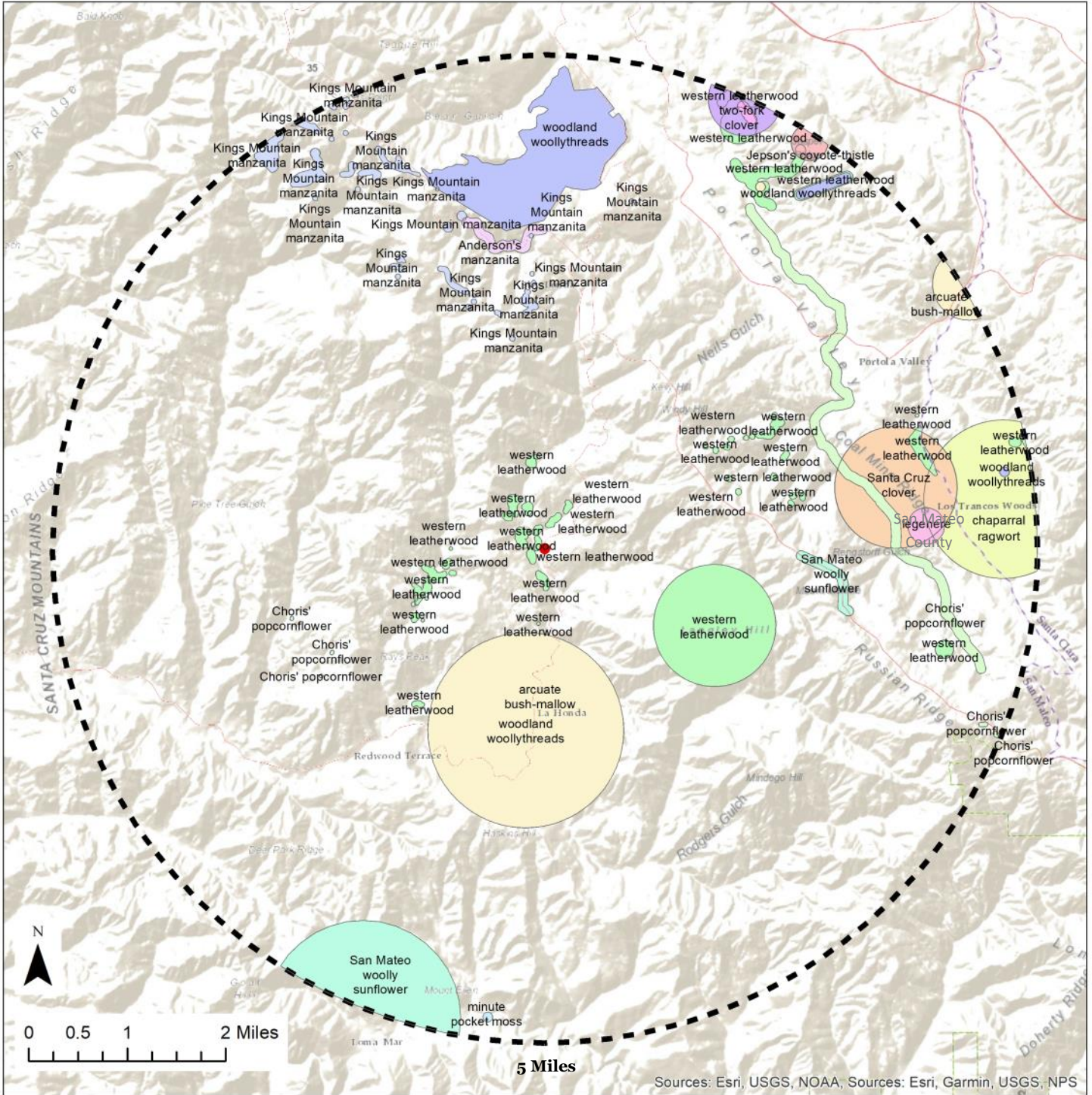
PROJECT FIGURES: PROJECT STUDY AREA MAP, AND CNDDDB MAP RESULTS

**Figure 1: Project Location & Sensitive Habitat**  
 705 & 711 Furlong Project, La Honda, CA



- Project Study Area
- Parcel Boundary
- Roads & Streets
- Ephemeral Stream
- Erosion Gully
- Streams and Creeks

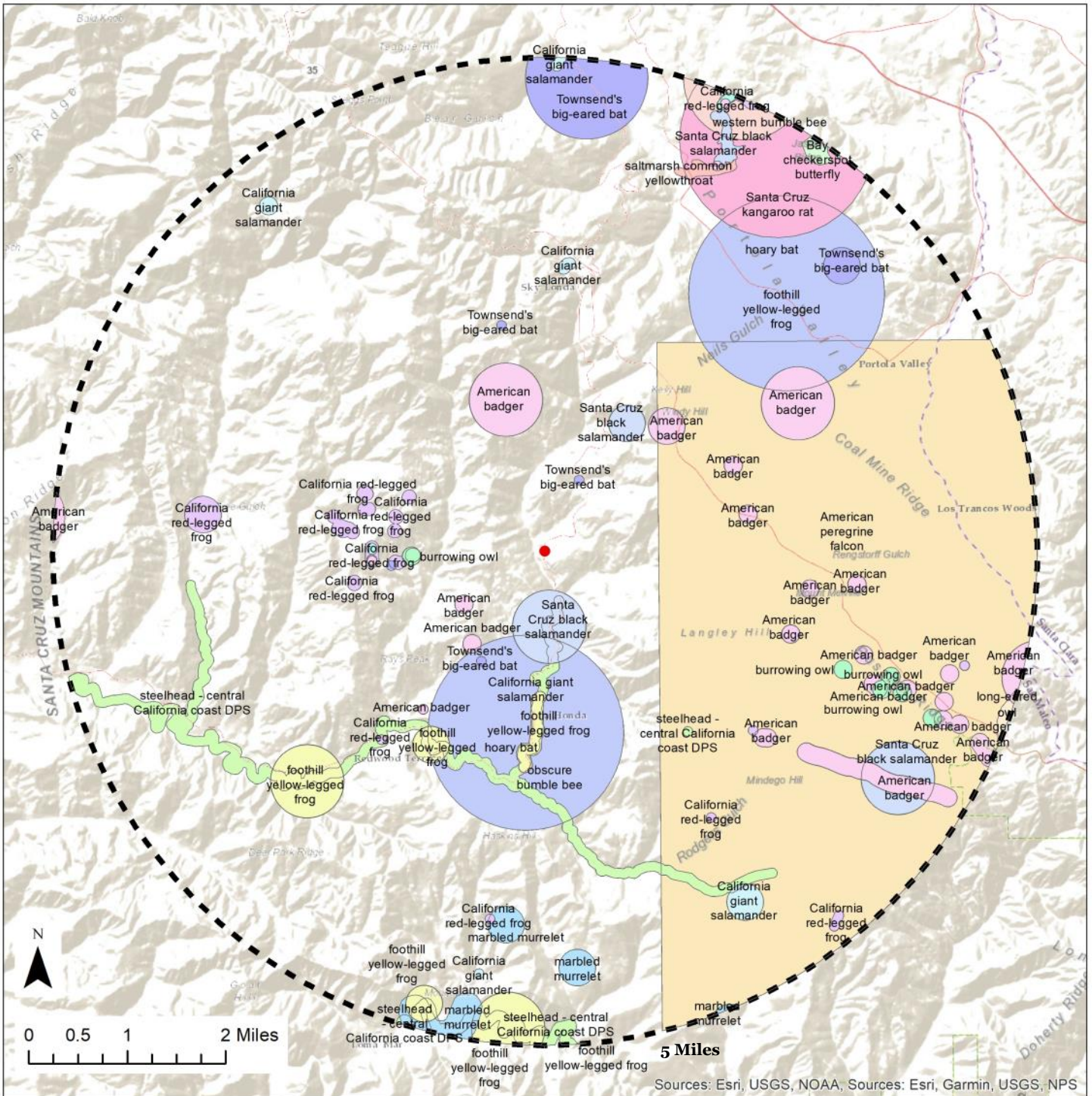
**Figure 2: Special Status Plant Species within 5 Miles of the Project Site**  
 705 & 711 Furlong Project, La Honda, CA



Sources: Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS

- Project Location
- 5-Mile Buffer
- Anderson's manzanita (1)
- Choris' popcornflower (5)
- Franciscan onion (1)
- Jepson's coyote-thistle (1)
- Kings Mountain manzanita (6)
- San Mateo woolly sunflower (2)
- Santa Cruz clover (1)
- arcuate bush-mallow (3)
- chaparral ragwort (1)
- legene (1)
- minute pocket moss (1)
- two-fork clover (1)
- western leatherwood (11)
- woodland woollythreads (4)

**Figure 3: Special Status Animal Species within 5 Miles of the Project Site**  
 705 & 711 Furlong Project, La Honda, CA



Sources: Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS

- Project Location
- ⬜ 5-Mile Buffer
- American badger (17)
- American peregrine falcon (1)
- bay checkerspot butterfly (1)
- California giant salamander (6)
- California red-legged frog (9)
- Santa Cruz black salamander (4)
- Santa Cruz kangaroo rat (1)
- Townsend's big-eared bat (6)
- American peregrine falcon (1)
- burrowing owl (2)
- foothill yellow-legged frog (7)
- California giant salamander (6)
- hoary bat (2)
- long-eared owl (1)
- marbled murrelet (4)
- obscure bumble bee (1)
- saltmarsh common yellowthroat (1)
- steelhead - central California coast DPS (3)
- western bumble bee (1)
- western pond turtle (2)
- San Francisco gartersnake (17)

APPENDIX B

---

CNDDDB AND IPAC SUMMARY TABLES



# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



**Query Criteria:** Quad (Woodside (3712243) OR Palo Alto (3712242) OR La Honda (3712233) OR San Gregorio (3712234) OR Half Moon Bay (3712244) OR Mindego Hill (3712232) OR Big Basin (3712222) OR Pigeon Point (3712224) OR Franklin Point (3712223)) AND Taxonomic Group (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 Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes OR Fungi)

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Acanthomintha duttonii</i> San Mateo thorn-mint	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	170 600	5 S:3	0	1	0	1	1	0	2	1	2	0	1
<i>Agrostis blasdalei</i> Blasdale's bent grass	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCSC-UC Santa Cruz	25 35	62 S:3	0	0	0	0	0	3	1	2	3	0	0
<i>Allium peninsulare var. franciscanum</i> Franciscan onion	G5T2 S2	None None	Rare Plant Rank - 1B.2	170 670	25 S:11	2	2	1	0	0	6	2	9	11	0	0
<i>Amsinckia lunaris</i> bent-flowered fiddleneck	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley SB_UCSC-UC Santa Cruz		93 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Anomobryum julaceum</i> slender silver moss	G5? S2	None None	Rare Plant Rank - 4.2		13 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Arctostaphylos andersonii</i> Anderson's manzanita	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	525 2,400	64 S:26	2	8	4	3	0	9	8	18	26	0	0



# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Arctostaphylos glutinosa</i> Schreiber's manzanita	G1 S1	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz SB_USDA-US Dept of Agriculture	1,800 2,230	7 S:2	1	0	0	1	0	0	1	1	2	0	0
<i>Arctostaphylos ohloneana</i> Ohlone manzanita	G1 S1	None None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	1,700 1,700	4 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Arctostaphylos regismontana</i> Kings Mountain manzanita	G2 S2	None None	Rare Plant Rank - 1B.2	586 2,300	17 S:15	1	3	3	3	0	5	3	12	15	0	0
<i>Arctostaphylos silvicola</i> Bonny Doon manzanita	G1 S1	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	900 900	16 S:1	1	0	0	0	0	0	0	1	1	0	0
<i>Astragalus pycnostachyus</i> var. <i>pycnostachyus</i> coastal marsh milk-vetch	G2T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	10 500	25 S:10	0	5	1	0	1	3	5	5	9	1	0
<i>Calyptridium parryi</i> var. <i>hesseae</i> Santa Cruz Mountains pussypaws	G3G4T2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	2,300 2,600	11 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	G3T1T2 S1S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	2 2	98 S:1	0	0	1	0	0	0	0	1	1	0	0



**Summary Table Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Chorizanthe pungens var. hartwegiana</i> Ben Lomond spineflower	G2T1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_UCSC-UC Santa Cruz	800 1,160	18 S:3	0	1	0	0	0	2	2	1	3	0	0
<i>Cirsium andrewsii</i> Franciscan thistle	G3 S3	None None	Rare Plant Rank - 1B.2	80 80	31 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Cirsium fontinale var. fontinale</i> fountain thistle	G2T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	150 600	5 S:4	0	0	3	0	1	0	1	3	3	1	0
<i>Cirsium praeteriens</i> lost thistle	GX SX	None None	Rare Plant Rank - 1A	50 50	1 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Clarkia concinna ssp. automixa</i> Santa Clara red ribbons	G5?T3 S3	None None	Rare Plant Rank - 4.3	1,500 2,750	20 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Collinsia corymbosa</i> round-headed Chinese-houses	G1 S1	None None	Rare Plant Rank - 1B.2		13 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Collinsia multicolor</i> San Francisco collinsia	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	100 560	36 S:3	0	2	0	0	0	1	1	2	3	0	0
<i>Dirca occidentalis</i> western leatherwood	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	150 2,100	71 S:20	5	6	2	0	0	7	5	15	20	0	0
<i>Eriophyllum latilobum</i> San Mateo woolly sunflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	2,000 2,000	8 S:2	0	0	0	0	1	1	2	0	1	1	0
<i>Eryngium aristulatum var. hooveri</i> Hoover's button-celery	G5T1 S1	None None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	80 80	16 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Eryngium jepsonii</i> Jepson's coyote-thistle	G2 S2	None None	Rare Plant Rank - 1B.2	525 625	19 S:2	0	0	0	0	0	2	1	1	2	0	0



# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Erysimum ammophilum</i> sand-loving wallflower	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CRES-San Diego Zoo CRES Native Gene Seed Bank SB_SBBG-Santa Barbara Botanic Garden	100 100	58 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Fissidens pauperculus</i> minute pocket moss	G3? S2	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	250 300	22 S:3	0	0	0	0	0	3	1	2	3	0	0
<i>Fritillaria liliacea</i> fragrant fritillary	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	33 720	82 S:5	0	4	0	0	0	1	2	3	5	0	0
<i>Grimmia torenii</i> Toren's grimmia	G2 S2	None None	Rare Plant Rank - 1B.3 BLM_S-Sensitive	1,970 2,325	13 S:4	0	0	0	0	0	4	0	4	4	0	0
<i>Grimmia vaginulata</i> vaginulate grimmia	G3 S1	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive	2,250 2,250	2 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Hesperovax sparsiflora var. brevifolia</i> short-leaved evax	G4T3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	850 850	72 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Hesperocyparis abramsiana var. abramsiana</i> Santa Cruz cypress	G1T1 S1	Threatened Endangered	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	1,000 2,000	7 S:2	0	1	0	0	0	1	0	2	2	0	0
<i>Hesperocyparis abramsiana var. butanoensis</i> Butano Ridge cypress	G1T1 S1	Threatened Endangered	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	1,400 1,400	1 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Hesperolinon congestum</i> Marin western flax	G1 S1	Threatened Threatened	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	200 700	27 S:5	0	3	1	0	1	0	1	4	4	1	0



**Summary Table Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Horkelia cuneata var. sericea</i> Kellogg's horkelia	G4T1? S1?	None None	Rare Plant Rank - 1B.1 SB_UCSC-UC Santa Cruz USFS_S-Sensitive	600 600	58 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lasthenia californica ssp. macrantha</i> perennial goldfields	G3T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	25 50	59 S:5	0	2	1	2	0	0	0	5	5	0	0
<i>Legenere limosa</i> legenere	G2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley	1,200 1,200	83 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Leptosiphon rosaceus</i> rose leptosiphon	G1 S1	None None	Rare Plant Rank - 1B.1	70 70	31 S:3	0	1	0	0	2	0	2	1	1	2	0
<i>Lessingia arachnoidea</i> Crystal Springs lessingia	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	440 550	11 S:2	0	0	1	0	0	1	0	2	2	0	0
<i>Limnanthes douglasii ssp. sulphurea</i> Point Reyes meadowfoam	G4T1 S1	None Endangered	Rare Plant Rank - 1B.2	240 240	12 S:1	0	0	1	0	0	0	1	0	1	0	0
<i>Malacothamnus arcuatus</i> arcuate bush-mallow	G2Q S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	300 2,400	30 S:11	0	0	1	1	0	9	5	6	11	0	0
<i>Microseris paludosa</i> marsh microseris	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden SB_UCSC-UC Santa Cruz	40 300	38 S:3	1	0	0	0	2	0	2	1	1	1	1
<i>Monolopia gracilens</i> woodland woollythreads	G3 S3	None None	Rare Plant Rank - 1B.2	400 1,850	68 S:13	0	1	0	0	1	11	7	6	12	1	0
<i>Monterey Pine Forest</i> Monterey Pine Forest	G1 S1.1	None None		400 400	11 S:1	0	0	0	0	0	1	1	0	1	0	0



# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<b><i>N. Central Coast Calif. Roach/Stickleback/Steelhead Stream</i></b> N. Central Coast Calif. Roach/Stickleback/Steelhead Stream	GNR SNR	None None		130 200	2 S:2	0	2	0	0	0	0	2	0	2	0	0
<b><i>North Central Coast Drainage Sacramento Sucker/Roach River</i></b> North Central Coast Drainage Sacramento Sucker/Roach River	GNR SNR	None None		400 400	4 S:1	0	1	0	0	0	0	1	0	1	0	0
<b><i>North Central Coast Short-Run Coho Stream</i></b> North Central Coast Short-Run Coho Stream	GNR SNR	None None		50 50	2 S:1	0	0	1	0	0	0	1	0	1	0	0
<b><i>North Central Coast Steelhead/Sculpin Stream</i></b> North Central Coast Steelhead/Sculpin Stream	GNR SNR	None None		160 160	1 S:1	0	1	0	0	0	0	1	0	1	0	0
<b><i>Northern Coastal Salt Marsh</i></b> Northern Coastal Salt Marsh	G3 S3.2	None None		10 10	53 S:3	0	1	0	0	0	2	3	0	3	0	0
<b><i>Northern Interior Cypress Forest</i></b> Northern Interior Cypress Forest	G2 S2.2	None None		1,000 2,100	22 S:3	0	0	0	0	0	3	3	0	3	0	0
<b><i>Orthotrichum kellmanii</i></b> Kellman's bristle moss	G1 S1	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	2,133 2,247	4 S:2	0	0	0	0	0	2	0	2	2	0	0
<b><i>Pedicularis dudleyi</i></b> Dudley's lousewort	G2 S2	None Rare	Rare Plant Rank - 1B.2 SB_UCSC-UC Santa Cruz USFS_S-Sensitive	500 500	11 S:2	0	1	0	0	0	1	1	1	2	0	0
<b><i>Penstemon rattanii var. kleei</i></b> Santa Cruz Mountains beardtongue	G4T2 S2	None None	Rare Plant Rank - 1B.2	2,000 2,000	5 S:1	0	0	0	0	0	1	1	0	1	0	0
<b><i>Pentachaeta bellidiflora</i></b> white-rayed pentachaeta	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	520 2,000	14 S:5	1	0	0	0	2	2	4	1	3	2	0
<b><i>Pinus radiata</i></b> Monterey pine	G1 S1	None None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	400 400	5 S:1	1	0	0	0	0	0	0	1	1	0	0



# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



Name (Scientific/Common)	CNDDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Piperia candida</i> white-flowered rein orchid	G3 S3	None None	Rare Plant Rank - 1B.2	500 1,300	222 S:4	0	0	0	0	0	4	2	2	4	0	0
<i>Plagiobothrys chorisianus var. chorisianus</i> Choris' popcornflower	G3T1Q S1	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCSC-UC Santa Cruz	25 2,300	42 S:25	2	7	4	0	0	12	9	16	25	0	0
<i>Plagiobothrys diffusus</i> San Francisco popcornflower	G1Q S1	None Endangered	Rare Plant Rank - 1B.1 SB_UCSC-UC Santa Cruz	160 160	17 S:1	0	0	1	0	0	0	1	0	1	0	0
<i>Sacramento-San Joaquin Coastal Lagoon</i> Sacramento-San Joaquin Coastal Lagoon	GNR SNR	None None		10 10	2 S:2	0	2	0	0	0	0	2	0	2	0	0
<i>Senecio aphanactis</i> chaparral ragwort	G3 S2	None None	Rare Plant Rank - 2B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_CRES-San Diego Zoo CRES Native Gene Seed Bank	640 1,200	98 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Serpentine Bunchgrass</i> Serpentine Bunchgrass	G2 S2.2	None None		720 5,800	22 S:2	1	0	0	0	0	1	2	0	2	0	0
<i>Silene scouleri ssp. scouleri</i> Scouler's catchfly	G5T4T5 S2S3	None None	Rare Plant Rank - 2B.2		23 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Silene verecunda ssp. verecunda</i> San Francisco campion	G5T1 S1	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	600 600	20 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Stebbinsoseris decipiens</i> Santa Cruz microseris	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCSC-UC Santa Cruz	875 875	19 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Stuckenia filiformis ssp. alpina</i> slender-leaved pondweed	G5T5 S2S3	None None	Rare Plant Rank - 2B.2	50 50	21 S:2	0	0	0	0	0	2	2	0	2	0	0



# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Trifolium amoenum</i> two-fork clover	G1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley SB_USDA-US Dept of Agriculture		26 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Trifolium buckwestiorum</i> Santa Cruz clover	G2 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden SB_UCSC-UC Santa Cruz SB_USDA-US Dept of Agriculture		64 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Trifolium polyodon</i> Pacific Grove clover	G1 S1	None Rare	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_USDA-US Dept of Agriculture	870 870	21 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Usnea longissima</i> Methuselah's beard lichen	G4 S4	None None	Rare Plant Rank - 4.2 BLM_S-Sensitive	590 2,040	206 S:2	0	0	0	0	2	0	2	0	0	1	1
<i>Valley Needlegrass Grassland</i> Valley Needlegrass Grassland	G3 S3.1	None None		400 400	45 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Valley Oak Woodland</i> Valley Oak Woodland	G3 S2.1	None None		40 40	91 S:1	0	0	0	0	0	1	1	0	1	0	0



# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



**Query Criteria:** Quad (Woodside (3712243) OR Palo Alto (3712242) OR La Honda (3712233) OR San Gregorio (3712234) OR Half Moon Bay (3712244) OR Mindego Hill (3712232) OR Big Basin (3712222) OR Pigeon Point (3712224) OR Franklin Point (3712223)) AND Taxonomic Group (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects)

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Ambystoma californiense</i> California tiger salamander	G2G3 S2S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable	40 400	1271 S:5	0	1	0	0	3	1	3	2	2	1	2
<i>Aneides niger</i> Santa Cruz black salamander	G3 S3	None None	CDFW_SSC-Species of Special Concern	49 2,300	78 S:16	0	0	0	0	0	16	10	6	16	0	0
<i>Antrozous pallidus</i> pallid bat	G5 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	70 420	420 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Ardea herodias</i> great blue heron	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	5 5	156 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Asio otus</i> long-eared owl	G5 S3?	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	2,000 2,000	48 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Athene cunicularia</i> burrowing owl	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	713 2,253	1989 S:3	0	0	0	0	0	3	0	3	3	0	0
<i>Bombus caliginosus</i> obscure bumble bee	G4? S1S2	None None	IUCN_VU-Vulnerable	40 500	181 S:5	0	0	0	0	0	5	5	0	5	0	0
<i>Bombus crotchii</i> Crotch bumble bee	G3G4 S1S2	None Candidate Endangered		100 100	276 S:1	0	0	0	0	0	1	1	0	1	0	0



# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Bombus occidentalis</i> western bumble bee	G2G3 S1	None Candidate Endangered	USFS_S-Sensitive	15 400	281 S:8	0	0	0	0	0	8	8	0	8	0	0
<i>Brachyramphus marmoratus</i> marbled murrelet	G3G4 S1	Threatened Endangered	CDF_S-Sensitive IUCN_EN-Endangered NABCI_RWL-Red Watch List	200 1,800	110 S:36	0	1	0	0	0	35	20	16	36	0	0
<i>Calicina minor</i> Edgewood blind harvestman	G1 S1	None None		560 560	2 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Charadrius alexandrinus nivosus</i> western snowy plover	G3T3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	0 17	138 S:5	1	1	0	0	2	1	3	2	3	1	1
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	G3G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	30 2,250	635 S:12	0	1	1	0	0	10	7	5	12	0	0
<i>Coturnicops noveboracensis</i> yellow rail	G4 S1S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	8 18	45 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Cypseloides niger</i> black swift	G4 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_YWL-Yellow Watch List USFWS_BCC-Birds of Conservation Concern	540 540	46 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Danaus plexippus pop. 1</i> monarch - California overwintering population	G4T2T3 S2S3	None None	USFS_S-Sensitive	40 200	383 S:9	0	4	2	0	1	2	8	1	8	1	0



# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Dicamptodon ensatus</i> California giant salamander	G3 S2S3	None None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	80 2,400	234 S:30	1	1	0	0	0	28	14	16	30	0	0
<i>Dipodomys venustus venustus</i> Santa Cruz kangaroo rat	G4T1 S1	None None		20 600	29 S:3	0	0	0	0	3	0	3	0	0	3	0
<i>Emys marmorata</i> western pond turtle	G3G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	21 949	1398 S:10	1	5	1	0	0	3	3	7	10	0	0
<i>Eucyclogobius newberryi</i> tidewater goby	G3 S3	Endangered None	AFS_EN-Endangered CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	15 20	127 S:3	0	2	0	0	0	1	3	0	3	0	0
<i>Eumetopias jubatus</i> Steller (=northern) sea-lion	G3 S2	Delisted None	IUCN_EN-Endangered MMC_SSC-Species of Special Concern	15 15	38 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Euphydryas editha bayensis</i> Bay checkerspot butterfly	G5T1 S1	Threatened None		500 640	30 S:3	0	1	0	0	2	0	2	1	1	1	1
<i>Falco peregrinus anatum</i> American peregrine falcon	G4T4 S3S4	Delisted Delisted	CDF_S-Sensitive CDFW_FP-Fully Protected USFWS_BCC-Birds of Conservation Concern	1,871 1,871	58 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Geothlypis trichas sinuosa</i> saltmarsh common yellowthroat	G5T3 S3	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	4 360	112 S:11	1	2	2	0	0	6	10	1	11	0	0
<i>Haliaeetus leucocephalus</i> bald eagle	G5 S3	Delisted Endangered	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	430 430	329 S:1	0	0	1	0	0	0	0	1	1	0	0
<i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	G2? S2?	None None		280 280	13 S:1	0	0	0	0	0	1	1	0	1	0	0



**Summary Table Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Lasiurus cinereus</i> hoary bat	G5 S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority		238 S:6	0	0	0	0	0	6	6	0	6	0	0
<i>Laterallus jamaicensis coturniculus</i> California black rail	G3G4T1 S1	None Threatened	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_NT-Near Threatened NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	5 5	303 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Linderiella occidentalis</i> California linderiella	G2G3 S2S3	None None	IUCN_NT-Near Threatened	110 110	508 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Margaritifera falcata</i> western pearlshell	G4G5 S1S2	None None		50 50	78 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Melospiza melodia pusillula</i> Alameda song sparrow	G5T2? S2S3	None None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	4 70	38 S:6	0	3	0	0	0	3	3	3	6	0	0
<i>Microcina edgewoodensis</i> Edgewood Park micro-blind harvestman	G1 S1	None None		600 600	1 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Neotoma fuscipes annectens</i> San Francisco dusky-footed woodrat	G5T2T3 S2S3	None None	CDFW_SSC-Species of Special Concern	215 460	42 S:5	0	2	2	0	0	1	0	5	5	0	0
<i>Oncorhynchus kisutch pop. 4</i> coho salmon - central California coast ESU	G4 S2	Endangered Endangered	AFS_EN-Endangered	40 400	23 S:2	0	0	1	1	0	0	2	0	2	0	0
<i>Oncorhynchus mykiss irideus pop. 8</i> steelhead - central California coast DPS	G5T2T3Q S2S3	Threatened None	AFS_TH-Threatened	40 1,200	44 S:9	0	2	0	0	0	7	7	2	9	0	0
<i>Rallus obsoletus obsoletus</i> California Ridgway's rail	G5T1 S1	Endangered Endangered	CDFW_FP-Fully Protected NABCI_RWL-Red Watch List	1 4	99 S:3	1	1	1	0	0	0	0	3	3	0	0
<i>Rana boylei</i> foothill yellow-legged frog	G3 S3	None Endangered	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened USFS_S-Sensitive	80 1,654	2468 S:15	0	1	0	0	6	8	15	0	9	2	4



**Summary Table Report**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Rana draytonii</i> California red-legged frog	G2G3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	10 1,880	1574 S:66	13	19	10	1	2	21	23	43	64	1	1
<i>Reithrodontomys raviventris</i> salt-marsh harvest mouse	G1G2 S1S2	Endangered Endangered	CDFW_FP-Fully Protected IUCN_EN-Endangered	0 0	144 S:3	0	1	2	0	0	0	3	0	3	0	0
<i>Riparia riparia</i> bank swallow	G5 S2	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern		298 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Sorex vagrans halicoetes</i> salt-marsh wandering shrew	G5T1 S1	None None	CDFW_SSC-Species of Special Concern	2 2	12 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Speyeria adiastrae adiastrae</i> unsilvered fritillary	G1G2T1 S1	None None		1,600 2,300	2 S:2	0	1	0	0	0	1	2	0	2	0	0
<i>Speyeria zerene myrtleae</i> Myrtle's silverspot butterfly	G5T1 S1	Endangered None		28 28	17 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Spirinchus thaleichthys</i> longfin smelt	G5 S1	Candidate Threatened		0 20	46 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Sternula antillarum browni</i> California least tern	G4T2T3Q S2	Endangered Endangered	CDFW_FP-Fully Protected NABCI_RWL-Red Watch List	1 1	75 S:1	0	0	0	0	1	0	1	0	0	0	1
<i>Taricha rivularis</i> red-bellied newt	G4 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	1,800 2,000	136 S:2	0	0	0	0	0	2	0	2	2	0	0
<i>Taxidea taxus</i> American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	30 2,542	594 S:26	0	0	0	0	0	26	3	23	26	0	0
<i>Thamnophis sirtalis tetrataenia</i> San Francisco gartersnake	G5T2Q S2	Endangered Endangered	CDFW_FP-Fully Protected	5 2,030	66 S:41	6	10	8	0	0	17	29	12	41	0	0
<i>Tryonia imitator</i> mimic tryonia (=California brackishwater snail)	G2 S2	None None	IUCN_DD-Data Deficient	3 40	39 S:2	0	1	0	0	0	1	1	1	2	0	0

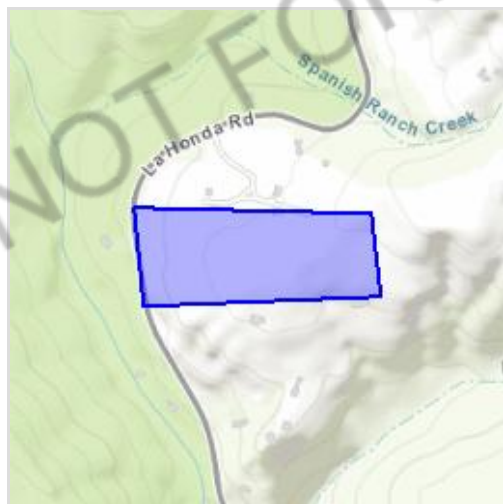
# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

San Mateo County, California



## Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📅 (916) 414-6713

Federal Building  
2800 Cottage Way, Room W-2605

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
  2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Birds

NAME	STATUS
California Least Tern <i>Sterna antillarum browni</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/8104">https://ecos.fws.gov/ecp/species/8104</a>	Endangered
Marbled Murrelet <i>Brachyramphus marmoratus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/4467">https://ecos.fws.gov/ecp/species/4467</a>	Threatened

## Reptiles

NAME	STATUS
Green Sea Turtle <i>Chelonia mydas</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/6199">https://ecos.fws.gov/ecp/species/6199</a>	Threatened
San Francisco Garter Snake <i>Thamnophis sirtalis tetrataenia</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/5956">https://ecos.fws.gov/ecp/species/5956</a>	Endangered

## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. <a href="https://ecos.fws.gov/ecp/species/2891">https://ecos.fws.gov/ecp/species/2891</a>	Threatened

## Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/321">https://ecos.fws.gov/ecp/species/321</a>	Threatened
Tidewater Goby <i>Eucyclogobius newberryi</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/57">https://ecos.fws.gov/ecp/species/57</a>	Endangered

## Insects

NAME	STATUS
San Bruno Elfin Butterfly <i>Callophrys mossii bayensis</i> There is <b>proposed</b> critical habitat for this species. The location of the critical habitat is not available. <a href="https://ecos.fws.gov/ecp/species/3394">https://ecos.fws.gov/ecp/species/3394</a>	Endangered

## Flowering Plants

NAME	STATUS
San Mateo Woolly Sunflower <i>Eriophyllum latilobum</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/7791">https://ecos.fws.gov/ecp/species/7791</a>	Endangered

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
California Red-legged Frog <i>Rana draytonii</i> <a href="https://ecos.fws.gov/ecp/species/2891#crithab">https://ecos.fws.gov/ecp/species/2891#crithab</a>	Final

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds>

</management/project-assessment-tools-and-guidance/conservation-measures.php>

- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Allen's Hummingbird *Selasphorus sasin*

Breeds Feb 1 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9637>

- Black Swift** *Cypseloides niger* Breeds Jun 15 to Sep 10  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  
<https://ecos.fws.gov/ecp/species/8878>
- Burrowing Owl** *Athene cunicularia* Breeds Mar 15 to Aug 31  
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  
<https://ecos.fws.gov/ecp/species/9737>
- Common Yellowthroat** *Geothlypis trichas sinuosa* Breeds May 20 to Jul 31  
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  
<https://ecos.fws.gov/ecp/species/2084>
- Golden Eagle** *Aquila chrysaetos* Breeds Jan 1 to Aug 31  
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.  
<https://ecos.fws.gov/ecp/species/1680>
- Lawrence's Goldfinch** *Carduelis lawrencei* Breeds Mar 20 to Sep 20  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  
<https://ecos.fws.gov/ecp/species/9464>
- Nuttall's Woodpecker** *Picoides nuttallii* Breeds Apr 1 to Jul 20  
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  
<https://ecos.fws.gov/ecp/species/9410>
- Oak Titmouse** *Baeolophus inornatus* Breeds Mar 15 to Jul 15  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  
<https://ecos.fws.gov/ecp/species/9656>
- Rufous Hummingbird** *selasphorus rufus* Breeds elsewhere  
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  
<https://ecos.fws.gov/ecp/species/8002>

**Song Sparrow** *Melospiza melodia*

Breeds Feb 20 to Sep 5

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

**Spotted Towhee** *Pipilo maculatus clementae*

Breeds Apr 15 to Jul 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/4243>

**Tricolored Blackbird** *Agelaius tricolor*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3910>

**Wrentit** *Chamaea fasciata*

Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the

## FIELD SURVEYOR QUALIFICATIONS

**Dana Riggs, Principal Biologist** for Sol Ecology received her Bachelor of Science degree in Earth Systems, Science and Policy at California State University of Monterey Bay in 2001. Prior to founding Sol Ecology, she was a principal biologist and head of the Wildlife and Fisheries Department at WRA, a mid-size environmental consulting firm in San Rafael, California. She has 20 years of experience directing a broad range of resource studies from planning level to post-construction including: biological habitat assessments and mapping, special status species surveys, corridor studies, site restoration and monitoring, federal and state regulatory permitting, local permitting, mitigation and restoration planning for aquatic species, and NEPA and CEQA documentation for a variety of public and private sector clients. Dana has extensive experience working with species including California red-legged frog and California tiger salamander and has been approved by USFWS and CDFW to monitor for these species on projects throughout the state.

**Amy May, Associate Biologist** for Sol Ecology received a Bachelor of Science degree in Biological Sciences at Virginia Tech in 2006 and a dual Master of Public Affairs and Master of Science in Environmental Science at Indiana University-Bloomington in 2010. She has worked as a biologist in the public and private industry for over 10 years and specializes in special status plant and wildlife surveys, floristic inventories, wetland delineation, and vegetation community mapping with experience in the Bay Area, Mojave Desert, Shasta Cascade Region, Great Basin, and Snake River Plain.

**Elsbeth Mathau, Associate Biologist** for Sol Ecology received an Honors Bachelor of Science degree in Environmental Studies, Biology and Psychology at the University of Toronto in 2016, and a Master of Science in Ethnobotany at the University of Kent, in Canterbury UK with Training at Kew Royal Botanical Gardens in 2018. She started working in the environmental science education field in 2009, and has experience with plant restoration projects, floristic inventories. Her master's research was on ecological change and climate adaptation in the Moroccan High Atlas Mountains with indigenous communities. She has also worked with sustainable agriculture and STEM education non-profits focused on equity and inclusion programs.

## APPENDIX D

## OBSERVED SPECIES TABLE

SCIENTIFIC NAME	COMMON NAME
<b>PLANTS</b>	
<i>Arbutus menziesii</i>	Pacific madrone
<i>Artemisia douglasiana</i>	mugwort
<i>Avena fatua</i>	wild oat
<i>Baccharis pilularis</i>	coyote brush
<i>Briza major</i>	rattlesnake grass
<i>Briza minor</i>	annual quaking grass
<i>Bromus diandrus</i>	ripgut brome
<i>Cirsium vulgare</i>	bull thistle
<i>Clinopodium douglasii</i>	Yerba Buena
<i>Cortaderia seloana</i>	pampas grass
<i>Cynosurus echinatus</i>	bristly dogtail grass
<i>Detricia graola</i>	stinkwort
<i>Diplacus aurantiacus</i>	orange bush monkeyflower
<i>Elymus glaucus</i>	blue wild-rye
<i>Foeniculum vulgare</i>	fennel
<i>Gastridium ventricosum</i>	nit grass
<i>Genista monspessulana</i>	french broom
<i>Helminthotheca echioides</i>	bristly ox tongue
<i>Kickxia elatine</i>	sharp leaved fluellin
<i>Lactuca serriola</i>	prickly lettuce
<i>Lonicera</i> sp.	honeysuckle
<i>Pinus</i> sp.	pine
<i>Polypogon monspeliensis</i>	annual beard grass
<i>Quercus agrifolia</i>	coast live oak
<i>Raphanus sativus</i>	radish
<i>Rubus ursinus</i>	California blackberry
<i>Salix lasiolepis</i>	arroyo willow
<i>Symphyotrichum frondosum</i>	American aster
<i>Torilis arvensis</i>	tall sock-destroyer
<i>Toxicodendron diversilobum</i>	western poison oak
<i>Umbellularia californica</i>	California bay
<i>Veratrum californicum</i>	California false hellebore
<i>Verbena lasiostachys</i>	common verbena
<i>Vicia sativa</i> ssp. <i>nigra</i>	narrow-leaved vetch
<i>Vicia sativa</i> ssp. <i>sativa</i>	spring vetch
<b>WILDLIFE</b>	
<b>Mammals</b>	
<i>Neotoma fuscipes annectens</i>	San Francisco dusky-footed woodrat

SITE PHOTOGRAPHS



**Photo 1.** North facing portion of driveway above steep graded turn. Orange plastic netting over eroded slope visible on northeast side.



**Photo 2.** East facing upper slope above driveway. Orange plastic netting over eroded slope visible on east side.



**Photo 3.** Driveway facing south.



**Photo 4.** Base of driveway where it meets SR 84/La Honda Road. Straw wattles at base of the driveway where 12" plastic culvert was installed.



**Photo 5.** Drainage ditch with 12" plastic culvert at the base of driveway adjacent to SR 84/La Honda Road.