



# BIOLOGICAL RESOURCES REPORT

**Brush Creek Subdivision Project,  
Santa Rosa, Sonoma County, CA**

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Project No. 2051

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## LIST OF ACRONYMS AND ABBREVIATIONS

CDFG/CDFW	California Department of Fish and Game/Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRLF	California Red-Legged Frog
ESA	Federal Endangered Species Act
FYLF	Foothill Yellow-Legged Frog
MBTA	Migratory Bird Treaty Act
NRCS	Natural Resources Conservation Service
OHWM	Ordinary High-Water Mark
RWQCB	Regional Water Quality Control Board
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
WBWG	Western Bat Working Group
WPT	Western Pond Turtle

## **1.0 INTRODUCTION**

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On September 24, 2020, Sol Ecology, Inc. (Sol Ecology) performed a biological resource survey at 2210 Brush Creek Road in Santa Rosa, Sonoma 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 resource impacts from development of the proposed project, under the guidelines of the California Environmental Quality Act (CEQA) for the City of Santa Rosa Planning Department. 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 potential mitigation measures to compensate for those impacts 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 Project Study Area is located in the city of Santa Rosa, Sonoma County, accessed going north on Brush Creek Road from Sonoma Highway/CA-12. The approximately 1.66-acre Project Study Area is within APN 182-050-004 (Appendix A, Figure 1). The parcel is currently zoned as Rural Residential (RR 20), Combining Districts (B6), Riparian Corridor Combining Zone (RC50/25), and Valley Oak Habitat Combining District (VOH) (County of Sonoma 2020). The parcel is bounded by Single Family Dwelling, Rural Residential/Vacant Development with Utility, a private residence, Brush Creek Road, Lyric Lane, and Rincon Creek.

### **1.2 Project Description**

The proposed project includes the development of the property into a 5-lot subdivision. Four (4) new lots with driveways would be established plus the remainder parcel.

## 2.0 METHODS

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On September 24, 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 Santa Rosa quadrangle and eight adjacent quadrangles (CNPS 2020a);
- California Natural Diversity Database (CNDDDB) records search for USGS 7.5-minute Santa Rosa quadrangle and eight adjacent quadrangles (California Department of Fish and Wildlife [CDFW] 2020);
- U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) automatically generated list of species and other resources under USFWS jurisdiction (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 sensitive natural communities that could be present in the Project vicinity. Figures 2 and 3 present the results of a 5-mile CNDDDB record search around the study area for special status plants and wildlife. 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 September 24, 2020. 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 2020b). 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.

Concurrently with the botanical and wildlife surveys, biologists identified wetland and non-wetland waters potentially subject to regulation by the federal government (U.S. Army Corps of Engineers [USACE]) and the state of California (Regional Water Quality Control Board [RWQCB] and CDFW). The delineation of wetland boundaries was based on the presence/absence of indicators of hydrophytic vegetation, hydric soil, and wetland hydrology. The boundaries of non-wetland waters were identified by locating the ordinary high-water mark (OHWM).

## 3.0 RESULTS

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### 3.1 Existing Conditions and General Wildlife Use

Elevations within the Project Study Area range from approximately 76 to 89 meters (250 to 290 feet) above mean sea level. The Project Study Area encompasses two soil map units identified by the USDA, NRCS (USDA 2019):

- **Zamora silty clay loam, moist, 0 to 2 percent slopes, MLRA 14:** This soil map unit is well drained and occurs in alluvial fans and stream terraces. Soil parent material is alluvium derived from volcanic and sedimentary rock. Zamora silty clay loam is not rated as hydric. Minor components include Cole (4%), Yolo (4%), Pajaro (3%), Cortina (3%), and Unnamed (1%).
- **Clough gravelly loam, 2 to 9 percent slopes:** This soil map unit is moderately well drained and occurs in terraces. The soil parent material is gravelly alluvium derived from sedimentary rock. Clough gravelly loam is not rated as hydric. Minor components include Positas (8%) and Manzanita (7%).

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 C.

#### 3.1.1 Non-Sensitive Natural Communities

##### California Annual Grassland

The Project Site is predominantly California annual grassland. This vegetation community is characterized by dense cover of non-native annual grasses. Discernible grass species include Bermuda grass (*Cynodon dactylon*), bristly dogtail grass (*Cynosurus echinatus*), harding grass (*Phalaris aquatica*), oats (*Avena* sp.), and rattlesnake grass (*Briza maxima*). Common non-native forbs include English plantain (*Plantago lanceolata*) and tall sock-destroyer (*Torilis arvensis*). Numerous ornamental trees and shrubs occur along the Project Study Area perimeter including Cootamundra wattle (*Acacia baileyana*), red gum (*Eucalyptus camaldulensis*), and firethorn (*Pyracantha coccinea*). Native black oak (*Quercus kelloggii*), coast live oak (*Quercus agrifolia*), and valley oak (*Quercus lobata*) trees also occur within the California annual grassland.

##### Developed

Developed areas within the Project Study Area mainly consist of a driveway, cement pool area, and a residential house. These areas are associated with non-native herbaceous species and ornamental landscaping.

### 3.1.2 Sensitive Natural Communities

#### Riparian Mixed Hardwood

Rincon Creek (sometimes referred to as Brush Creek) occurs within the Project Study Area. The riparian vegetation associated with Rincon Creek is considered a sensitive natural community. The riparian vegetation within the Project Study Area can best be described as riparian mixed hardwood. The co-dominant tree species include Arroyo willow (*Salix lasiolepis*), big-leaf maple (*Acer macrophyllum*), California bay (*Umbellularia californica*), California buckeye (*Aesculus californica*), and Oregon ash (*Fraxinus latifolia*). The understory consists of California sword fern (*Polystichum californicum*), English ivy (*Hedera helix*), flatsedge (*Cyperus eragrostis*), Himalayan blackberry (*Rubus armeniacus*), soft rush (*Juncus effusus*), and western poison oak (*Toxicodendron diversilobum*).

Rincon Creek was flowing at the time of the site visit. Cobble substrate was noted within the bottom of the streambed and the OHWM within the Project Study Area is about 15 feet. Rincon Creek is a tributary of Santa Rosa Creek. Santa Rosa Creek flows to the Laguna de Santa Rosa. The Laguna de Santa Rosa is the largest tributary to Mark West Creek. Mark West Creek eventually drains to the Russian River. The Russian River flows to the Pacific Ocean, a traditional navigable water. Two small ephemeral streams are also present as shown in Figure 1 (Appendix A). The origin of these streams is unknown but they appear to be either man-made or naturally occurring headwater streams that may have been impacted at the time that Lyric Lane was developed.

### 3.2 Special Status Plants

Special status species include those plants and wildlife 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 the CNPS Rare and Endangered Plant Inventory 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, sixty-three (63) 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 the potential to support one special status plant species: congested-headed hayfield tarplant described in Table 1 below; however this species was in bloom at the time of the survey and was not observed on site. 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. vernal pools, freshwater swamps, bog) necessary to support the special status plants do not exist on site;



- Edaphic (soil) conditions (e.g. sandy, red rhyolitic 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. cismontane woodland, chaparral, coniferous forest) 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.

Based on the databases given in Section 2.1, thirty-three (33) special status wildlife species have been documented within a 9-quad search of the Study Area (Appendix B). The Project Study Area has the potential to support six (6) of these species based on the presence of biological communities described above (Table 2). A discussion of potential impacts or unlikelihood for impacts to occur is provided in Section 4.1.

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

- No suitably sized burrows or evidence of potential dens are present on or immediately adjacent to the Study Area (e.g. for burrowing owl or American badger);
- No suitable habitat or species is not known to be extant (e.g. for Northern spotted owl, California freshwater shrimp, or steelhead); and
- No fast-moving streams on or adjacent to the Study Area (e.g. red-bellied newt).

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

Common Name/Scientific Name	Status <sup>1</sup>	Habitat	Blooming Period	Potential for Occurrence
congested-headed hayfield tarplant <i>Hemizonia congesta</i> subsp. <i>congesta</i>	1B.2	Valley and foothill grassland, sometimes roadsides; 20-560 meters.	May-Nov	<b>Low Potential.</b> There are occurrences within 5 miles of the Project Site. These occurrences are all associated with vernal pool habitat. Not observed during site visit within the species bloom period.

<sup>1</sup> 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

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

Common Name/Scientific Name	Status <sup>1</sup>	Habitat Type/Alliance	Potential for Occurrence
<b>Amphibians and Reptiles</b>			
<i>Dicamptodon ensatus</i> California giant salamander	SSC	Usually found in cool, moist, forest habitat and associated with rocky streams and springs.	<b>Low Potential.</b> Species is documented within 3 miles of the Project Study Area. May be found in Rincon Creek and its associated riparian habitat.
<i>Emys marmorata</i> western pond turtle	SSC	Found in ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat for egg-laying.	<b>High Potential.</b> Species is documented within 2 miles of the Study Area. There is suitable habitat for basking within Rincon Creek; suitable nesting substrate is not present.
<i>Rana boylei</i> foothill yellow-legged frog	SSC	Prefers partly shaded, shallow streams and riffles with a rocky substrate; requires at least some cobble-sized substrate for egg-	<b>Moderate Potential.</b> Species is documented within 3 miles of the Project Study Area. Suitable cobble-sized substrate present in Rincon Creek.

		laying. Needs at least 15 weeks to attain metamorphosis.	This species is not likely to be found outside the riparian habitat.
<b>Mammals</b>			
<i>Lasiurus blossevillii</i> western red bat	SSC, WBWG_High	Requires water. Prefers edges or habitat mosaics that have trees for roosting or open areas for foraging.	<b>Moderate Potential.</b> Suitable tree-roosting habitat is present on site.
<i>Lasiurus cinereus</i> hoary bat	WBWG_Med	Trees, preferably at the edge of clearings. Have been found in trees in heavy forests, open wooded glades, and shade trees along urban streets and in city parks.	<b>Moderate Potential.</b> Suitable tree roosting habitat is present on site.
<i>Myotis thysanodes</i> fringed myotis	WBWG_High	Roosts in crevices of buildings, underground mines, rocks, cliff faces, and bridges, large trees and snags.	<b>Moderate Potential.</b> Suitable tree roosting habitat is present on site.
<i>Myotis volans</i> long-legged myotis	WBWG High	Primarily coniferous forests but also occurs seasonally in riparian and desert habitats.	<b>Low Potential.</b> Suitable habitat is present in riparian habitat on the site (which will be avoided).

<sup>1</sup> FE/FT – Federal Endangered/Federally Threatened

SSC – CDFW Species of Special Concern

WBWG\_High/Med – Western Bat Working Group High priority/Medium priority

#### 4.0 POTENTIAL IMPACTS AND MITIGATION

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The assessment of impacts under CEQA is based on the change caused by the Project relative to the existing conditions within the Study Area. In applying CEQA Appendix G, the terms “substantial” and “substantially” are used as the basis for significance determinations in many of the thresholds but are not defined qualitatively or quantitatively in CEQA or in technical literature. In some cases, the determination requires application of best professional judgment based on knowledge of site conditions as well as the ecology and physiology of biological resources present in a given area. The CEQA and State CEQA Guidelines defines “significant effect on the environment” as “a substantial adverse change in the physical conditions which exist in the area affected by the proposed project.” Pursuant to Appendix G, Section IV of the State CEQA Guidelines, the proposed Project would have a significant impact on biological resources if it would:

- A. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.
- C. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- D. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- E. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

## 4.1 Potentially Significant Impacts and Mitigation Measures

### Sensitive Natural Communities

Sensitive natural communities within the Project Study Area include Rincon Creek and associated riparian mixed hardwood habitat. The parcel is in Riparian Corridor Combining Zone (RC 50/25). This means that Rincon Creek is associated with a minimum streamside conservation area of 50 feet. The streamside conservation area extends 50 feet from Rincon Creek top of bank, and 30 feet outward from the two ephemeral streams. Project activities are prohibited within any stream channel, riparian habitat, or streamside conservation area. No significant impacts are anticipated, and no mitigation is proposed as long as no project activities occur within the streamside conservation area. There are no other sensitive natural communities with the Project Study Area.

### Special Status Plant Species

One special status species, congested-headed hayfield tarplant has a low potential for occurrence within the Project Study Area (Table 1). There are no documented occurrences of congested-headed hayfield tarplant within the Project Study Area and congested-headed hayfield tarplant was not observed during the site visit which took place during the special status plant's blooming period. It is unlikely that congested-headed hayfield tarplant occurs within the Project Study Area given that the nearby occurrences are associated with vernal pool habitat. Impacts to special status plant species is less than significant given that no special status plants were observed. No further mitigation is recommended at this time.

### Special Status Wildlife Species

#### *Amphibians and Reptiles*

Two special status amphibians have the potential to be present in the study area: California giant salamander, and foothill yellow-legged frog (FYLF). Western Pond Turtle (WPT) also has the potential to be present in the study area (Table 2). These species most likely to occur within Rincon Creek and the riparian mixed hardwood habitat and thus are not likely to be affected by the proposed project.

#### *Birds*

Migratory nesting birds in grassland and riparian areas may potentially be impacted by the proposed project if activities occur during the nesting season from February 1 through August 31. Noise and/or dust and visual disturbances may result in nest abandonment or mortality to eggs and chicks which is considered significant under CEQA. To avoid such impacts, all construction activities should be performed outside the nesting season between September 1 and January 31.

If work must be performed during the nesting season, a pre-construction nesting bird survey should be performed in all areas within 250 feet of proposed activities. If nests are found, an appropriately sized no-disturbance buffer should be placed around the nest at the direction of the qualified biologist conducting the survey. Buffers should remain in place until all young have fledged, or the biologist has confirmed that the nest has been naturally predated.

### *Mammals*

Four bat species have the potential to occur within the Project Study Area. These species may roost in the trees primarily or in eaves or the attic of the existing residential house on the site. Removal of bat roost habitat under CEQA is considered a significant impact. To ensure potentially significant impacts to bats are avoided, prior to tree removal and/or building demolition or alteration, the following measures are prescribed:

1. Prior to activities in areas where bat roosts may be present, a qualified bat biologist shall perform a pre-construction roost survey (dusk emergence survey) no more than 10 days prior to the start of activities with potential to disturb bats or their habitat during the maternity season between April and September to avoid potential impacts to active maternity sites and/or pregnant females.
2. If no maternity roost is found, any felled trees should be left overnight prior to removal from the site or on-site chipping to allow any solitary bats to exit the roost.

## 6.0 REFERENCES

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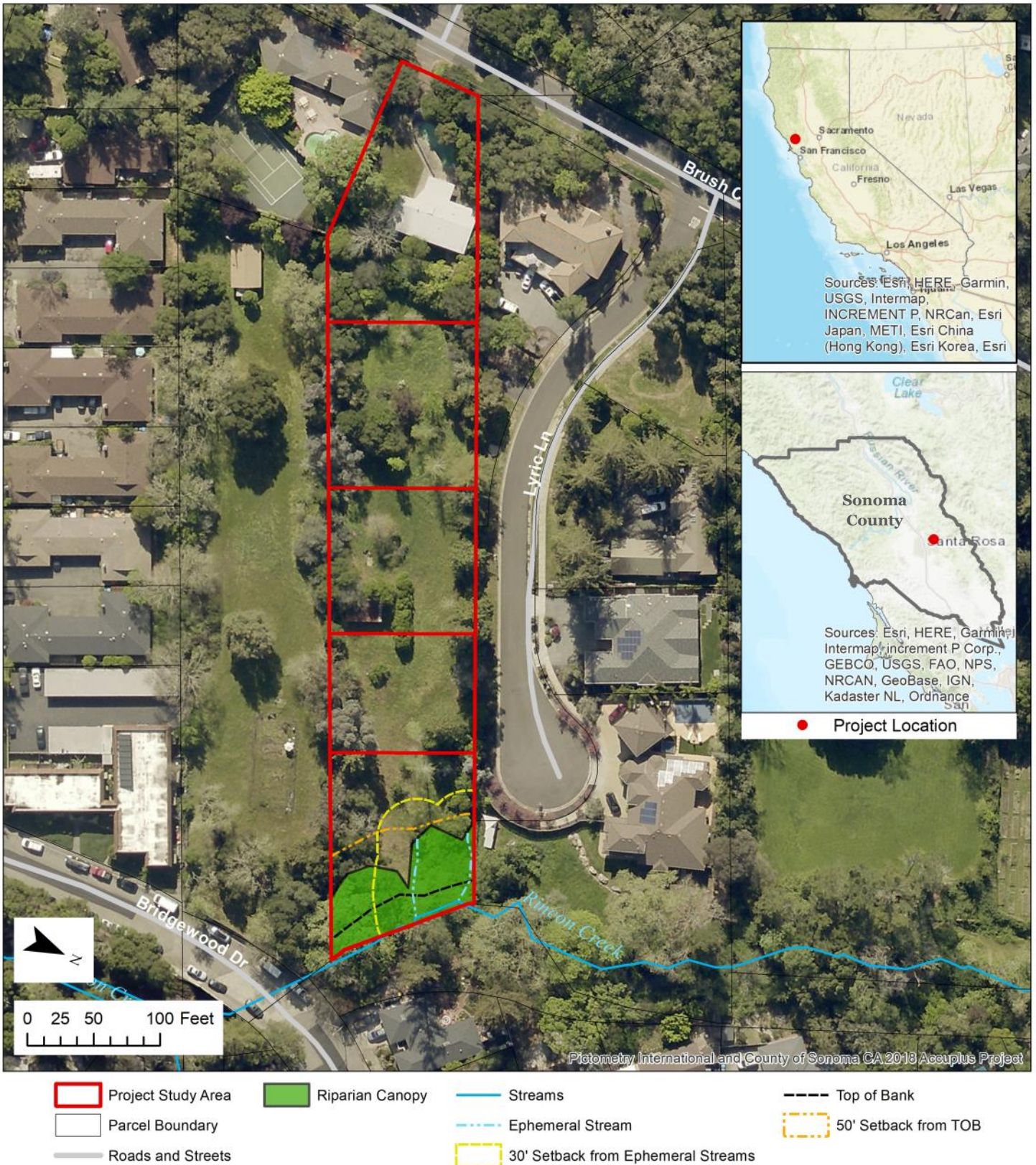


APPENDIX A

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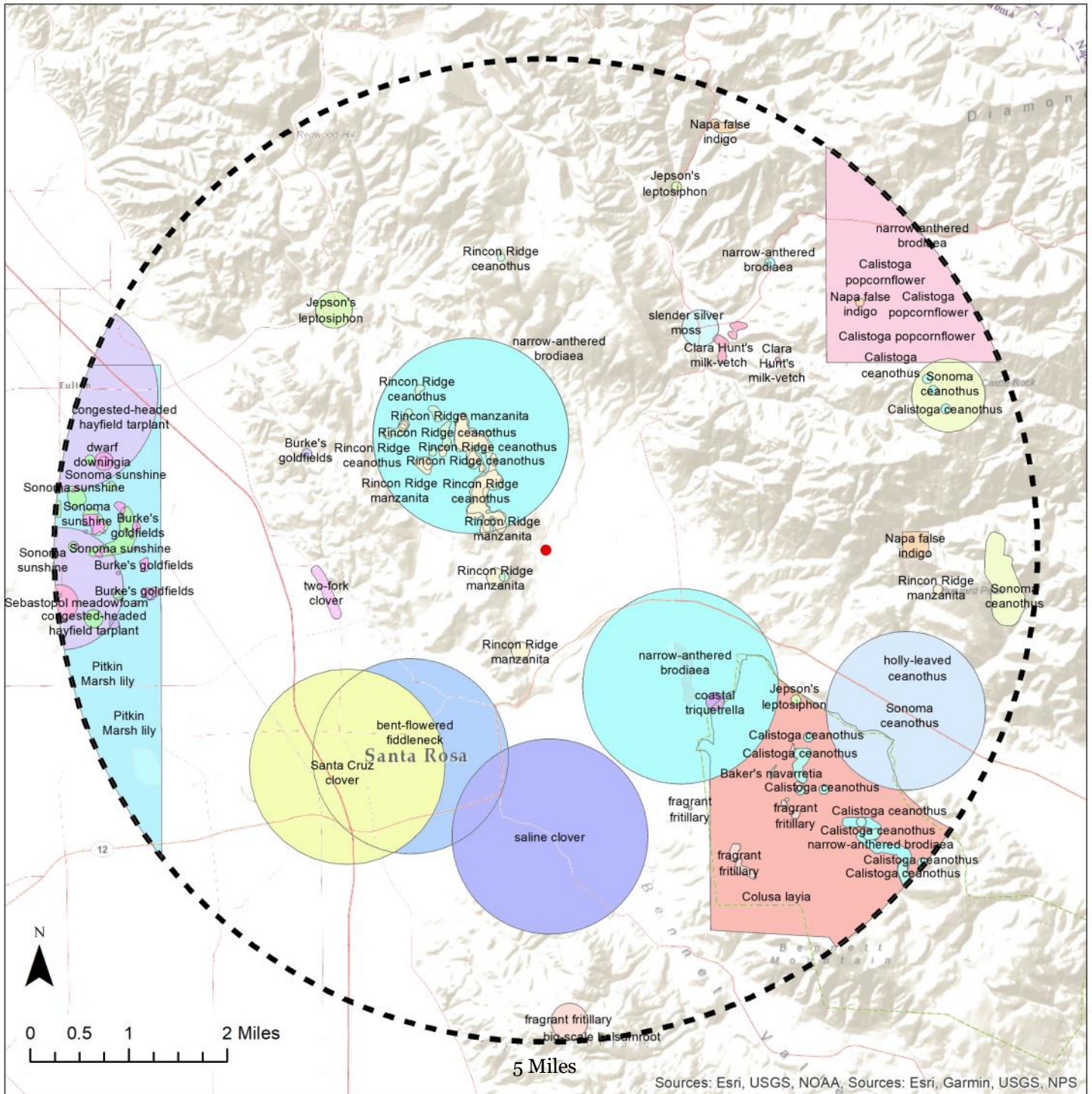
PROJECT FIGURES: SITE LOCATION MAP AND CNDDDB DATABASE RESULTS

**Figure 1. Project Study Area & Sensitive Habitats Map**  
 Brush Creek, Santa Rosa, CA





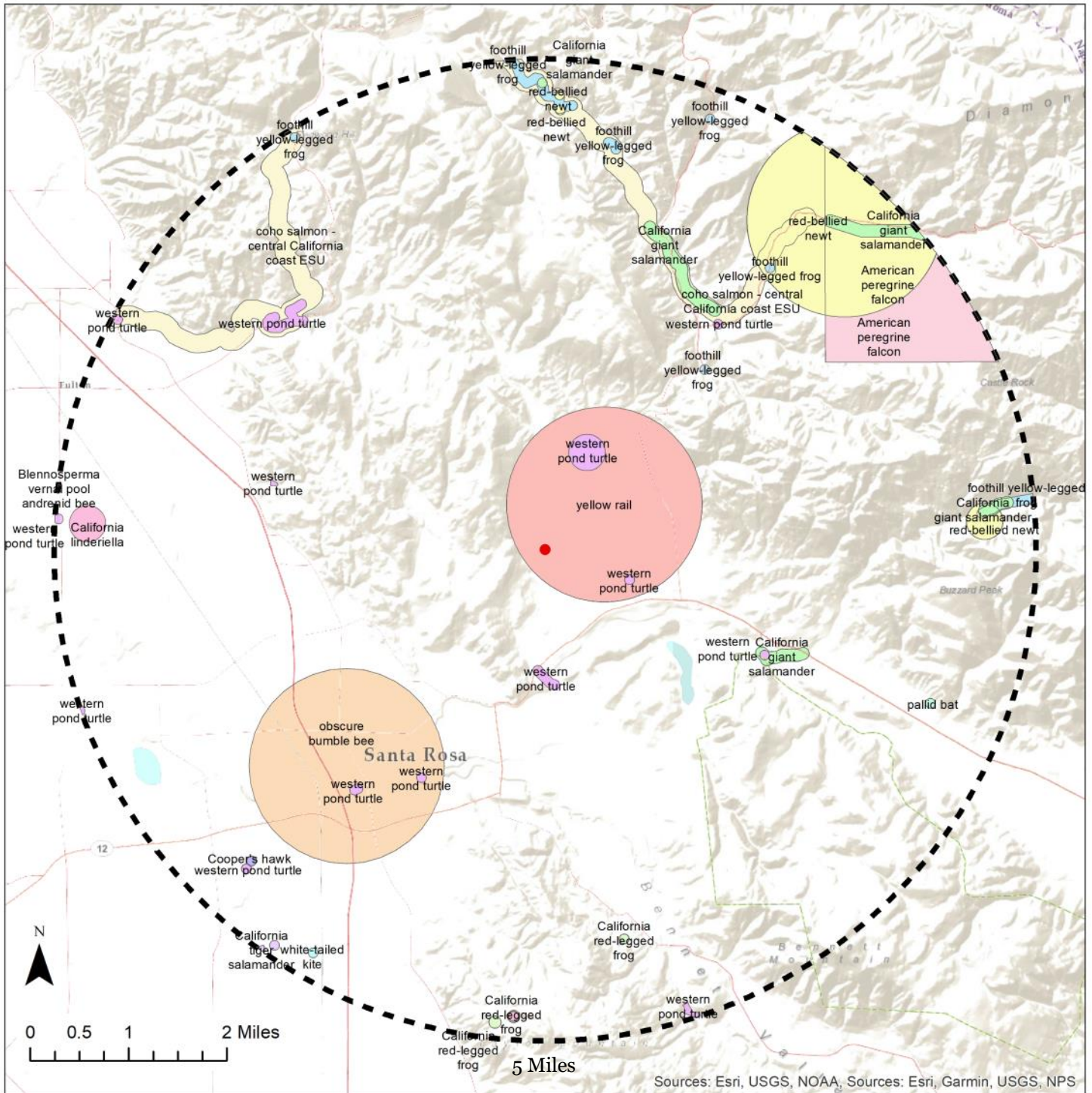
**Figure 2: Special Status Plant Species within 5 Miles of the Project Site**  
 Brush Creek, Santa Rosa, CA



- Project Location
- 5-Mile Buffer
- Baker's navarretia (2)
- Burke's goldfields (4)
- Calistoga ceanothus (4)
- Calistoga popcornflower (3)
- Clara Hunt's milk-vetch (2)
- Colusa layia (1)
- Jepson's leptosiphon (3)
- Napa false indigo (4)
- Pitkin Marsh lily (2)
- Rincon Ridge ceanothus (3)
- Rincon Ridge manzanita (5)
- Santa Cruz clover (1)
- Sebastopol meadowfoam (2)
- Sonoma ceanothus (3)
- Sonoma sunshine (3)
- bent-flowered fiddleneck (1)
- big-scale balsamroot (1)
- coastal triquetrella (1)
- congested-headed hayfield tarplant (3)
- dwarf downingia (3)
- fragrant fritillary (5)
- holly-leaved ceanothus (1)
- narrow-anthered brodiaea (5)
- saline clover (1)
- slender silver moss (1)
- two-fork clover (1)



**Figure 3: Special Status Animal Species within 5 Miles of the Project Site**  
 Brush Creek, Santa Rosa, CA



- |   |  |                          |
|---|--|--------------------------|
| ● Project Location                        | California red-legged frog (2)                 | pallid bat (1)           |
| ⊖ 5-Mile Buffer                           | California tiger salamander (2)                | red-bellied newt (3)     |
| American peregrine falcon (2)             | Cooper's hawk (1)                              | western pond turtle (14) |
| Blennosperma vernal pool andrenid bee (1) | coho salmon - central California coast ESU (1) | white-tailed kite (1)    |
| California giant salamander (5)           | foothill yellow-legged frog (7)                | yellow rail (1)          |
| California linderiella (2)                | California red-legged frog                     |                          |
|   | California tiger white-tailed salamander       |                          |
|   | California red-legged frog                     |                          |
|   | California red-legged frog                     |                          |

APPENDIX B

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CNDDDB, CNPS, AND IPAC SUMMARY TABLES



# Summary Table Report

## California Department of Fish and Wildlife

### California Natural Diversity Database



**Query Criteria:** Quad (Healdsburg (3812257) OR Mark West Springs (3812256) OR Calistoga (3812255) OR Sebastopol (3812247) OR Santa Rosa (3812246) OR Kenwood (3812245) OR Two Rock (3812237) OR Cotati (3812236) OR Glen Ellen (3812235))  
 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>Allium peninsulare</i> var. <i>franciscanum</i> Franciscan onion	G5T2 S2	None None	Rare Plant Rank - 1B.2	600 600	25 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Alopecurus aequalis</i> var. <i>sonomensis</i> Sonoma alopecurus	G5T1 S1	Endangered None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	100 1,180	21 S:6	0	0	0	1	2	3	5	1	4	2	0
<i>Amorpha californica</i> var. <i>napensis</i> Napa false indigo	G4T2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	200 2,100	76 S:28	7	4	3	2	0	12	7	21	28	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	1	0	1	0	0
<i>Arctostaphylos densiflora</i> Vine Hill manzanita	G1 S1	None Endangered	Rare Plant Rank - 1B.1	200 240	2 S:2	0	0	1	1	0	0	1	1	2	0	0
<i>Arctostaphylos stanfordiana</i> ssp. <i>decumbens</i> Rincon Ridge manzanita	G3T1 S1	None None	Rare Plant Rank - 1B.1	300 900	12 S:7	0	1	2	1	1	2	4	3	6	0	1



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Astragalus claranus</i> Clara Hunt's milk-vetch	G1 S1	Endangered Threatened	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	500 1,165	6 S:3	0	1	1	0	0	1	0	3	3	0	0
<i>Balsamorhiza macrolepis</i> big-scale balsamroot	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive	890 1,230	51 S:2	2	0	0	0	0	0	2	0	2	0	0
<i>Blennosperma bakeri</i> Sonoma sunshine	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	70 330	24 S:19	0	8	4	1	3	3	6	13	16	2	1
<i>Brodiaea leptandra</i> narrow-anthered brodiaea	G3? S3?	None None	Rare Plant Rank - 1B.2	100 1,400	39 S:15	0	4	1	0	1	9	8	7	14	1	0
<i>Calamagrostis crassiglumis</i> Thurber's reed grass	G3Q S2	None None	Rare Plant Rank - 2B.1	150 150	15 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Calystegia collina ssp. oxyphylla</i> Mt. Saint Helena morning-glory	G4T3 S3	None None	Rare Plant Rank - 4.2	1,150 1,150	9 S:1	1	0	0	0	0	0	1	0	1	0	0
<i>Campanula californica</i> swamp harebell	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	150 150	155 S:2	0	0	0	0	2	0	2	0	0	1	1
<i>Castilleja uliginosa</i> Pitkin Marsh paintbrush	GXQ SX	None Endangered	Rare Plant Rank - 1A	150 200	2 S:2	0	0	0	0	2	0	2	0	0	2	0
<i>Ceanothus confusus</i> Rincon Ridge ceanothus	G1 S1	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive SB_SBBG-Santa Barbara Botanic Garden	510 2,700	33 S:9	0	0	1	0	1	7	4	5	8	0	1
<i>Ceanothus divergens</i> Calistoga ceanothus	G2 S2	None None	Rare Plant Rank - 1B.2	320 1,900	26 S:16	1	3	1	2	0	9	7	9	16	0	0
<i>Ceanothus foliosus var. vineatus</i> Vine Hill ceanothus	G3T1 S1	None None	Rare Plant Rank - 1B.1	150 250	6 S:3	0	0	1	0	0	2	1	2	3	0	0
<i>Ceanothus purpureus</i> holly-leaved ceanothus	G2 S2	None None	Rare Plant Rank - 1B.2 SB_SBBG-Santa Barbara Botanic Garden	475 475	43 S:2	0	0	0	0	0	2	2	0	2	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Ceanothus sonomensis</i> Sonoma ceanothus	G2 S2	None None	Rare Plant Rank - 1B.2 SB_SBBG-Santa Barbara Botanic Garden	475 1,900	30 S:14	2	0	0	0	0	12	10	4	14	0	0
<i>Centromadia parryi ssp. parryi</i> pappose tarplant	G3T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	80 750	39 S:5	0	1	0	0	0	4	3	2	5	0	0
<i>Chorizanthe valida</i> Sonoma spineflower	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	150 150	6 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Clarkia imbricata</i> Vine Hill clarkia	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	230 232	2 S:2	0	1	1	0	0	0	1	1	2	0	0
<i>Coastal and Valley Freshwater Marsh</i> Coastal and Valley Freshwater Marsh	G3 S2.1	None None		65 400	60 S:2	0	0	1	0	0	1	2	0	2	0	0
<i>Cuscuta obtusiflora var. glandulosa</i> Peruvian dodder	G5T4? SH	None None	Rare Plant Rank - 2B.2		6 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Delphinium luteum</i> golden larkspur	G1 S1	Endangered Rare	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley		11 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Downingia pusilla</i> dwarf downingia	GU S2	None None	Rare Plant Rank - 2B.2	85 700	132 S:15	4	2	0	1	3	5	9	6	12	1	2
<i>Eryngium constancei</i> Loch Lomond button-celery	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	2,060 2,060	4 S:1	0	1	0	0	0	0	1	0	1	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	150 800	82 S:10	0	2	1	0	3	4	7	3	7	3	0





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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Gratiola heterosepala</i> Boggs Lake hedge-hyssop	G2 S2	None Endangered	Rare Plant Rank - 1B.2 BLM_S-Sensitive		99 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Hemizonia congesta ssp. congesta</i> congested-headed hayfield tarplant	G5T2 S2	None None	Rare Plant Rank - 1B.2 SB_UCBG-UC Botanical Garden at Berkeley	90 1,705	52 S:22	0	3	0	1	3	15	17	5	19	2	1
<i>Horkelia tenuiloba</i> thin-lobed horkelia	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	200 250	27 S:3	0	0	0	0	0	3	3	0	3	0	0
<i>Lasthenia burkei</i> Burke's goldfields	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	50 442	35 S:28	3	8	7	1	4	5	11	17	24	1	3
<i>Lasthenia californica ssp. bakeri</i> Baker's goldfields	G3T1 S1	None None	Rare Plant Rank - 1B.2	125 125	19 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Layia septentrionalis</i> Colusa layia	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCBG-UC Botanical Garden at Berkeley		69 S:2	0	0	0	0	0	2	1	1	2	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	90 1,400	83 S:2	0	0	1	0	1	0	2	0	1	0	1
<i>Leptosiphon jepsonii</i> Jepson's leptosiphon	G2G3 S2S3	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	400 1,900	51 S:18	1	2	1	0	0	14	5	13	18	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Lilium pardalinum ssp. pitkinense</i> Pitkin Marsh lily	G5T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_BerrySB-Berry Seed Bank SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture	132 200	4 S:3	0	2	0	0	0	1	2	1	3	0	0
<i>Limnanthes vinculans</i> Sebastopol meadowfoam	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	50 320	45 S:43	2	7	6	2	7	19	18	25	36	5	2
<i>Lupinus sericatus</i> Cobb Mountain lupine	G2? S2?	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_UCSC-UC Santa Cruz	400 2,400	46 S:7	0	0	2	0	0	5	7	0	7	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	40 100	38 S:4	0	0	0	0	0	4	4	0	4	0	0
<i>Navarretia leucocephala ssp. bakeri</i> Baker's navarretia	G4T2 S2	None None	Rare Plant Rank - 1B.1	50 1,320	64 S:19	1	1	0	0	7	10	16	3	12	3	4
<i>Navarretia leucocephala ssp. pliantha</i> many-flowered navarretia	G4T1 S1	Endangered Endangered	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	110 850	8 S:2	0	2	0	0	0	0	1	1	2	0	0
<i>Northern Hardpan Vernal Pool</i> Northern Hardpan Vernal Pool	G3 S3.1	None None		60 135	126 S:6	4	0	1	0	1	0	6	0	5	1	0
<i>Northern Vernal Pool</i> Northern Vernal Pool	G2 S2.1	None None		73 1,400	20 S:5	0	1	0	0	0	4	5	0	5	0	0
<i>Penstemon newberryi var. sonomensis</i> Sonoma beardtongue	G4T3 S3	None None	Rare Plant Rank - 1B.3 BLM_S-Sensitive	1,400 2,750	15 S:3	0	1	0	0	0	2	1	2	3	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Plagiobothrys strictus</i> Calistoga popcornflower	G1 S1	Endangered Threatened	Rare Plant Rank - 1B.1 SB_UCBG-UC Botanical Garden at Berkeley	300 400	3 S:3	0	2	0	0	0	1	1	2	3	0	0
<i>Pleuropogon hooverianus</i> North Coast semaphore grass	G2 S2	None Threatened	Rare Plant Rank - 1B.1 SB_BerrySB-Berry Seed Bank SB_CalBG/RSABG- California/Rancho Santa Ana Botanic Garden	780 780	27 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Poa napensis</i> Napa blue grass	G1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG- California/Rancho Santa Ana Botanic Garden	340 400	2 S:2	0	2	0	0	0	0	0	2	2	0	0
<i>Potentilla uliginosa</i> Cunningham Marsh cinquefoil	GX SX	None None	Rare Plant Rank - 1A	150 150	1 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Puccinellia simplex</i> California alkali grass	G3 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive	400 400	80 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Rhynchospora alba</i> white beaked-rush	G5 S2	None None	Rare Plant Rank - 2B.2	200 200	11 S:1	0	1	0	0	0	0	1	0	1	0	0
<i>Rhynchospora californica</i> California beaked-rush	G1 S1	None None	Rare Plant Rank - 1B.1	150 150	9 S:3	0	0	0	0	1	2	3	0	2	0	1
<i>Rhynchospora capitellata</i> brownish beaked-rush	G5 S1	None None	Rare Plant Rank - 2B.2	150 150	25 S:2	0	0	1	0	1	0	1	1	1	1	0
<i>Rhynchospora globularis</i> round-headed beaked-rush	G4 S1	None None	Rare Plant Rank - 2B.1	150 150	2 S:2	0	0	0	0	1	1	2	0	1	1	0
<i>Sidalcea hickmanii ssp. napensis</i> Napa checkerbloom	G3T1 S1	None None	Rare Plant Rank - 1B.1 SB_CalBG/RSABG- California/Rancho Santa Ana Botanic Garden		2 S:1	0	0	0	0	0	1	1	0	1	0	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Sidalcea oregana ssp. valida</i> Kenwood Marsh checkerbloom	G5T1 S1	Endangered Endangered	Rare Plant Rank - 1B.1 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_UCBG-UC Botanical Garden at Berkeley	400 400	2 S:1	0	0	1	0	0	0	0	1	1	0	0
<i>Spergularia macrotheca var. longistyla</i> long-styled sand-spurrey	G5T2 S2	None None	Rare Plant Rank - 1B.2	350 400	22 S:2	0	0	0	0	0	2	1	1	2	0	0
<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	160 200	26 S:5	0	0	0	0	0	5	5	0	5	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:2	0	0	0	0	0	2	1	1	2	0	0
<i>Trifolium hydrophilum</i> saline clover	G2 S2	None None	Rare Plant Rank - 1B.2	75 400	56 S:7	0	2	0	1	2	2	4	3	5	1	1
<i>Triquetrella californica</i> coastal triquetrella	G2 S2	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	328 328	13 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Valley Needlegrass Grassland</i> Valley Needlegrass Grassland	G3 S3.1	None None		835 1,200	45 S:2	0	0	0	0	0	2	2	0	2	0	0
<i>Viburnum ellipticum</i> oval-leaved viburnum	G4G5 S3?	None None	Rare Plant Rank - 2B.3	520 545	39 S:6	0	1	0	0	0	5	5	1	6	0	0



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**Query Criteria:** Quad IS (Healdsburg (3812257) OR Mark West Springs (3812256) OR Calistoga (3812255) OR Sebastopol (3812247) OR Santa Rosa (3812246) OR Kenwood (3812245) OR Two Rock (3812237) OR Cotati (3812236) OR Glen Ellen (3812235)) AND Taxonomic Group IS (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>Accipiter cooperii</i> Cooper's hawk	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	133 133	118 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Accipiter striatus</i> sharp-shinned hawk	G5 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	900 900	22 S:1	1	0	0	0	0	0	1	0	1	0	0
<i>Agelaius tricolor</i> tricolored blackbird	G2G3 S1S2	None Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	106 139	955 S:2	0	0	0	0	1	1	2	0	1	1	0
<i>Ambystoma californiense</i> California tiger salamander	G2G3 S2S3	Threatened Threatened	CDFW_WL-Watch List IUCN_VU-Vulnerable	50 475	1271 S:82	10	25	24	5	4	14	7	75	78	3	1
<i>Ammodramus savannarum</i> grasshopper sparrow	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	2,150 2,150	27 S:1	1	0	0	0	0	0	0	1	1	0	0
<i>Andrena blennospermatis</i> Blennosperma vernal pool andrenid bee	G2 S2	None None		90 130	15 S:2	0	0	0	0	0	2	2	0	2	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	100 730	420 S:9	2	1	0	0	3	3	7	2	6	1	2



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<i>Aquila chrysaetos</i> golden eagle	G5 S3	None None	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	1,800 1,800	323 S:1	1	0	0	0	0	0	0	1	1	0	0
<i>Ardea herodias</i> great blue heron	G5 S4	None None	CDF_S-Sensitive IUCN_LC-Least Concern	120 120	156 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	104 2,400	1989 S:3	0	1	1	0	0	1	0	3	3	0	0
<i>Bombus caliginosus</i> obscure bumble bee	G4? S1S2	None None	IUCN_VU-Vulnerable	150 150	181 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Bombus crotchii</i> Crotch bumble bee	G3G4 S1S2	None Candidate Endangered		300 300	288 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Bombus occidentalis</i> western bumble bee	G2G3 S1	None Candidate Endangered	USFS_S-Sensitive	100 750	295 S:4	0	0	0	0	0	4	4	0	4	0	0
<i>Buteo regalis</i> ferruginous hawk	G4 S3S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	2,278 2,278	107 S:1	0	1	0	0	0	0	0	1	1	0	0
<i>Caecidotea tomalensis</i> Tomales isopod	G2 S2S3	None None		1,640 2,120	6 S:2	1	0	0	0	0	1	2	0	2	0	0
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	G5T2T3 S1	Threatened Endangered	BLM_S-Sensitive NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	90 600	165 S:2	0	0	0	0	1	1	2	0	1	1	0



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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
<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	124 730	635 S:8	0	1	1	0	0	6	7	1	8	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	283 283	45 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Dicamptodon ensatus</i> California giant salamander	G3 S2S3	None None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	350 2,185	234 S:14	4	2	0	0	0	8	4	10	14	0	0
<i>Elanus leucurus</i> white-tailed kite	G5 S3S4	None None	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern	120 2,160	180 S:4	2	1	0	0	0	1	1	3	4	0	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	29 2,240	1398 S:44	5	12	16	6	0	5	12	32	44	0	0
<i>Eremophila alpestris actia</i> California horned lark	G5T4Q S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	2,275 2,275	94 S:1	1	0	0	0	0	0	0	1	1	0	0
<i>Erethizon dorsatum</i> North American porcupine	G5 S3	None None	IUCN_LC-Least Concern	163 163	523 S:1	0	0	0	0	0	1	1	0	1	0	0
<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	1,700 2,000	58 S:2	1	0	1	0	0	0	1	1	2	0	0
<i>Hydrochara rickseckeri</i> Ricksecker's water scavenger beetle	G2? S2?	None None		1,500 1,500	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>Hydroporus leechi</i> Leech's skyline diving beetle	G1? S1?	None None		1,180 1,180	13 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Hysteroecarpus traskii poma</i> Russian River tule perch	G5T4 S4	None None	AFS_VU-Vulnerable CDFW_SSC-Species of Special Concern	70 70	4 S:1	0	0	1	0	0	0	1	0	1	0	0
<i>Lasiurus blossevillii</i> western red bat	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_H-High Priority	67 67	128 S:1	0	0	0	0	0	1	0	1	1	0	0
<i>Lasiurus cinereus</i> hoary bat	G5 S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority		238 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Lavinia symmetricus navarroensis</i> Navarro roach	G4T1T2 S2S3	None None	CDFW_SSC-Species of Special Concern	80 400	4 S:2	0	1	0	1	0	0	2	0	2	0	0
<i>Linderiella occidentalis</i> California linderiella	G2G3 S2S3	None None	IUCN_NT-Near Threatened	90 1,693	508 S:8	0	2	0	0	0	6	6	2	8	0	0
<i>Myotis thysanodes</i> fringed myotis	G4 S3	None None	BLM_S-Sensitive IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	210 1,050	86 S:3	0	0	2	0	0	1	2	1	3	0	0
<i>Myotis volans</i> long-legged myotis	G5 S3	None None	IUCN_LC-Least Concern WBWG_H-High Priority	210 210	117 S:1	0	0	0	0	1	0	1	0	0	1	0
<i>Myotis yumanensis</i> Yuma myotis	G5 S4	None None	BLM_S-Sensitive IUCN_LC-Least Concern WBWG_LM-Low-Medium Priority	210 304	265 S:2	1	0	0	0	0	1	1	1	2	0	0
<i>Oncorhynchus kisutch pop. 4</i> coho salmon - central California coast ESU	G4 S2	Endangered Endangered	AFS_EN-Endangered	70 445	23 S:4	0	0	1	0	0	3	1	3	4	0	0
<i>Oncorhynchus mykiss irideus pop. 8</i> steelhead - central California coast DPS	G5T2T3Q S2S3	Threatened None	AFS_TH-Threatened	75 600	44 S:7	1	4	1	1	0	0	0	7	7	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>Pandion haliaetus</i> osprey	G5 S4	None None	CDF_S-Sensitive CDFW_WL-Watch List IUCN_LC-Least Concern	200 200	504 S:1	0	0	0	0	0	1	1	0	1	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	57 2,100	2468 S:38	12	9	4	1	1	11	11	27	37	0	1
<i>Rana draytonii</i> California red-legged frog	G2G3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	45 2,230	1574 S:26	3	10	9	0	1	3	2	24	25	0	1
<i>Riparia riparia</i> bank swallow	G5 S2	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	25 25	298 S:1	0	0	0	0	0	1	1	0	1	0	0
<i>Syncaris pacifica</i> California freshwater shrimp	G2 S2	Endangered Endangered	IUCN_EN-Endangered	120 540	20 S:7	2	4	1	0	0	0	2	5	7	0	0
<i>Taricha rivularis</i> red-bellied newt	G4 S2	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	100 1,200	136 S:9	0	1	0	0	0	8	5	4	9	0	0
<i>Taxidea taxus</i> American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	24 2,200	594 S:10	2	4	1	2	0	1	1	9	10	0	0

\*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

## Plant List

62 matches found. [Click on scientific name for details](#)

### Search Criteria

California Rare Plant Rank is one of [1A, 1B, 2A, 2B], Found in Quads 3812257, 3812256, 3812255, 3812247, 3812246, 3812245, 3812237 3812236 and 3812235;

[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
<a href="#">Allium peninsulare var. franciscanum</a>	Franciscan onion	Alliaceae	perennial bulbiferous herb	(Apr)May-Jun	1B.2	S2	G5T2
<a href="#">Alopecurus aequalis var. sonomensis</a>	Sonoma alopecurus	Poaceae	perennial herb	May-Jul	1B.1	S1	G5T1
<a href="#">Amorpha californica var. napensis</a>	Napa false indigo	Fabaceae	perennial deciduous shrub	Apr-Jul	1B.2	S2	G4T2
<a href="#">Amsinckia lunaris</a>	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	1B.2	S3	G3
<a href="#">Arctostaphylos densiflora</a>	Vine Hill manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr	1B.1	S1	G1
<a href="#">Arctostaphylos stanfordiana ssp. decumbens</a>	Rincon Ridge manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr(May)	1B.1	S1	G3T1
<a href="#">Astragalus claranus</a>	Clara Hunt's milk-vetch	Fabaceae	annual herb	Mar-May	1B.1	S1	G1
<a href="#">Balsamorhiza macrolepis</a>	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	1B.2	S2	G2
<a href="#">Blennosperma bakeri</a>	Sonoma sunshine	Asteraceae	annual herb	Mar-May	1B.1	S1	G1
<a href="#">Brodiaea leptandra</a>	narrow-anthered brodiaea	Themidaceae	perennial bulbiferous herb	May-Jul	1B.2	S3?	G3?
<a href="#">Calamagrostis crassiglumis</a>	Thurber's reed grass	Poaceae	perennial rhizomatous	May-Aug	2B.1	S2	G3Q

			herb					
<a href="#"><u>Campanula californica</u></a>	swamp harebell	Campanulaceae	perennial rhizomatous herb	Jun-Oct	1B.2	S3	G3	
<a href="#"><u>Castilleja uliginosa</u></a>	Pitkin Marsh paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Jun-Jul	1A	SX	GXQ	
<a href="#"><u>Ceanothus confusus</u></a>	Rincon Ridge ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Jun	1B.1	S1	G1	
<a href="#"><u>Ceanothus divergens</u></a>	Calistoga ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Apr	1B.2	S2	G2	
<a href="#"><u>Ceanothus foliosus var. vineatus</u></a>	Vine Hill ceanothus	Rhamnaceae	perennial evergreen shrub	Mar-May	1B.1	S1	G3T1	
<a href="#"><u>Ceanothus purpureus</u></a>	holly-leaved ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Jun	1B.2	S2	G2	
<a href="#"><u>Ceanothus sonomensis</u></a>	Sonoma ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Apr	1B.2	S2	G2	
<a href="#"><u>Centromadia parryi ssp. parryi</u></a>	pappose tarplant	Asteraceae	annual herb	May-Nov	1B.2	S2	G3T2	
<a href="#"><u>Chorizanthe valida</u></a>	Sonoma spineflower	Polygonaceae	annual herb	Jun-Aug	1B.1	S1	G1	
<a href="#"><u>Clarkia imbricata</u></a>	Vine Hill clarkia	Onagraceae	annual herb	Jun-Aug	1B.1	S1	G1	
<a href="#"><u>Cordylanthus tenuis ssp. capillaris</u></a>	Pennell's bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Sep	1B.2	S1	G4G5T1	
<a href="#"><u>Cuscuta obtusiflora var. glandulosa</u></a>	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct	2B.2	SH	G5T4?	
<a href="#"><u>Delphinium luteum</u></a>	golden larkspur	Ranunculaceae	perennial herb	Mar-May	1B.1	S1	G1	
<a href="#"><u>Downingia pusilla</u></a>	dwarf downingia	Campanulaceae	annual herb	Mar-May	2B.2	S2	GU	
<a href="#"><u>Erigeron serpentinus</u></a>	serpentine daisy	Asteraceae	perennial herb	May-Aug	1B.3	S2	G2	
<a href="#"><u>Eryngium constancei</u></a>	Loch Lomond button-celery	Apiaceae	annual / perennial herb	Apr-Jun	1B.1	S1	G1	
<a href="#"><u>Fritillaria liliacea</u></a>	fragrant fritillary	Liliaceae	perennial bulbiferous herb	Feb-Apr	1B.2	S2	G2	
<a href="#"><u>Gilia capitata ssp. tomentosa</u></a>	woolly-headed gilia	Polemoniaceae	annual herb	May-Jul	1B.1	S1	G5T1	
<a href="#"><u>Gratiola heterosepala</u></a>	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	1B.2	S2	G2	
<a href="#"><u>Hemizonia congesta ssp. congesta</u></a>	congested-headed hayfield tarplant	Asteraceae	annual herb	Apr-Nov	1B.2	S2	G5T2	
<a href="#"><u>Horkelia tenuiloba</u></a>	thin-lobed horkelia	Rosaceae	perennial herb	May-Jul(Aug)	1B.2	S2	G2	
<a href="#"><u>Lasthenia burkei</u></a>	Burke's goldfields	Asteraceae	annual herb	Apr-Jun	1B.1	S1	G1	
<a href="#"><u>Lasthenia californica ssp. bakeri</u></a>	Baker's goldfields	Asteraceae	perennial herb	Apr-Oct	1B.2	S1	G3T1	
<a href="#"><u>Lasthenia conjugens</u></a>	Contra Costa goldfields	Asteraceae	annual herb	Mar-Jun	1B.1	S1	G1	
<a href="#"><u>Layia septentrionalis</u></a>	Colusa layia	Asteraceae	annual herb	Apr-May	1B.2	S2	G2	

<a href="#">Legenere limosa</a>	legenere	Campanulaceae	annual herb	Apr-Jun	1B.1	S2	G2
<a href="#">Leptosiphon jepsonii</a>	Jepson's leptosiphon	Polemoniaceae	annual herb	Mar-May	1B.2	S2S3	G2G3
<a href="#">Lilium pardalinum ssp. pitkinense</a>	Pitkin Marsh lily	Liliaceae	perennial bulbiferous herb	Jun-Jul	1B.1	S1	G5T1
<a href="#">Limnanthes vinculans</a>	Sebastopol meadowfoam	Limnanthaceae	annual herb	Apr-May	1B.1	S1	G1
<a href="#">Lupinus sericatus</a>	Cobb Mountain lupine	Fabaceae	perennial herb	Mar-Jun	1B.2	S2?	G2?
<a href="#">Microseris paludosa</a>	marsh microseris	Asteraceae	perennial herb	Apr-Jun(Jul)	1B.2	S2	G2
<a href="#">Navarretia leucocephala ssp. bakeri</a>	Baker's navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G4T2
<a href="#">Navarretia leucocephala ssp. pliantha</a>	many-flowered navarretia	Polemoniaceae	annual herb	May-Jun	1B.2	S1	G4T1
<a href="#">Penstemon newberryi var. sonomensis</a>	Sonoma beardtongue	Plantaginaceae	perennial herb	Apr-Aug	1B.3	S2	G4T2
<a href="#">Plagiobothrys strictus</a>	Calistoga popcornflower	Boraginaceae	annual herb	Mar-Jun	1B.1	S1	G1
<a href="#">Pleuropogon hooverianus</a>	North Coast semaphore grass	Poaceae	perennial rhizomatous herb	Apr-Jun	1B.1	S2	G2
<a href="#">Poa napensis</a>	Napa blue grass	Poaceae	perennial herb	May-Aug	1B.1	S1	G1
<a href="#">Potentilla uliginosa</a>	Cunningham Marsh cinquefoil	Rosaceae	perennial herb	May-Aug	1A	SH	GH
<a href="#">Puccinellia simplex</a>	California alkali grass	Poaceae	annual herb	Mar-May	1B.2	S2	G3
<a href="#">Rhynchospora alba</a>	white beaked-rush	Cyperaceae	perennial rhizomatous herb	Jun-Aug	2B.2	S2	G5
<a href="#">Rhynchospora californica</a>	California beaked-rush	Cyperaceae	perennial rhizomatous herb	May-Jul	1B.1	S1	G1
<a href="#">Rhynchospora capitellata</a>	brownish beaked-rush	Cyperaceae	perennial herb	Jul-Aug	2B.2	S1	G5
<a href="#">Rhynchospora globularis</a>	round-headed beaked-rush	Cyperaceae	perennial rhizomatous herb	Jul-Aug	2B.1	S1	G4
<a href="#">Sidalcea hickmanii ssp. napensis</a>	Napa checkerbloom	Malvaceae	perennial herb	Apr-Jun	1B.1	S1	G3T1
<a href="#">Sidalcea oregana ssp. valida</a>	Kenwood Marsh checkerbloom	Malvaceae	perennial rhizomatous herb	Jun-Sep	1B.1	S1	G5T1
<a href="#">Spergularia macrotheca var. longistyla</a>	long-styled sand-spurrey	Caryophyllaceae	perennial herb	Feb-May(Jun)	1B.2	S2	G5T2
<a href="#">Trifolium amoenum</a>	two-fork clover	Fabaceae	annual herb	Apr-Jun	1B.1	S1	G1
<a href="#">Trifolium buckwestiorum</a>	Santa Cruz clover	Fabaceae	annual herb	Apr-Oct	1B.1	S2	G2
<a href="#">Trifolium hydrophilum</a>	saline clover	Fabaceae	annual herb	Apr-Jun	1B.2	S2	G2
<a href="#">Triquetrella californica</a>	coastal triquetrella	Pottiaceae	moss		1B.2	S2	G2
<a href="#">Viburnum ellipticum</a>	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	May-Jun	2B.3	S3?	G4G5

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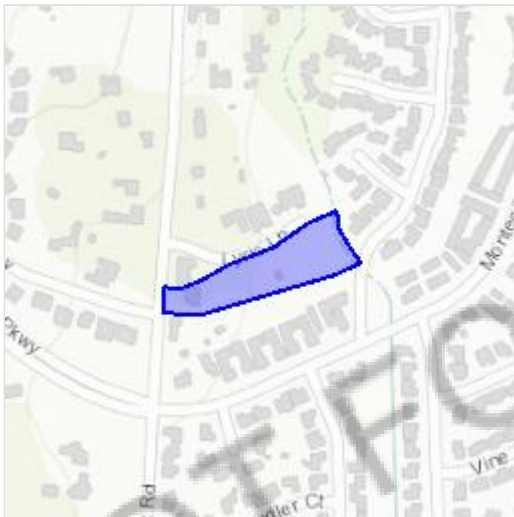
# IPaC resource list

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

Sonoma County, California



# Local office

## Sacramento Fish And Wildlife Office

☎ (916) 414-6600

📅 (916) 414-6713

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

NOT FOR CONSULTATION

# 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
Northern Spotted Owl <i>Strix occidentalis caurina</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/1123">https://ecos.fws.gov/ecp/species/1123</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

## Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</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/2891">https://ecos.fws.gov/ecp/species/2891</a>	Threatened
California Tiger Salamander <i>Ambystoma californiense</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/2076">https://ecos.fws.gov/ecp/species/2076</a>	Endangered

## Insects

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

## Crustaceans

NAME	STATUS
<p>California Freshwater Shrimp <i>Syncaris pacifica</i></p> <p>No critical habitat has been designated for this species.</p> <p><a href="https://ecos.fws.gov/ecp/species/7903">https://ecos.fws.gov/ecp/species/7903</a></p>	Endangered

## Flowering Plants

NAME	STATUS
<p>Burke's Goldfields <i>Lasthenia burkei</i></p> <p>No critical habitat has been designated for this species.</p> <p><a href="https://ecos.fws.gov/ecp/species/4338">https://ecos.fws.gov/ecp/species/4338</a></p>	Endangered
<p>Clara Hunt's Milk-vetch <i>Astragalus clarianus</i></p> <p>No critical habitat has been designated for this species.</p> <p><a href="https://ecos.fws.gov/ecp/species/3300">https://ecos.fws.gov/ecp/species/3300</a></p>	Endangered
<p>Sebastopol Meadowfoam <i>Limnanthes vinculans</i></p> <p>No critical habitat has been designated for this species.</p> <p><a href="https://ecos.fws.gov/ecp/species/404">https://ecos.fws.gov/ecp/species/404</a></p>	Endangered

**Showy Indian Clover** *Trifolium amoenum*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/6459>

**Sonoma Sunshine** *Blennosperma bakeri*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/1260>

**White Sedge** *Carex albida*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/3063>

## Critical habitats

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

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## 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*

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

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

Breeds Feb 1 to Jul 15

**Bald Eagle** *Haliaeetus leucocephalus*

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/1626>

Breeds Jan 1 to Aug 31

**Burrowing Owl** *Athene cunicularia*

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>

Breeds Mar 15 to Aug 31

**California Thrasher** *Toxostoma redivivum*

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

Breeds Jan 1 to Jul 31

**Common Yellowthroat** *Geothlypis trichas sinuosa*

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>

Breeds May 20 to Jul 31

**Golden Eagle** *Aquila chrysaetos*

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>

Breeds Jan 1 to Aug 31

**Nuttall's Woodpecker** *Picoides nuttallii*

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>

Breeds Apr 1 to Jul 20

**Oak Titmouse** *Baeolophus inornatus*

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

<https://ecos.fws.gov/ecp/species/9656>

Breeds Mar 15 to Jul 15

**Rufous Hummingbird** *selasphorus rufus*

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

<https://ecos.fws.gov/ecp/species/8002>

Breeds elsewhere

**Song Sparrow** *Melospiza melodia*

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

Breeds Feb 20 to Sep 5

**Spotted Towhee** *Pipilo maculatus clementae*

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>

Breeds Apr 15 to Jul 20

**Tricolored Blackbird** *Agelaius tricolor*

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

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

Breeds Mar 15 to Aug 10

**Wrentit** *Chamaea fasciata*

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

Breeds Mar 15 to Aug 10



SITE PHOTOGRAPHS



**Photo 1.** California annual grassland within the study area on September 24, 2020.



**Photo 2.** Rincon Creek within the study area facing southeast on September 24, 2020.

## APPENDIX D

## OBSERVED SPECIES TABLE

SCIENTIFIC NAME	COMMON NAME
<b>PLANTS</b>	
<i>Acacia baileyana</i>	Cootamundra wattle
<i>Acer macrophyllum</i>	big-leaf maple
<i>Aesculus californica</i>	California buckeye
<i>Amaryllis belladonna</i>	naked ladies
<i>Avena</i> sp.	oats
<i>Briza maxima</i>	rattlesnake grass
<i>Carex barbarae</i>	whiteroot sedge
<i>Crataegus monogyna</i>	hawthorn
<i>Cynodon dactylon</i>	Bermuda grass
<i>Cynosurus echinatus</i>	bristly dogtail grass
<i>Cyperus eragrostis</i>	flatsedge
<i>Eucalyptus camaldulensis</i>	red gum
<i>Eucalyptus globulus</i>	blue gum
<i>Fraxinus latifolia</i>	Oregon ash
<i>Genista monspessulana</i>	French broom
<i>Hedera helix</i>	English ivy
<i>Iris</i> sp.	iris
<i>Juncus effusus</i>	soft rush
<i>Lemna</i> sp.	duckweed
<i>Ligustrum lucidum</i>	Chinese privet
<i>Liquidambar styraciflua</i>	sweetgum
<i>Malus</i> sp.	apple tree
<i>Pentagramma triangularis</i>	goldback fern
<i>Phalaris aquatica</i>	harding grass
<i>Pinus</i> sp.	pine
<i>Pittosporum</i> sp.	pittosporum
<i>Plantago lanceolata</i>	English plantain
<i>Polystichum californicum</i>	California sword fern
<i>Prunus cerasifera</i>	cherry plum
<i>Pyracantha coccinea</i>	firethorn
<i>Quercus agrifolia</i>	coast live oak
<i>Quercus kelloggii</i>	black oak
<i>Quercus lobata</i>	valley oak
<i>Rubus armeniacus</i>	Himalayan blackberry
<i>Rumex crispus</i>	curly dock
<i>Salix lasiolepis</i>	Arroyo willow



<i>Sequoia sempervirens</i>	coast redwood
<i>Stachys</i> sp.	hedgenettle
<i>Torilis arvensis</i>	tall sock-destoryer
<i>Toxicodendron diversilobum</i>	western poison oak
<i>Umbellularia californica</i>	California bay
<b>WILDLIFE</b>	
<b>Mammals</b>	
<i>Odocoileus hemionus</i>	mule deer
<b>Amphibians and Reptiles</b>	
<i>Sceloporus occidentalis</i>	western fence lizard
<b>Fish</b>	
<i>Hesperoleucus symmetricus</i>	California roach
<b>Birds</b>	
<i>Poecile rufescens</i>	chestnut-backed chickadee
<i>Psaltriparus minimus</i>	bushtit
<i>Passer domesticus</i>	house sparrow

FIELD SURVEYOR QUALIFICATIONS

*Biological Assessment and Wildlife Surveys*

**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.

*Biological Assessment and Botanical Surveys*

**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.