

# **BIOLOGICAL RESOURCES TECHNICAL REPORT**

## **Villa Serena Specific Plan (Tract No. 20245) Project**

---

### **Prepared for:**

City of Upland, Development Services Department  
460 N. Euclid Avenue  
Upland, CA 91786



### **Prepared by:**

Aspen Environmental Group  
615 N. Benson Avenue, Suite E  
Upland, CA 91786



**January 2023**

## Contents

<b>1.0</b>	<b>Introduction</b> .....	<b>1</b>
<b>2.0</b>	<b>Project and Property Description</b> .....	<b>1</b>
2.1	Project Description .....	1
2.2	Project Location .....	1
<b>3.0</b>	<b>Methods</b> .....	<b>1</b>
3.1	Literature Review .....	1
3.2	Field Surveys .....	2
<b>4.0</b>	<b>General Biological Survey Results</b> .....	<b>3</b>
4.1	Vegetation and Cover Types .....	3
4.2	Sensitive Natural Communities.....	4
4.3	Wildlife Habitat .....	5
<b>5.0</b>	<b>Special-Status Species Results</b> .....	<b>5</b>
5.1	Special-Status Plants .....	13
5.2	Special-Status Wildlife .....	13
5.3	Designated Critical Habitat .....	17
5.4	Native Birds: Migratory Bird Treaty Act (MBTA) / California Fish and Game Code .....	17
5.5	Wildlife Movement .....	17
<b>6.0</b>	<b>Impact Assessment</b> .....	<b>18</b>
6.1	Vegetation and Cover Types .....	18
6.2	Sensitive Natural Communities.....	18
6.3	Wildlife Habitat .....	18
6.4	Special-Status Plants .....	18
6.5	Special-Status Wildlife .....	19
6.6	Native Birds: Migratory Bird Treaty Act (MBTA) / California Fish and Game Code .....	19
6.7	Wildlife Movement .....	19
<b>7.0</b>	<b>Mitigation Measures</b> .....	<b>19</b>
<b>8.0</b>	<b>Conclusions</b> .....	<b>20</b>
<b>9.0</b>	<b>Literature Cited</b> .....	<b>21</b>

## Tables

Table 1:	Vegetation and Other Cover Types on the Project site.....	3
Table 2:	Definitions of Special-Status Species .....	5
Table 3:	Special-Status Species Addressed .....	7

## Attachments

### Attachment 1: Figures

Figure 1: Project Overview

Figure 2: Vegetation and Land Cover

Figure 3: Biological Resources

Attachment 2: CNDDDB Query Results  
Attachment 3: IPaC Resource List  
Attachment 4: Special-Status Species Not Addressed  
Attachment 5: Project Species List  
Attachment 6: Project Photos

## **Appendices**

Appendix A: San Bernardino Kangaroo Rat and California Gnatcatcher Habitat Assessment for a 19-acre parcel located in Upland, San Bernardino County, California.



## **1.0 Introduction**

This report was prepared by Aspen Environmental Group (Aspen) to describe the biological resources at the Villa Serena Specific Plan (Tract No. 20245) Project (project). The project is located within 15<sup>th</sup> Street Basin within the City of Upland, California. The Colonies Partners, LLC. proposes to develop approximately 9.16 acres of the property and construct 65 houses. Throughout this report, “project” refers to the proposed residential development of a portion of 15<sup>th</sup> Street Basin, while “project site” refers to all areas that may be directly or indirectly impacted by project activities as well as a larger survey area that encompasses 15<sup>th</sup> Street Basin. This report provides baseline information on biological resources to support the regulatory review and permitting process.

## **2.0 Project and Property Description**

### **2.1 Project Description**

The Colonies Partners, LLC proposes to construct 65 single-family residential dwellings on 9.16 acres of the existing 20.3-acre 15<sup>th</sup> Street Basin. In addition to the residential dwellings, the project will also construct a community pool, pool house, restrooms, picnic tables, and utility connections. The total impact area included in this report is 22.1 acres which includes temporary impact areas and additional improvements to infrastructure beyond the limits of 15<sup>th</sup> Street Basin. Approximately 4.3 acres of 15<sup>th</sup> Street Basin will remain as a functioning flood control basin and will be excavated to increase its storage capacity. The basin will also be preserved and enhanced to off-set the loss of riparian and wetland vegetation.

### **2.2 Project Location**

The project is approximately 22.1-acres and is located on the northeast corner of the intersection of Fernando Avenue and E. 15<sup>th</sup> Street in the City of Upland, California (APN: 3105-171-08). The project site is located in Section 23, Township 1 South, Range 5 West (USGS Ontario, CA 7.5-minute quadrangle) (Figure 1, Attachment 1). The project site is surrounded by existing single family residential housing developments to the south, east, and west with Upland hills Country Club to the north. Dry Dock Depot Boat and RV Storage and Sothern California Edison Padua Station are located to the southwest and northwest of Campus Avenue.

## **3.0 Methods**

### **3.1 Literature Review**

Prior to conducting field surveys, Aspen biologists reviewed available literature to identify special-status biological resources known from the vicinity of the project site. The literature and databases listed below were reviewed.

- U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) for the project site (USFWS 2022).
- CNDDDB (CDFW 2022a) for the following 7.5-minute USGS topographic quads within 5-miles of the project: Mt. Baldy, Ontario, Glendora, San Dimas, Guasti, Cucamonga Peak, Yorba Linda, Prado Dam, and Corona North.

- CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2022), for the same topographic quads.
- General Biological Resources Assessment, Upland, San Bernardino County, California, APN: 3105-171-08 (RCA Associates, Inc., 2022).

The CNDDDB results are listed in Attachment 2 and the IPaC Resource List is provided as Attachment 3. Several special-status species identified during the literature review only occur in specialized native habitats that are absent from the project site or occur at higher or lower elevations. These plants and animals are listed in Attachment 4 but are not addressed further in this report.

### **3.2 Field Surveys**

Field surveys were conducted on January 25, February 16, March 16, April 3, and April 22, 2022, by RCA Associate, Inc. biologists, to evaluate project impacts to vegetation and wildlife species. Aspen biologists Justin Wood and Jacob Aragon visited the project site on June 24 and August 15, 2022, to conduct a focused botanical survey, map vegetation, and conduct general wildlife surveys. Lastly, permitted biologist Mikael Romich, of Origin Biological conducted a habitat assessment for California gnatcatcher and San Bernardino kangaroo rat on the project site on June 3 and July 1, 2022 (see Appendix A).

During the surveys, biologists conducted 100 percent coverage biological survey of the project site. During the field surveys, all plant and wildlife species observed were recorded in field notes and special-status species locations were recorded using hand-held GPS units. All plant and wildlife species observed during the surveys are listed in Attachment 5. Representative site photos were captured during the survey and are included in Attachment 6.

The botanical surveys were conducted in conformance with California Department of Fish and Wildlife (CDFW) guidelines (CDFW 2018). The surveys were (a) conducted during flowering seasons for the special status plants known from the area, (b) floristic in nature, (c) consistent with conservation ethics, (d) systematically covered all habitat types on the sites, and (e) well documented by this report and by voucher specimens to be deposited at California Botanic Garden (formerly Rancho Santa Ana Botanic Garden) and other herbaria. Plants of uncertain identity were collected and identified later using keys, descriptions, and illustrations in Baldwin et al. (2012).

Vegetation mapping was done by drawing tentative boundaries onto high-resolution aerial images during site visit on June 24, 2022. These boundaries were then digitized into Geographic Information System (GIS) shapefiles. Vegetation maps were field verified for accuracy on August 15, 2022 (see Attachment 1; Figure 2: Vegetation and Land Cover). Vegetation within the project site is further described below using the names and descriptions in *A Manual of California Vegetation* (Sawyer et al., 2009). Vegetation was mapped digitally using ArcGIS (version 10.7) and one-foot pixel aerial imagery. The smallest mapping unit was approximately 0.05-acre and most mapped vegetation boundaries are accurate to within approximately 5-ft. Any vegetation map is subject to imprecision for several reasons:

1. Vegetation types tend to intergrade on the landscape so that there are no true boundaries in the vegetation itself. In these cases, a mapped boundary represents best professional judgment.
2. Vegetation types as they are named and described tend to intergrade; that is, a given stand of real-world vegetation may not fit into any named type in the classification scheme used. Thus, a mapped and labeled polygon is given the best name available in the classification, but this name does not imply that the vegetation unambiguously matches its mapped name.

- Vegetation tends to be patchy. Small patches of one named type are often included within mapped polygons of another type. The size of these patches varies, depending on the minimum mapping units and scale of available aerial imagery.

**Rainfall:** Rainfall is greatest during the months of November through March, with an average annual precipitation total of 17.16 inches, as reported in north Claremont, approximately 4 miles west of the project site (Los Angeles County 2022). Rainfall to-date has been lower than average with approximately 14.33 inches falling in the region since October 2, 2021 (Los Angeles County 2022).

## 4.0 General Biological Survey Results

### 4.1 Vegetation and Cover Types

Vegetation within the project site consists of riparian and wetland vegetation, upland vegetation, and other land cover types. Some of the native species observed include mulefat (*Baccharis salicifolia*), coast live oak (*Quercus agrifolia*), broadleaf cattail (*Typha latifolia*), marsh purslane (*Ludwigia peploides*), California buckwheat (*Eriogonum fasciculatum*), coastal sage brush (*Artemisia californica*), scale broom (*Lepidospartum squamatum*), and black sage (*Salvia mellifera*). The vegetation and land covers within the project site are described in detail below and acreages of the vegetation and land cover types are presented in Table 1 and shown in Figures 2 (Attachment 1).

**Table 1. Vegetation and Other Cover Types on the Project Site (acres)**

Vegetation Type	Development Area (Acres)	Conservation Area (Acres)	Project Site (Acres)
California buckwheat scrub	5.39	2.55	7.94
Cattail marshes	0.08	0.18	0.25
Eucalyptus - tree of heaven - black locust groves	0.89	0.64	1.53
Mulefat scrub	--	0.17	0.17
Scale broom scrub	0.14	--	0.14
<b>Other Cover Types</b>			
Developed	11.30	0.74	12.04
<b>Total</b>	<b>17.79</b>	<b>4.29</b>	<b>22.08</b>

### Riparian and Wetland Vegetation Types

**Cattail marshes (*Typha (angustifolia, domingensis, latifolia) Herbaceous Alliance*).** Cattail marshes are wetland vegetation that is dominated by broadleaf cattail (*Typha latifolia*). Additional species such as marsh purslane (*Ludwigia peploides*), watercress (*Nasturtium officinale*), seep monkeyflower (*Mimulus guttatus*), Dallis grass (*Paspalum dilatatum*), cocklebur (*Xanthium strumarium*), and Spanish sunflower (*Pulicaria paludosa*) are also present. Cattail marshes are present in the low-lying portions of the project site that accumulate runoff and storm flows from the adjacent golf course and watershed. Cattail marshes have a State rank of S5 and are therefore not recognized as a sensitive natural community by CDFW (CDFW 2022c).

**Mulefat thickets (*Baccharis salicifolia Shrubland Alliance*).** Mulefat thickets are a winter deciduous shrubland that are dominated by mulefat. Additional species such as Gooding's black willow (*Salix goodingii*), Chinese elms (*Ulmus parvifolia*), and California sycamore (*Platanus racemosa*) are also present. The mulefat thickets are present within the Conservation Area, along the northern and southern

edges of the basin floor. Mulefat thickets have a State Rank of S4 and are therefore not recognized as a sensitive natural community by CDFW (CDFW 2022c).

### Upland Vegetation Types

**California buckwheat scrub (*Eriogonum fasciculatum* Shrubland Alliance).** California buckwheat scrub is a type of coastal sage scrub dominated by California buckwheat. Other species such as pine bush (*Ericameria pinifolia*), broom baccharis (*Baccharis sarothroides*), coastal sage brush, black sage, showy penstemon (*Penstemon spectabilis*), and holly leaf cherry (*Prunus ilicifolia*) are also present. California buckwheat scrub is the most common native vegetation within the project site and most of it is in the Conservation Area. California buckwheat scrub has a State rank of S5 and are therefore not recognized as a sensitive natural community by CDFW (CDFW 2022c).

**Eucalyptus - tree of heaven - black locust groves (*Eucalyptus* spp. - *Ailanthus altissima* - *Robinia pseudoacacia* Woodland Semi-Natural Alliance).** Eucalyptus - tree of heaven - black locust groves are used to map all vegetation dominated by non-native trees within the project site including gum trees (*Eucalyptus* spp.), crepe myrtle (*Lagerstroemia indica*), goldenrain tree (*Koelreuteria bipinnata*), and others. Native tree species such as California sycamore and coast live oak are also present but generally represent single trees and not a continuous canopy. Eucalyptus - tree of heaven - black locust groves have a State Rank of SNA (Not Applicable) and are therefore not recognized as a sensitive natural community by CDFW (CDFW 2022c).

**Scale broom scrub (*Lepidospartum squamatum* Shrubland Alliance).** Scale broom scrub is a type of alluvial fan sage scrub or coastal sage scrub dominated by scale broom. Other species such as California buckwheat and deerweed (*Acmispon glaber*) are also present in low numbers. Scale broom scrub is present on one slope within the Development Area. It is likely a remnant stand of a vegetation type that was once much more common in the region. Scale broom scrub has a State Rank of S3 and is therefore recognized as a sensitive natural community by CDFW (CDFW 2022c).

### Other Cover Types

**Developed.** This cover type includes disturbed and developed areas within the project site including unpaved roads, drainage structures, and the unvegetated slopes and basin floors. Sparse vegetation is present and includes weedy species such as wild oat (*Avena* spp.), ripgut brome (*Bromus diandrus*), red brome (*Bromus rubens*), mustard (*Hirschfeldia incana*), and tocalote (*Centaurea melitensis*). Developed is not a vegetation type and is therefore not described in *A Manual of California Vegetation* and is also not recognized as a sensitive natural community by CDFW (CDFW 2022c).

## 4.2 Sensitive Natural Communities

Sensitive vegetation communities are defined by CDFW (2018) as, "...communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects." The literature review identified ten sensitive vegetation communities recorded near the project site. These include canyon live oak ravine forest, coastal and valley freshwater marsh, southern California arroyo chub/Santa Ana sucker stream, southern coast live oak riparian forest, southern cottonwood willow riparian forest, southern sycamore alder riparian woodland, southern willow scrub, Riversidean alluvial fan sage scrub, California walnut woodland, walnut forests (CDFW 2022a). Of these, Riversidean alluvial fan sage scrub is the only one present on the project site and is mapped as scale broom scrub, an equivalent vegetation described above.

### 4.3 Wildlife Habitat

The term habitat refers to the environment and ecological conditions where a species is found. Wildlife habitat is often described in terms of vegetation, though a more thorough explanation includes detail such as availability or proximity to water, suitable nesting or denning sites, shade, foraging perches, cover sites to escape from predators, soils that are suitable for burrowing or hiding, proximity of noise and disturbance, and other factors that are unique to each species. For many wildlife species, vegetation reflects important components of habitat, including regional climate, physical structure, and biological productivity and food resources. Thus, the vegetation descriptions in Section 4.1 are useful overarching descriptors for wildlife habitat.

Wildlife and wildlife sign observed during the field surveys included species common in the region, such as western fence lizard (*Sceloporus occidentalis*), black phoebe (*Sayornis nigricans*), lesser goldfinch (*Spinus psaltria*), house finch (*Haemorhous mexicanus*), turkey vulture (*Cathartes aura*), coyote (*Canis latrans*), and California ground squirrel (*Otospermophilus beecheyi*). Other common wildlife species that were not observed but are likely to be present include mallard (*Anas platyrhynchos*), great egret (*Ardea alba*), great blue heron (*Ardea herodias*), common yellow throat (*Geothlypis trichas*), Pacific chorus frog (*Pseudacris regilla*), western toads (*Anaxyrus boreas*), bobcats (*Lynx rufus*), racoon (*Procyon lotor*), opossum (*Didelphis marsupialis*), striped skunks (*Mephitis mephitis*), desert cottontail (*Sylvilagus audubonii*), and numerous small mammals and invertebrates. Two special-status wildlife species were observed or otherwise detected during the surveys and are discussed below in Section 5.0.

### 5.0 Special-Status Species Results

Based on review of the literature and databases listed above, and on local expertise with the flora and fauna of the project site, lists of special-status plants and wildlife with potential to occur on the project site or in the project vicinity were compiled (Table 3). Plant and wildlife taxa were considered to be special-status species if they were classified in one or more of the categories listed in Table 2. All special-status plants and wildlife occurring in the region in habitats similar to those found on the project site are addressed in Table 3, with brief descriptions of habitat and distribution, conservation status, and probability of occurrence on the site.

**Table 2. Definitions of Special-Status Species**

Species Designation	Agency	Definition
Federal Endangered	USFWS	A species that is in danger of extinction throughout all or a significant portion of its range.
Federal Threatened	USFWS	A species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
Federal Candidate	USFWS	A species the US Fish and Wildlife Service (USFWS) has designated as a candidate for listing under Section 4 of the federal Endangered Species Act (ESA), published in its annual candidate review, and defined as a species that has sufficient information on its biological status and threats to propose it as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities.
Federal Proposed	USFWS	A species that the USFWS has proposed for listing under Section 4 of the ESA, by publishing a Proposed Rule in the Federal Register.

**Table 2. Definitions of Special-Status Species**

Species Designation	Agency	Definition
Protected under the federal Bald and Golden Eagle Protection Act (BGEPA)	USFWS	Bald and golden eagles are protected from take, including harassment, except as permitted by USFWS.
State Endangered	CDFW	A species that is in serious danger of becoming extinct throughout all or a significant portion of its range due to one or more causes, including loss or change in habitat, overexploitation, predation, competition, or disease.
State Threatened	CDFW	A species that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts.
State Candidate	CDFW	A species that has been officially noticed by the California Fish and Game Commission as being under review by the CDFW for addition to the threatened or endangered species lists. CDFW candidate species are given no extra-legal protection under state laws.
Fully Protected	CDFW	Animal species fully protected under the California Fish and Game Code. The CDFW may not issue take authorization except for scientific purposes or as provided under SB 618 (2011).
Species of Special Concern	CDFW	<p>A species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:</p> <ul style="list-style-type: none"> <li>Is extirpated from the state or, in the case of birds, in its primary seasonal or breeding role.</li> <li>Is on the federal, but not state list, of threatened or endangered species.</li> <li>Meets the state definition of threatened or endangered but has not formally been listed.</li> <li>Is experiencing or formerly experienced serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status; or</li> <li>Has naturally small populations exhibiting high susceptibility to risk from any factor(s) that if realized, could lead to declines that would qualify it for state threatened or endangered status.</li> </ul> <p>This is an administrative designation and carries no formal legal status. This designation is intended to focus attention on animals at conservation risk, to stimulate research on poorly known species, and to achieve conservation and recovery before these species meet the California Endangered Species Act (CESA) criteria for listing. California Species of Special Concern are considered under the California Environmental Quality Act (CEQA) and require a discussion of impacts and appropriate mitigation to reduce impacts.</p>
Watch List	CDFW	Taxa that were previously Species of Special Concern, but no longer merit that status or which do not meet criteria for designation as Species of Special Concern, but for which there is concern and a need for additional information to clarify status.
Special Animal	CDFW	An animal species that is tracked in the CNDDDB but has no other status at the state or federal level.
California Rare Plant Rank (CRPR) 1A	CDFW	Plants presumed to be extinct in California.
CRPR 1B	CDFW	Plants rare or endangered in California and elsewhere.
CRPR 2A	CDFW	Plants presumed extinct in California but more common elsewhere.

**Table 2. Definitions of Special-Status Species**

Species Designation	Agency	Definition
CRPR 2B	CDFW	Plants rare or endangered in California but more common elsewhere.
CRPR 3	CDFW	Plants about which more information is needed – a review list.
CRPR 4	CDFW	Plants of limited distribution – a watch list.

Plants or wildlife may be ranked as special-status species due to declining populations, vulnerability to habitat change, or restricted distributions. Certain species have been listed as threatened or endangered under the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA). Others have not been listed, but declining populations or habitat availability cause concern for their long-term viability. These species of conservation concern appear on lists compiled by resource agencies or private conservation organizations. In this report, “special-status species” includes all plants and wildlife listed as threatened or endangered or included in these other compilations. All special-status plants and wildlife occurring in the region in habitats similar to those found on the project site are addressed in Table 3, with brief descriptions of habitat and distribution, conservation status, and probability of occurrence on the site.

**Table 3. Special-Status Species Addressed**

Species Name	Habitat Requirements	Flowering or Activity Season	Conservation Status	Potential to Occur
<b>PLANTS</b>				
<i>Berberis nevinii</i> Nevin's barberry	A shrub native to California, riparian, coastal sage scrub and chaparral. 230-2,705 ft elev. Santa Barbara, Ventura, Los Angeles, Orange, San Bernardino, Riverside, San Diego, and Imperial Cos.	Mar-Jun	Fed: <b>END</b> CA: 1B.1	<b>Low:</b> suitable habitat is present, known several locations in Claremont about 4.5 miles northwest of the project site.
<i>Calochortus plummerae</i> Plummer's mariposa-lily	Perennial herb (bulb); chaparral, alluvial fans, pine forest, below about 5600 ft. elev.; widespread but uncommon throughout S. Calif. mts., foothills & valleys.	May-Jul	Fed: None CA: S4, 4.2	<b>Low:</b> suitable habitat is present, known several locations in Claremont about 4.5 miles northwest of the project site.
<i>Calystegia felix</i> Lucky morning-glory	Annual herb; alkaline meadows, riparian scrub. 100-700 ft elev.; Los Angeles, Orange, San Bernardino, and Riverside Cos.	Mar-Sep	Fed: None CA: S1, 1B.1	<b>Low:</b> Marginally suitable wetland habitat present, nearest known occurrence about 8 miles to the south.
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	Annual herb, dry slopes and flats in coastal scrub, chaparral, cismontane woodlands. 295-4000 ft. elev.: Ventura, Los Angeles, San Bernardino, Riverside and San Diego Cos.	Apr-Jun	Fed: None CA: S2, 1B.1	<b>Moderate:</b> Marginally suitable habitat present, nearest known occurrence about 5 miles to the west and east.

**Table 3. Special-Status Species Addressed**

Species Name	Habitat Requirements	Flowering or Activity Season	Conservation Status	Potential to Occur
<i>Horkelia cuneata</i> var. <i>puberula</i> Mesa horkelia	Perennial herb; shrublands, woodlands; sandy soils, away from immediate coast; San Luis Obispo to San Diego Co., rarely inland to San Bernardino Co.; about 200-2700 ft. elev.	Apr-Sep	Fed: None CA: S1, 1B.1	<b>Low:</b> Marginally suitable habitat present, about 4.2 miles from nearest known occurrence.
<i>Imperata brevifolia</i> California satintail	Perennial grass-like herb; mesic sites, alkali seeps, coastal sage scrub, chaparral, wetlands and non-wetlands. <1640 ft elev. Santa Barbara down to San Diego Cos.	Jun-Aug	Fed: None CA: S3 2B.1	<b>Low:</b> Marginally suitable wetland habitat present, nearest known occurrence about 20 miles to the east.
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's pepper-grass	Annual herb; dry soils in chaparral, coastal sage scrub. 5-2,902 ft. elev.; Ventura, Santa Barbara, Los Angeles, Mono, Orange, Riverside, San Bernardino, San Diego Cos.	Jan-Jul	Fed: None CA: S3, 4.3	<b>Moderate:</b> Marginally suitable habitat present, nearest known occurrence about 5 miles to the west and east.
<i>Juglans californica</i> Southern California black walnut	A native, dicot tree occurring in southern oak woodlands from 165-2,955 ft elev; Santa Barbara, Ventura, Kern, Los Angeles, San Bernardino, Orange, Riverside and San Diego Cos.	Mar-Aug	Fed: None CA: S4, 4.2	<b>Moderate:</b> Marginally suitable habitat present, nearest known occurrence about 3 miles to the west.
<i>Pseudognaphalium luecocephalum</i> White rabbit-tobacco	Perennial herb, sandy or gravelly benches, dry stream and canyon bottoms of chaparral and coastal sage scrub. 0-6,890 ft. elev.; Ventura, Los Angeles, San Bernardino, Riverside, Orange and San Diego Cos.	Aug-Nov	Fed: None CA: S2, 2B.2	<b>Low:</b> Marginally suitable habitat present, more than 5 miles from nearest known occurrence.
<i>Sagittaria sanfordii</i> Sanford's arrowhead	Perennial herb (rhizomatous) occurring in wetlands, freshwater marshes, riparian. 0-2,135 ft. elev.; Los Angeles, Orange and San Bernardino Cos.	Mar-Oct	Fed: None CA: S3, 1B.2	<b>Low:</b> Marginally suitable wetland habitat present, nearest known occurrence about 3 miles to the northeast.
<b>INVERTEBRATES</b>				
<i>Bombus crotchii</i> Crotch bumble bee	Colonial insect; open grassland and scrub; underground colonies, often in old rodent burrows. Many food plants including <i>Chaenactis</i> , <i>Lupinus</i> , <i>Phacelia</i> , <i>Salvia</i> , and <i>Eriogonum</i> . Much of southern and central CA, SW Nevada and Baja.	Spring – Summer	Fed: None CA: S1S2	<b>Moderate:</b> Suitable habitat and food plants present; historical records from within about 2 miles.
<i>Danaus plexippus</i> pop. 1 Monarch – California overwintering population	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby. Closed-cone coniferous forest	Year-round	Fed: <b>CAN</b> CA: S2	<b>High;</b> not observed, likely to be present however they are unlikely to overwinter this far inland.
<b>REPTILES</b>				

**Table 3. Special-Status Species Addressed**

Species Name	Habitat Requirements	Flowering or Activity Season	Conservation Status	Potential to Occur
<i>Anniella stebbinsi</i> Southern California legless lizard	Generally, south of the Transverse Range, south to NW Baja Calif. Sandy or loose loamy soils under sparse vegetation; soils typically have high moisture content.	Year-round	Fed: None CA: S3, CSC	<b>Low:</b> Marginally suitable habitat present, nearest known occurrence about 5 miles.
<i>Aspidoscelis tigris stejnegeri</i> Coastal whiptail	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. Coastal Calif., Transverse, and Peninsular ranges, south to Baja Calif.	Year-round	Fed: None CA: S3, CSC	<b>Present.</b> Three individuals observed in the project site.
<i>Phrynosoma blainvillii</i> Coast horned lizard	Forest, shrubland or grassland; sandy soils; W Calif. from LA Co S through N Baja Calif., below about 6000 ft. elev.	Spring – Summer	Fed: None CA: S3S4, CSC	<b>Low:</b> Minimally suitable habitat present, historical records from within about 2 miles.
<b>BIRDS</b>				
<i>Accipiter cooperii</i> Cooper's hawk	Nests in forest and woodland, hunts in woods and open areas; breeds through most of US, winters south through Mexico	Year-round	Fed: None CA: S4 (nesting), WL	<b>Moderate</b> (nesting); <b>Present</b> (foraging); suitable nesting habitat present; 1 individual observed foraging within the project site.
<i>Agelaius tricolor</i> Tricolored blackbird	Highly colonial species; requires open water, protected nesting substrate, and foraging areas with insect prey within a few kilometers of colony.	Year-round	Fed: None CA: THR, S1S2, CSC	<b>Low</b> (nesting); <b>Moderate</b> (foraging); limited nesting habitat; historical records from within about 5 miles.
<i>Aimophila ruficeps canescens</i> Southern California rufous-crowned sparrow	Coastal sage scrub, open chaparral; S Calif. and NW Baja Calif.; not migratory	Year-round	Fed: None CA: S3, WL	<b>Moderate:</b> Suitable habitat present; historical records from within about 5 miles.
<i>Aquila chrysaetos</i> Golden eagle	Nests in remote trees and cliffs; forages over shrublands and grasslands; breeds throughout W N America, winters to E coast	Year-round	Fed: Eagle Protection Act CA: S3, FP	<b>Minimal</b> (nesting), <b>Low</b> (foraging); no suitable nesting habitat, minimal suitable foraging habitat present.
<i>Athene cunicularia</i> Burrowing owl	Nests mainly in rodent burrows, usually in open grassland or shrubland; forages in open habitat; increasingly uncommon in S Calif.; through W US and Mexico	Year-round	Fed: None CA: S3, CSC	<b>Moderate</b> suitable habitat present, historical records from within about 2 miles.

**Table 3. Special-Status Species Addressed**

Species Name	Habitat Requirements	Flowering or Activity Season	Conservation Status	Potential to Occur
<i>Buteo swainsonii</i> Swainson's hawk	Breeds in open habitats (e.g., grassland), Central Valley and W Mojave Desert (Calif.) and east to cent. US, S. Canada, New Mexico; winters in S America	Spring – Summer	Fed: None CA: THR, S3	<b>Minimal</b> (nesting), <b>Moderate</b> (foraging); no suitable nesting habitat, suitable foraging habitat present during migration only.
<i>Elanus leucurus</i> White-tailed kite	Typically nests at lower elevations in riparian trees, including oaks, willows, and cottonwoods; forages over open country. Throughout much of cismontane California.	Spring – Summer	Fed: None CA: S3S4, FP	<b>Minimal</b> (nesting); <b>Moderate</b> (foraging); no suitable nesting habitat; marginal foraging habitat, known within 5 miles.
<i>Eremophila alpestris actia</i> California horned lark	Open, flat lands incl. sparse sagebrush or grassland, meadows, alkali flats; wide elev. range; breeds in western Calif (San Diego Co through Humboldt Co) and Baja Calif; winters in same range.	Year-round	Fed: None CA: S4, WL	<b>Low</b> (nesting); <b>Moderate</b> (foraging); Minimally suitable nesting habitat, marginal foraging habitat present.
<i>Falco columbarius</i> Merlin	Uncommon wintering species in S Calif. desert and valleys (breeds in northern N America and Eurasia).	Winter	Fed: None CA: S3S4, WL (winter)	<b>Minimal</b> (nesting); <b>Low</b> (foraging); nesting habitat absent known to winter in the region.
<i>Icteria virens</i> Yellow-breasted chat	Inhabits riparian thickets of willow and other brushy tangles near water courses; nests in low, dense riparian vegetation; nests and forages within 10 feet of ground.	Spring – Summer	Fed: None CA: S3, CSC	<b>Moderate</b> : suitable habitat present, known from within 0.7 miles of the project site.
<i>Polioptila californica californica</i> Coastal California gnatcatcher	Primarily coastal sage scrub below about 2,000 feet elev.; southwestern California, Ventura County to northern Baja California; inland to San Geronio Pass area (e.g., Banning)	Year-round	Fed: THR CA: S2, CSC	<b>Low</b> : marginally suitable habitat is present, nearest record is about 5 miles west.
<i>Setophaga petechia</i> Yellow warbler	Breeds in willow and cottonwood riparian habitat, near sea level to 9000 ft. elev.; much of N Amer.; sensitive in S Calif. due to habitat loss & cowbird parasitism; winters Mexico to S Amer.	Spring – Summer	Fed: None CA: S3S4, CSC (nesting)	<b>Moderate</b> : suitable habitat present, known from within less than 0.5 miles of the project site.
<i>Vireo bellii pusillus</i> Least Bell's vireo	Summer resident of southern California in low riparian habitats in vicinity of water or dry river bottoms; found below 2000 ft; nests placed along margins of bushes or on twigs projecting into pathways, usually willow, mesquite, and mulefat.	Spring–Fall	Fed: END CA: END, S2	<b>Low</b> : suitable habitat present, known from Cucamonga Basin approximately 0.7 miles north of the project site.

**MAMMALS**

**Table 3. Special-Status Species Addressed**

Species Name	Habitat Requirements	Flowering or Activity Season	Conservation Status	Potential to Occur
<i>Antrozous pallidus</i> Pallid bat	Desert, grassland, shrubland, woodland, forest; most common in open, dry habitats with rocky areas for roosting.	Spring – Summer	Fed: None CA: S3, CSC	<b>Minimal</b> (roosting); <b>Low</b> (foraging). Suitable foraging habitat is present; suitable roosting habitat is absent.
<i>Eumops perotis californicus</i> Western mastiff bat	Lowlands (with rare exceptions); cent. and S Calif., S Ariz., NM, SW Tex., N Mexico; roost in deep rock crevices, forage over wide area.	Year-round	Fed: None CA: S3S4, CSC	<b>Minimal</b> (roosting); <b>Low</b> (foraging): suitable roosting habitat absent, marginally suitable foraging habitat present.
<i>Lasiurus cinereus</i> Hoary bat	Prefers deciduous and coniferous woodlands, primarily roosts in tree foliage. Widespread throughout most of North America into Central America.	Year-round	Fed: None CA: S4	<b>Minimal</b> (roosting); <b>Low</b> (foraging): suitable roosting habitat absent, marginally suitable foraging habitat present.
<i>Lasiurus xanthinus</i> Western yellow bat	Roosts in trees, particularly palms. Forages over water and trees in valley foothill riparian, desert riparian, washes. Southern California, Mexico and Central America.	Year-round	Fed: None CA: S3, CSC	<b>Minimal</b> (roosting); <b>Low</b> (foraging): suitable roosting habitat absent, marginally suitable foraging habitat present.
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	Arid regions with short grass, agricultural fields, and sparse coastal sage scrub. Western United States from Washington to Southern California, east to Nebraska and Texas.	Year-round	Fed: None CA: S3S4	<b>Low</b> : suitable habitat present, historical records from within about 5 miles.
<i>Myotis yumanensis</i> Yuma myotis	Widespread in CA, uncommon in deserts, many habitats, sea level to 3300 m (11,000 ft), but uncommon above 2560 m (8000 ft); feeds over open water.	Year-round	Fed: None CA: S4	<b>Minimal</b> (roosting); <b>Low</b> (foraging): suitable roosting habitat absent, marginally suitable foraging habitat present.
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	Coastal scrub with a moderate to dense canopies preferred. Particularly abundant in rock outcrops, rocky cliffs, and slopes. So. California from San Diego to San Luis Obispo Cos.	Year-round	Fed: None CA: S3S4, CSC	<b>Moderate</b> : suitable habitat is present, nearest known occurrence is within about 2 miles of the project site.
<i>Nyctinomops femorosaccus</i> Pocketed tree-tailed bat	Variety of arid areas, pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian. Rocky areas with high cliffs.	Year-round	Fed: None CA: S3, CSC	<b>Minimal</b> (roosting); <b>Low</b> (foraging): suitable roosting habitat absent, marginally suitable foraging habitat present.

**Table 3. Special-Status Species Addressed**

Species Name	Habitat Requirements	Flowering or Activity Season	Conservation Status	Potential to Occur
<i>Nyctinomops macrotis</i> Big free-tailed bat	Primarily desert bats, roosts in crevices of cliffs and rocky outgroups. Southwestern United States and western Mexico.	Year-round	Fed: None CA: S3, CSC	<b>Minimal</b> (roosting): <b>Low</b> (foraging): suitable roosting habitat absent, marginally suitable foraging habitat present.

General references (botany): Baldwin et al., 2012; CDFW, 2022a; CDFW, 2022b; CNPS, 2022; and CCH, 2022. General references (wildlife): American Ornithologists Union, 1998 (including supplements through 2013); Barbour and Davis, 1969; Ebird.org, 2022; Feldhamer et al., 2003; Garrett and Dunn, 1981; Hall, 1981; Jennings and Hayes, 1994; Stebbins, 2003; Wilson and Ruff, 1999; and Zeiner et al., 1990.

**Conservation Status**

**Federal designations (Fed):** (federal ESA, USFWS).

END: Federally listed, endangered.

THR: Federally listed, threatened.

Candidate: Sufficient data are available to support federal listing, but not yet listed.

Proposed: Formally proposed for the federal status shown.

BGEPA: Bald and Golden Eagle Protection Act

DEL: Delisted

**State designations (CA):** (CESA, CDFW)

END: State listed, endangered.

THR: State listed, threatened.

CAND: Sufficient data are available to support federal listing, but not yet listed.

RARE: State listed as rare (applied only to certain plants).

CSC: California Species of Special Concern. Considered vulnerable to extinction due to declining numbers, limited geographic ranges, or ongoing threats.

WL: Species that were either previously listed as SC and have not been state listed under CESA; or were previously state or federally listed and now are on neither list; or are on the list of "Fully Protected" species.

FP: Fully protected. May not be taken or possessed without permit from CDFW.

**CDFW Natural Diversity Data Base Designations:** Applied to special-status plants and sensitive plant communities; where correct category is uncertain, CDFW uses two categories or question marks.

S1: Fewer than 6 occurrences or fewer than 1000 individuals or less than 2000 acres.

S1.1: Very threatened

S1.2: Threatened

S1.3: No current threats known

S2: 6-20 occurrences or 1,000-3,000 individuals or 2,000-10,000 acres (decimal suffixes same as above).

S3: 21-100 occurrences or 3,000-10,000 individuals or 10,000-50,000 acres (decimal suffixes same as above).

S4: Apparently secure in California; this rank is clearly lower than S3 but factors exist to cause some concern, i.e., there is some threat or somewhat narrow habitat. No threat rank.

S5: Demonstrably secure or ineradicable in California. No threat rank.

SH: All California occurrences historical (i.e., no records in > 20 years).

SX: Presumed extirpated in California.

**California Rare Plant Rank designations.** Note: According to the California Native Plant Society

(<http://www.cnps.org/cnps/rareplants/ranking.php>), plants ranked as CRPR 1A, 1B, and 2 meet definitions as threatened or endangered and are eligible for state listing. That interpretation of the state Endangered Species Act is not in general use.

1A: Plants presumed extinct in California.

1B: Plants rare and endangered in California and throughout their range.

2A: Plants presumed extinct in California but more common elsewhere in their range.

2B: Plants rare, threatened or endangered in California but more common elsewhere in their range.

3: Plants about which we need more information; a review list.

4: Plants of limited distribution; a watch list.

**California Rare Plant Rank Threat designation extensions:**

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

.2 Fairly endangered in California (20-80% occurrences threatened)

.3 Not very endangered in California (<20% of occurrences threatened or no current threats known)

**Definitions of occurrence probability:** Estimated occurrence probabilities are based on literature sources cited earlier, field surveys, and habitat analyses reported here.

*Present:* Observed on the site by qualified biologists.

*High:* Habitat is a type often utilized by the species and the site is within the known range of the species.

*Moderate:* Site is within the known range of the species and habitat on the site is a type occasionally used.

*Low:* Site is within the species' known range but habitat is rarely used, or the species was not found during focused surveys covering less than 100% of potential habitat or completed in marginal seasons.

*Minimal:* No suitable habitat on the site; or well outside the species' known elevational or geographic ranges; or a focused study covering 100% of all suitable habitat, completed during the appropriate season and during a year of appropriate rainfall, did not detect the species.

## 5.1 Special-Status Plants

### 5.1.1 Listed Threatened or Endangered Plants

This section describes plant species reported from the region that are listed as threatened or endangered under the federal ESA or CESA and are present or have a potential to be present on the project site. Several listed plant species were identified during the literature review but none of these species were observed or found to have at least a moderate potential to occur. **No listed plant species are known from the project site, and none were observed during the surveys described in this report.**

### 5.1.2 Other Special-Status Plants

In addition to the federal and state endangered species regulations noted above, CDFW and CNPS maintain lists of plants of conservation concern. The CDFW compiles these species including CDFW and CNPS rankings as CRPR 1, 2, 3, or 4 in its compendium of "Special Plants" (CDFW 2022b). These plants are treated here as "special-status species" and are discussed below.

**Parry's spineflower (*Chorizanthe parryi* var. *parryi*).** Parry's spineflower has a CRPR of 1B.1 (CDFW, 2022a). It is an annual herb in the buckwheat (Polygonaceae) family. Parry's spineflower is endemic to southern California and occurs in Los Angeles, Ventura, San Bernardino, Riverside, and San Diego Counties. It is found on sandy or rocky soils in coastal scrub, chaparral, cismontane woodland, and alley and foothill grassland at elevations from 900 to 4,000 feet, and flowers from April to June (CNPS, 2022). Suitable habitat is present throughout much of the project site. Parry's spineflower is known from several extinct occurrences within about 5 miles of the project site. There is a low to moderate potential for this species to germinate and be present in the project site in a year with above average rainfall.

**California Rare Plant Rank (CRPR) 4 Species.** Two CRPR 4 species (i.e., a "watch list," not indicating rarity) have at least a moderate potential to occur. These include southern California black walnut (*Juglans californica*) and Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*). Both of these species are known from within five miles of the project site.

## 5.2 Special-Status Wildlife

### 5.2.1 Listed Threatened or Endangered Wildlife

This section includes species listed as threatened or endangered under CESA or FESA which were detected or have a high potential to be present on the project site. **No listed wildlife species are known from the project site, and none were observed during the surveys described in this report.** Three listed species and one candidate species have at least a moderate potential to be present and are discussed below.

**Least Bell's vireo (*Vireo bellii pusilus*).** Least Bell's vireo is listed as endangered under both the FESA and the CESA (CDFW 2022a). It is a small songbird that nests in riparian vegetation throughout much of southern California. Least Bell's vireo were once widespread in southern California, but their range was greatly reduced due to parasitism by brown-headed cowbirds concurrent with development of riparian habitats. Least Bell's vireo are known to nest at Cucamonga Basin, approximately 0.7 miles north of the project site. Suitable riparian habitat for least Bell's vireo is present on the project site and there is a low potential to be present. Protocol-level surveys were not completed as part of this report however multiple visits by qualified least Bell's vireo biologists were completed during the nesting season and no least Bell's vireo were detected.

**Coastal California gnatcatcher (*Polioptila californica californica*).** Coastal California gnatcatcher is listed as threatened under the FESA (CDFW 2022a). Its geographic range is primarily coastal southern California from Ventura County, inland to the Santa Clarita area, Banning area, and southward through northwestern Baja California. Its habitat is coastal sage scrub largely composed of California sagebrush, California buckwheat, and other low-growing, drought-deciduous shrubs. Coastal California gnatcatcher were once widespread in the region but are now very limited. They are now restricted to areas with larger, intact patches of coastal sage scrub such as near Puddingstone Reservoir and within the North Etiwanda Preserve, both more than 7 miles from the project site. Coastal California gnatcatcher have a low potential to be present on the project site. The nearest designated critical habitat for coastal California gnatcatcher is near Puddingstone Reservoir, about 7 miles to the west (USFWS 2007b).

**Swainson's Hawk (*Buteo swainsoni*).** Swainson's hawks are listed as threatened under the CESA (CDFW 2022a). In California, they nest in the San Joaquin Valley, western Antelope Valley, and Owens Valley. They migrate to South America every fall and return to California every spring. Swainson's hawks migrate along the Pacific flyway, and several have been observed in the vicinity of the project site during migration. Several Swainson's hawks have been reported from the region during migration (eBird.org 2022). The project site is well outside of the breeding range, but Swainson's hawks may migrate over the area biannually. Swainson's hawks have a moderate potential to be present during migration.

**Tricolored blackbird (*Agelaius tricolor*).** Tricolored blackbird is listed as threatened under the CESA (CDFW, 2022a). It is a highly colonial species that is nearly endemic to California. They have a fairly wide range in central and northern California but in southern California are much more restricted. They nest in emergent marshland vegetation such as cattails (*Typha* sp.) and tules (*Schoenoplectus* sp.). It has been observed at Puddingstone Reservoir and throughout the Chino Basin (CDFW 2022a, eBird.org 2022). It has not been observed on the project site, but the project site does provide limited nesting habitat and suitable foraging habitat. There is a moderate potential for tricolored blackbirds to forage on the project site and a low potential for nesting within the Conservation Area.

**Monarch (*Danaus plexippus* pop. 1).** Overwintering populations of monarch in California are a candidate for federal listing under the ESA. The listing would only protect these overwintering sites and not individual butterflies or their food plants. Monarch and their food plants are widespread in California and although milkweed was not seen on the project site, monarchs have a high potential to be present. Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico and roosts are generally located in wind-protected tree groves. The project site is likely too far inland to support winter roosting habitat.

## 5.2.2 Species Protected Under the Federal Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C. §§ 668-668d; BGEPA) prohibits take of bald eagles and golden eagles. The BGEPA defines *take* to include “pursuing, shooting, shooting at, poisoning, wounding, killing, capturing, trapping, collecting, molesting, and disturbing.” The USFWS (2007a) further defines *disturb* as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”

Both bald eagle and golden eagle are observed periodically in the region but are not expected to utilize the project site for nesting because no nesting habitat is present. Bald eagles are not expected to forage on the site because of a lack of suitable prey items and golden eagles have a low potential to forage on the site given the small area of the project site and the limited amount of prey items.

## 5.2.3 California Wildlife Species of Special Concern

**Coastal whiptail (*Aspidoscelis tigris stejnegeri*).** Coastal whiptail are found in coastal southern California, mostly west of the Peninsular Ranges and south of the Transverse Ranges. Their range extends north into Ventura County and south to Baja California. The coastal whiptail occurs in a variety of habitats including various upland and riparian habitats. It is most commonly associated with areas of dense vegetation but is also found around sandy areas along gravelly arroyos or washes (Stebbins 2003). Coastal whiptail were observed at three locations within the project site and are expected to occur throughout the project site. Two of the observations were within the proposed development area and the other was within the portions of 15<sup>th</sup> Street Basin that will remain as open space (Figure 3, Attachment 1).

**Burrowing owl (*Athene cunicularia*).** Burrowing owl are uncommon throughout much of southern California with the highest densities occurring near agricultural lands in the Imperial Valley. Burrowing owl have been extirpated from portions of Orange County because of development. Burrowing owl are still periodically observed in the Inland Empire with the highest local concentrations near Ontario, approximately 5 miles southeast of the project site. Suitable burrowing owl burrows are present on the project site but limited. The habitat at the project site is marginally suitable for this species, but with a sufficient prey base, and an abundant ground squirrel population (for producing burrows), there is a moderate potential for breeding or wintering burrowing owls to be present on the site.

**Yellow-breasted chat (*Icteria virens*).** Yellow-breasted chat is a migratory species, occurring in California only during the breeding season which is typically between April and August. In California, it primarily breeds in the northern portion of the state and is scarce in the central and southern portions. It typically utilizes dense riparian thickets and brushy tangles near watercourses for breeding (CDFW 2022a). Yellow-breasted chat are known to nest at Cucamonga Basin, approximately 0.7 miles north of the project site. Marginally suitable riparian habitat for yellow-breasted chat is present and there is a moderate potential for yellow-breasted chat to be present on the project site.

**Yellow warbler (*Setophaga petechia*).** Yellow warbler is a migratory species, occurring in California only during the breeding season, which is typically between April and August. In California, it is widespread in riparian habitat throughout much of the state. It typically nests in dense riparian vegetation near watercourses (CDFW 2022a). Yellow warbler have not been previously detected on the project site but are known from several locations within 1 mile of the project site (eBird.org 2022). Suitable habitat is present throughout the project site, and there is a moderate potential for them to be present.

**San Diego desert woodrat (*Neotoma lepida intermedia*).** San Diego desert woodrat is known from coastal and desert scrub and rocky outcrops throughout much of southern California (CDFW 2022a). It frequently builds large middens (piles of sticks and debris arranged to form a shelter) in rock outcrops or around the bases of shrubs. In some portions of its range, it builds middens primarily at the bases of cactus (*Opuntia* spp.) and yucca (*Yucca* spp.) plants (Feldhamer et al. 2003). Habitat in the project site is suitable for San Diego desert woodrat and it has been documented within about 5 miles of the project site.

**Bats.** Several special-status bat species have at least a low potential to forage over the project site: pallid bat (*Antrozous pallidus*), Western mastiff bat (*Eumops perotis californicus*), hoary bat (*Lasiurus cinereus*), Western yellow bat (*Lasiurus xanthinus*), Yuma myotis (*Myotis yumanensis*), big free-tailed bat (*Nyctinomops macrotis*), and pocketed free-tailed bat (*Nyctinomops femorosaccus*). The pallid bat and Western mastiff bat forage in open areas over grasslands, agricultural areas, and other shrublands and roost in a variety of habitats including building, rock crevices, and caves. The pocketed free-tailed bat forages over water and open shrublands and roosts in crevices in cliffs. Hoary bats may roost in tree foliage within the project site. The remaining species are unlikely to roost in the project site because of a lack of suitable roosting habitat.

### 5.2.3 Other Special-Status Wildlife Species

**Crotch bumble bee (*Bombus crotchii*).** Crotch bumble bee was recently petitioned for listing under the CESA but was determined to not be eligible for protection under CESA. It is currently recognized as a special animal but may be petitioned again in the future based on a recent interpretation of CESA which indicates that some invertebrates may be eligible for protection. Crotch bumble bee is a widespread secretive species that is known from more than two hundred locations over a broad geographic range (CDFW 2022a). It is typically found in openings in grassland and scrub habitats where it burrows into the ground and lives in colonies. It feeds on native plants including milkweed, pincushion, lupine, phacelia, sage, snapdragon, clarkia, bush poppy, and buckwheat. Many of these food plants are present on the project site and suitable burrowing habitat is also present. Crotch bumblebee has a moderate potential to be present on the site and is known from numerous observations in the region.

**Raptors:** Two additional special-status bird of prey are found throughout the region. Cooper's hawk (*Accipiter cooperii*; CDFW Watch List species) and white-tailed kite (*Elanus leucurus*; CDFW Watch List species) are known to nest in and around urban areas of Southern California and forages in open space. Suitable nesting habitat for these species is limited and foraging habitat for these species is present within the project site. A single Cooper's hawk was observed flying over the project site during the biological survey.

**Other special-status birds:** Two additional special-status bird species are reported from the surrounding area (CDFW, 2022a; Table 2): Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*; CDFW Watch List Species) and California horned lark (*Eremophila alpestris actia*). These species were not observed on the project site during field surveys. These species are known from throughout the region and are likely to forage on the project site but are not expected to nest on the project site. Several birds identified as Birds of Conservation Concern were also identified in the USFWS IPaC search (Attachment 3). Several of these including Allen's hummingbird (*Selasphorus sasin*), Bullock's oriole (*Icterus bullockii*), California thrasher (*Toxostoma redivivum*), common yellowthroat (*Geothlypis trichas sinuosa*), Lawrence's goldfinch (*Carduelis lawrencei*), Nuttall's woodpecker (*Picoides nuttallii*), and oak titmouse (*Baeolophus inornatus*). These species have a potential to be present on the project site but do not have any formal protection.

### 5.3 Designated Critical Habitat

The literature review conducted prior to conducting field surveys determined that the project site is not within federally designated critical habitat for any species. The nearest designated critical habitat is for San Bernardino kangaroo rat and is located approximately 4 miles northeast of the project site (USFWS 2002).

### 5.4 Native Birds: Migratory Bird Treaty Act (MBTA) / California Fish and Game Code

The federal MBTA prohibits take of any migratory bird, including eggs or active nests, except as permitted by regulation (e.g., licensed hunting of waterfowl or upland game species). Under the MBTA, “migratory bird” is broadly defined as “any species or family of birds that live, reproduce or migrate within or across international borders at some point during their annual life cycle” and thus applies to most native bird species. California Fish and Game Code Section 3503 prohibits take, possession, or needless destruction of bird nests or eggs; Section 3503.5 prohibits take or possession of birds of prey or their eggs; and Section 3513 prohibits take or possession of any migratory nongame bird. With the exception of a few non-native birds, such as European starling, the take of any birds or loss of active bird nests or young is regulated by these statutes. Most of these species have no other special conservation status as defined above.

The project site has many trees, shrubs, and open areas that may provide nesting habitat. Numerous common and special-status birds are known to nest in the area and many of these are likely to nest on the project site. No active nests were observed during the biological surveys.

Many adult birds would flee from equipment during project construction; however, nestlings and eggs would be vulnerable. If project activities include site grading or brush removal during nesting season, then it would likely destroy bird nests, including eggs or nestling birds. For most birds, these impacts can be avoided by scheduling initial clearing and grading outside the nesting season. Or, if initial clearing and grading are undertaken during nesting season, work may be limited only to areas where no nesting birds are present, as documented by pre-construction nest surveys.

Some birds are likely to nest in the project site during construction, even after initial grading and clearing have been completed. Depending on the species, birds may nest on the ground; in adjacent vegetation; or on construction equipment that is left overnight or during a long weekend. The species most likely to nest in the project site during construction are common ravens, house finches, killdeer, and mourning doves, all of which are protected by the MBTA and Fish and Game Code. Due to the high probability that birds may nest on site during construction, regular monitoring and nest site management may be necessary throughout the breeding season.

### 5.5 Wildlife Movement

The ability for wildlife to move freely among populations and habitat areas is important to long-term genetic variation and demography. Fragmentation and isolation of natural habitat may cause loss of native species diversity in fragmented habitats. In the short term, wildlife movement may also be important to individual animals’ ability to occupy their home ranges, if their ranges extend across a potential movement barrier. These considerations are especially important for rare, threatened, or endangered species, and wide-ranging species such as large mammals, which exist in low population densities.

The California Essential Habitat Connectivity Project was commissioned by the California Department of Transportation (Caltrans) and CDFW to create a statewide assessment of essential habitat connectivity to

be used for conservation and infrastructure planning (Caltrans and CDFW 2010). One of its goals was to create the Essential Connectivity Map, which depicts large, relatively natural habitat blocks that support native biodiversity (natural landscape blocks) and areas essential for ecological connectivity between them (essential connectivity areas). This map does not reflect the needs of particular species but is based on overall biological connectivity and ecological integrity. A more detailed analysis is required to assess local and regional needs for connectivity and develop linkage designs based on the requirements of individual species (Caltrans and CDFW 2010). The project site is not located within any identified Essential Habitat Connectivity Areas or Natural Landscape Blocks. The project site is more likely to support more localized movement within the region, with some species such as coyote occupying the project site and radiating out into the adjacent development to forage.

## **6.0 Impact Assessment**

Several special-status biological resources that were observed on the project site or have at least a moderate potential to be present and may be impacted as discussed below. This analysis is intended to lay the framework for analysis under the CEQA.

### **6.1 Vegetation and Cover Types**

Five vegetation types and one additional cover type are present within the project site. One of these vegetation types, scale broom scrub, is present and is a sensitive natural community. Scale broom scrub is discussed below in Section 6.2. The remaining four vegetation types and one cover type are not protected communities and are also not limited in the region. For these reasons, impacts to the remaining vegetation and land cover types are not expected to be significant under CEQA.

### **6.2 Sensitive Natural Communities**

One sensitive natural community, scale broom scrub, was observed within the project site. A total of 0.14 acres of scale broom scrub are within the Development Area and will be removed. The scale broom scrub within the project site is limited to the north-facing basin slope and is providing limited habitat value. The loss of 0.14 acres of scale broom scrub is a limited impact but may be significant under CEQA. A mitigation measure has been added below to offset the loss of scale broom scrub.

### **6.3 Wildlife Habitat**

The project would result in the loss of 9.13 acres of wildlife habitat within the Development Area. The loss of this habitat for common species is not expected to be significant under CEQA and no mitigation for the loss of wildlife habitat is expected. Loss of special-status species habitat is discussed below.

### **6.4 Special-Status Plants**

No special-status plants were observed on the project site. Parry's spineflower has a CRPR of 1B.1 and a low to moderate potential to be present. It was not detected in 2022 and therefore impacts to this species are expected to be less than significant. Two special-status plants with a CRPR of 4 have a moderate potential to be present but were not observed. Plants ranked as CRPR 4 have no formal protection under CEQA and impacts to these species would be less than significant. No mitigation measures are required for potential impacts to special-status plants.

## 6.5 Special-Status Wildlife

Two special-status wildlife species were observed on the project site during the surveys. These include coastal whiptail and Cooper's hawk. Coastal whiptail is a CDFW Species of Special Concern and impacts may be significant under CEQA. A mitigation measure has been added below to reduce any potential impacts to this species. Cooper's hawk is a CDFW watch list species which has no formal protection and requires to impact assessment under CEQA. If nesting on site, Cooper's hawks may be impacted. Mitigation measures below to protect nesting birds would also protect Cooper's hawk and would reduce any potential impacts. No additional mitigation measures are needed to avoid or reduce potential impacts to special-status wildlife.

## 6.6 Native Birds: Migratory Bird Treaty Act (MBTA) / California Fish and Game Code

Nesting birds on the project site have a potential to be impacted by project construction. Impacts to nesting birds would violate the MBTA and Fish and Game Code. It could also result in significant impacts under CEQA. To mitigate any potential impacts to nesting birds, a mitigation measure has been added below.

## 6.7 Wildlife Movement

Project construction is not expected to result in significant impacts to wildlife movement or corridors. As discussed above, the project site is likely to support localized movement within the basin and is not expected to provide a wildlife corridor. Wildlife utilizing the Development Area would be pushed further east into the Conservation Area, golf courses, and open space. Impacts to wildlife movement would be less than significant.

## 7.0 Mitigation Measures

To avoid or reduce potential impacts to special-status biological resources on the project site, Aspen recommends the following mitigation measures. These measures are intended to avoid or reduce impacts to sensitive natural communities, special-status wildlife, and nesting birds within the Development Area. The biological resource measures area as follows:

- To mitigate the anticipated loss of 0.14 acres of scale broom scrub, the City of Upland will incorporate scale broom scrub habitat creation into the Habitat Mitigation and Monitoring Plan for the Conservation Area. It is expected that 0.14 acres of scale broom scrub will be created to offset the loss of this sensitive natural community. The methods to be used for habitat creation, success criteria, and monitoring schedule will all be specified in the Habitat Mitigation and Monitoring Plan.
- To mitigate potential impacts to coastal whiptail on the project site, the City of Upland will assign a Qualified Biologist to the project to be present during initial vegetation clearing and soil disturbance. The Qualified Biologist will capture coastal whiptail and any other special-status species from within the Development Area and will relocate them into the Conservation Area.
- To mitigate potential impacts to nesting birds, initial vegetation clearing, and soil disturbance will be scheduled between August 16th and February 14th, outside of the nesting bird season. If avoidance of the nesting season is not feasible and must initiate between February 15th and August 15th, a Qualified Biologist will conduct pre-construction nesting bird surveys. If nests are found, appropriate buffers will

be established around the nests to ensure that the nests are not impacted. Once the nests are inactive, the Qualified Biologist will remove the buffer and work will be allowed to proceed.

- To mitigate potential impacts to burrowing owl, a Qualified Biologist will complete a pre-construction survey for burrowing owl. If burrowing owl are found on the project site outside of the nesting season (September 1st through January 31st), the burrowing owls will be relocated according to the methods specified in the 2012 Staff Report on Burrowing Owl Mitigation (CDFW, 2012). If burrowing owls are found on the project site during the nesting season (February 1st through August 31st), they will be avoided throughout the duration of the nesting season. Buffers will be established based on the 2012 Staff Report on Burrowing Owl Mitigation (CDFW, 2012).

## 8.0 Conclusions

No State and federally listed species are known from the project site or the immediate vicinity. Two special-status wildlife species were observed, including coastal whiptail and Cooper's hawk. Impacts to both of these species are expected to be less than significant with the incorporated mitigation measures. Several other special-status wildlife species have a potential to be present but mitigation measures for the species mentioned above would also minimize or avoid impacts to these additional species. One sensitive natural community, scale broom scrub, was also observed within the project site. Mitigation measures included would offset the loss of this natural community and would result in a less than significant impact. With implementation of the mitigation measures in this report, all impacts to protected biological resources would be avoided, minimized, or otherwise mitigated for.




## 9.0 Literature Cited

- American Ornithologists' Union. 1998. Checklist of the North American Birds, 7<sup>th</sup> ed. Prepared by Committee on Classification and Nomenclature. American Ornithologists' Union, Washington DC.
- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, D.H. Wilken (eds.) 2012. The Jepson Manual: Vascular Plants of California, 2<sup>nd</sup> ed. University Press, Berkeley, California.
- Barbour, R.W. and W.H. Davis. 1969. Bats of America. University Press of Kentucky, Lexington, Kentucky.
- CBOC (California Burrowing Owl Consortium). 1993. Burrowing owl survey protocol and mitigation guidelines. Alviso, California. 13 pp.
- CDFW (California Department of Fish and Wildlife). 2022a. California Natural Diversity Database (CNDDDB), Rarefind, Version 5. Heritage section, CDFW, Sacramento.
- \_\_\_\_\_. 2022b. Special Vascular Plants, Bryophytes, and Lichens List. CDFW, Sacramento. Online: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline>
- \_\_\_\_\_. 2022c. California Natural Community List. CDFW. Sacramento. Online: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline>
- \_\_\_\_\_. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Online: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959>
- \_\_\_\_\_. 2012. Staff Report on Burrowing Owl Mitigation. Online: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline=true>
- CalTrans and CDFW (California Department of Transportation and California Department of Fish and Wildlife). 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Online: <http://www.dfg.ca.gov/habcon/connectivity/>
- CNPS (California Native Plant Society). 2022. Inventory of rare and endangered plants. California Native Plant Society. Sacramento. Online: <http://www.cnps.org/inventory>. Accessed August 2022.
- CCH (Consortium of California Herbaria). 2022. Botanical specimen data provided by the participants of the Consortium of California Herbaria. Online: <http://ucjeps.berkeley.edu/consortium/> Accessed August 2022.
- eBird.org. 2022. eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. Available: <http://www.ebird.org> Accessed August 2022.
- Feldhamer, G.A., B.C. Thompson, and J.A. Chapman (eds.). 2003. Wild Mammals of North America: Biology, Management and Conservation, 2nd ed. Johns Hopkins University Press, Baltimore MD.
- Garrett, K. and J. Dunn. 1981. Birds of Southern California: Status and Distribution. Los Angeles Audubon Society, Los Angeles, California.
- Hall, E.R. 1981. The Mammals of North America. John Wiley and Sons, New York.
- Jennings, M.R. and M.P. Hayes. 1994. Amphibian and reptile species of special concern in California. California Dept. of Fish and Game, Sacramento.
- Los Angeles County (Los Angeles County Public Works). 2022. Near Real-Time Precipitation Map. <https://dpw.lacounty.gov/wrd/rainfall/> Accessed September 2022.

- RCA Associates, Inc. 2022. General Biological Resources Assessment, Upland, San Bernardino County , California, APN: 3105-171-08.
- Sawyer, J.O., T. Keeler-Wolf, and J.M. Evans. 2009. Manual of California Vegetation, 2nd ed. California Native Plant Society, Sacramento, California. 1300 pp.
- Stebbins, R.C. 2003. Western Reptiles and Amphibians, 3rd ed. Houghton Mifflin Company, Boston Mass.
- USFWS (U.S. Fish and Wildlife Service). 2022. IPaC Information for Planning and Consultation. [Online]: <https://ipac.ecosphere.fws.gov/> Accessed August 2022.
- \_\_\_\_\_. 2007a. Protection of Eagles; Definition of “Disturb.” Federal Register 72:31132 -31140 (5 Jun).
- \_\_\_\_\_. 2007b. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Coastal California Gnatcatcher (*Polioptila californica californica*). Federal Register 72:72010-72213 (19 Dec).
- \_\_\_\_\_. 2002. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*). Federal Register 67:19812-19845 (23 Apr).
- Wilson, D.E. and S. Ruff (eds.). 1999. Smithsonian Book of North American Mammals. Smithsonian Institution Press, Washington DC.
- Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer, and M. White (eds.). 1990. California's Wildlife. Vol. III. Mammals. California Department of Fish and Wildlife, Sacramento.

## **Attachment 1 – Figures**



-  Project Site
-  Conservation Area
-  Residential Development Area

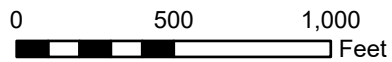
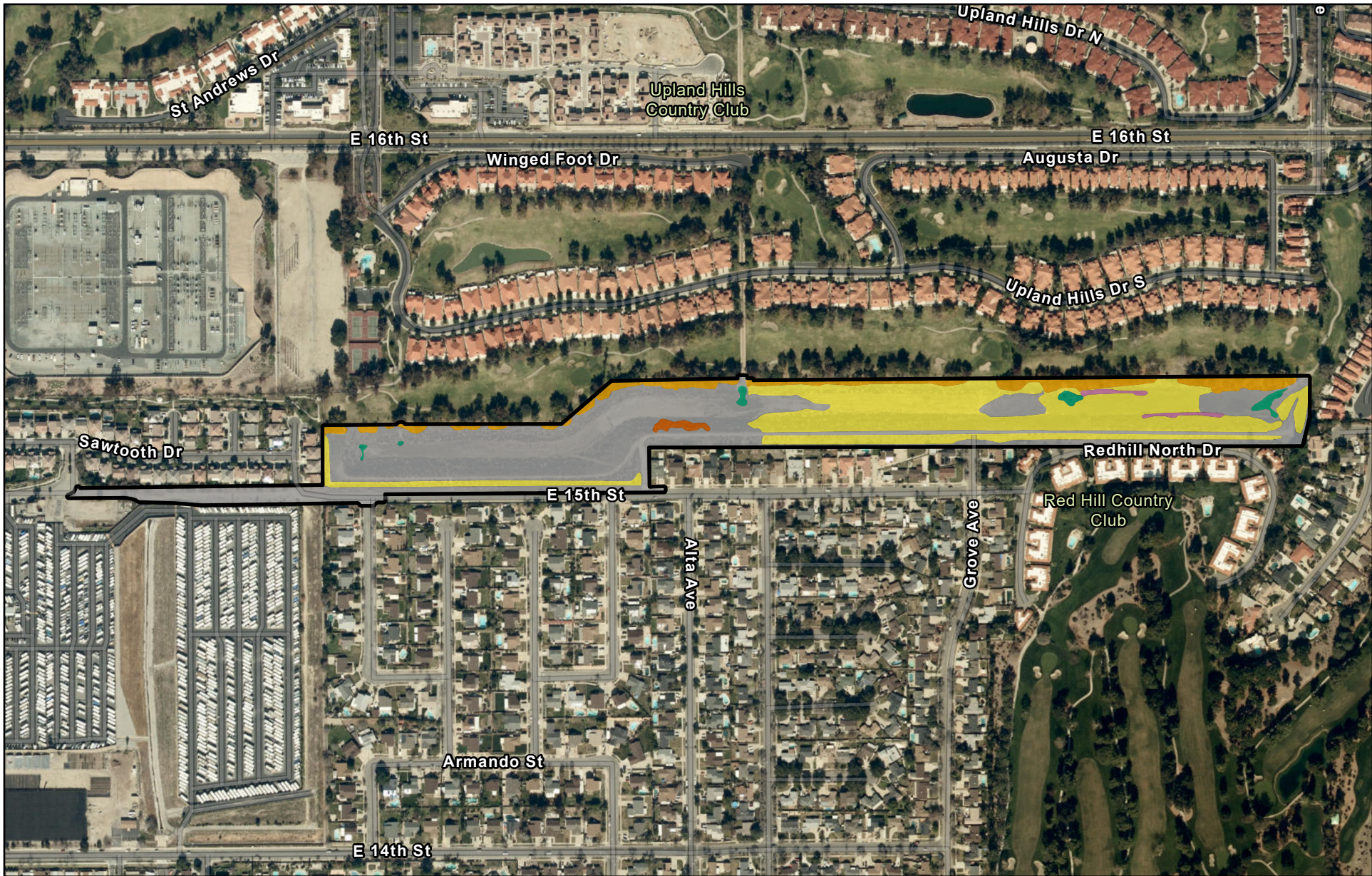


Figure 1

Project Overview

Sources: Aspen, 2022; County of San Bernardino, 2022; Esri, 2022; The Colonies Partners, LP, 2022.



0 500 Feet

Vegetation and Land Cover

California buckwheat scrub	Mulefat scrub
Cattail marsh	Ornamental trees
Developed or Disturbed	Scale broom scrub

Project Site

**Figure 2**

**Vegetation and Land Cover**

Sources: Aspen, 2022; County of San Bernardino, 2022; Esri, 2022; The Colonies Partners, LP, 2022.





 Coastal whiptail  
 Project Site

Figure 3

Biological Resources

Sources: Aspen, 2022; County of San Bernardino, 2022; Esri, 2022; The Colonies Partners, LP, 2022.

## **Attachment 2 – CNDDDB Query Results**



# Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad (Mt. Baldy (3411726) OR Ontario (3411716) OR Glendora (3411727) OR San Dimas (3411717) OR Guasti (3411715) OR Cucamonga Peak (3411725) OR Yorba Linda (3311787) OR Prado Dam (3311786) OR Corona North (3311785))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Abronia villosa</i> var. <i>aurita</i> chaparral sand-verbena	PDNYC010P1	None	None	G5T2?	S2	1B.1
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S3	WL
<i>Ammodramus savannarum</i> grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
<i>Anaxyrus californicus</i> arroyo toad	AAABB01230	Endangered	None	G2G3	S2S3	SSC
<i>Anniella stebbinsi</i> Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G4	S3	SSC
<i>Aquila chrysaetos</i> golden eagle	ABNKC22010	None	None	G5	S3	FP
<i>Arctostaphylos glandulosa</i> ssp. <i>gabrielensis</i> San Gabriel manzanita	PDERI042P0	None	None	G5T3	S3	1B.2
<i>Arizona elegans occidentalis</i> California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
<i>Artemisospiza belli belli</i> Bell's sage sparrow	ABPBX97021	None	None	G5T2T3	S3	WL
<i>Asio otus</i> long-eared owl	ABNSB13010	None	None	G5	S3?	SSC
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	ARACJ02060	None	None	G5	S2S3	WL
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
<i>Astragalus brauntonii</i> Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S3	SSC
<i>Atractelmis wawona</i> Wawona riffle beetle	IICOL58010	None	None	G3	S1S2	
<i>Atriplex coulteri</i> Coulter's saltbush	PDCHE040E0	None	None	G3	S1S2	1B.2



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Batrachoseps gabrieli</i></b> San Gabriel slender salamander	AAAAD02110	None	None	G2G3	S2S3	
<b><i>Berberis nevinii</i></b> Nevin's barberry	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
<b><i>Bombus crotchii</i></b> Crotch bumble bee	IIHYM24480	None	None	G2	S1S2	
<b><i>Brodiaea filifolia</i></b> thread-leaved brodiaea	PMLIL0C050	Threatened	Endangered	G2	S2	1B.1
<b><i>Buteo swainsoni</i></b> Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
<b>California Walnut Woodland</b> California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
<b><i>Callophrys mossii hidakupa</i></b> San Gabriel Mountains elfin butterfly	IILEPE2206	None	None	G4T1T2	S1S2	
<b><i>Calochortus clavatus var. gracilis</i></b> slender mariposa-lily	PMLIL0D096	None	None	G4T2T3	S2S3	1B.2
<b><i>Calochortus plummerae</i></b> Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
<b><i>Calochortus weedii var. intermedius</i></b> intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T3	S3	1B.2
<b><i>Calystegia felix</i></b> lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
<b><i>Campylorhynchus brunneicapillus sandiegensis</i></b> coastal cactus wren	ABPBG02095	None	None	G5T3Q	S3	SSC
<b>Canyon Live Oak Ravine Forest</b> Canyon Live Oak Ravine Forest	CTT61350CA	None	None	G3	S3.3	
<b><i>Castilleja gleasoni</i></b> Mt. Gleason paintbrush	PDSCR0D140	None	Rare	G2	S2	1B.2
<b><i>Catostomus santaanae</i></b> Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	
<b><i>Centromadia pungens ssp. laevis</i></b> smooth tarplant	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
<b><i>Chaetodipus fallax fallax</i></b> northwestern San Diego pocket mouse	AMAFD05031	None	None	G5T3T4	S3S4	SSC
<b><i>Chorizanthe parryi var. parryi</i></b> Parry's spineflower	PDPGN040J2	None	None	G3T2	S2	1B.1
<b><i>Cladium californicum</i></b> California saw-grass	PMCYP04010	None	None	G4	S2	2B.2
<b><i>Claytonia peirsonii ssp. peirsonii</i></b> Peirson's spring beauty	PDPOR03121	None	None	G2G3T2	S2	1B.2
<b>Coastal and Valley Freshwater Marsh</b> Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<i>Coleonyx variegatus abbotti</i> San Diego banded gecko	ARACD01031	None	None	G5T5	S1S2	SSC
<i>Coturnicops noveboracensis</i> yellow rail	ABNME01010	None	None	G4	S1S2	SSC
<i>Crotalus ruber</i> red-diamond rattlesnake	ARADE02090	None	None	G4	S3	SSC
<i>Cypseloides niger</i> black swift	ABNUA01010	None	None	G4	S2	SSC
<i>Diplectrona californica</i> California diplectronan caddisfly	IITRI23010	None	None	G1G2	S1S2	
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	AMAFD03143	Endangered	Candidate Endangered	G5T1	S1	SSC
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	AMAFD03100	Threatened	Threatened	G2	S2	
<i>Dodecahema leptoceras</i> slender-horned spineflower	PDPGN0V010	Endangered	Endangered	G1	S1	1B.1
<i>Dudleya densiflora</i> San Gabriel Mountains dudleya	PDCRA040B0	None	None	G2	S2	1B.1
<i>Dudleya multicaulis</i> many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Ensatina eschscholtzii klauberi</i> large-blotched salamander	AAAAD04013	None	None	G5T2?	S3	WL
<i>Eremophila alpestris actia</i> California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
<i>Eriastrum densifolium ssp. sanctorum</i> Santa Ana River woollystar	PDPLM03035	Endangered	Endangered	G4T1	S1	1B.1
<i>Eriogonum microthecum var. johnstonii</i> Johnston's buckwheat	PDPGN083W5	None	None	G5T2	S2	1B.3
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
<i>Falco columbarius</i> merlin	ABNKD06030	None	None	G5	S3S4	WL
<i>Fimbristylis thermalis</i> hot springs fimbristylis	PMCYP0B0N0	None	None	G4	S1S2	2B.2



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Gila orcuttii</i> arroyo chub	AFCJB13120	None	None	G2	S2	SSC
<i>Glyptostoma gabrielense</i> San Gabriel chestnut	IMGASB1010	None	None	G2	S2	
<i>Gonidea angulata</i> western ridged mussel	IMBIV19010	None	None	G3	S1S2	
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	PDRSOW045	None	None	G4T1	S1	1B.1
<i>Icteria virens</i> yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
<i>Imperata brevifolia</i> California satintail	PMPOA3D020	None	None	G3	S3	2B.1
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G3G4	S4	
<i>Lasiurus xanthinus</i> western yellow bat	AMACC05070	None	None	G4G5	S3	SSC
<i>Laterallus jamaicensis coturniculus</i> California black rail	ABNME03041	None	Threatened	G3T1	S1	FP
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	AMAEB03051	None	None	G5T3T4	S3S4	
<i>Lilium parryi</i> lemon lily	PMLIL1A0J0	None	None	G3	S3	1B.2
<i>Linanthus concinnus</i> San Gabriel linanthus	PDPLM090D0	None	None	G2	S2	1B.2
<i>Monardella australis</i> ssp. <i>jokerstii</i> Jokerst's monardella	PDLAM18112	None	None	G4T1?	S1?	1B.1
<i>Monardella breweri</i> ssp. <i>glandulifera</i> Brown's Flat monardella	PDLAM180B1	None	None	G5T1	S1	1B.2
<i>Monardella macrantha</i> ssp. <i>hallii</i> Hall's monardella	PDLAM180E1	None	None	G5T3	S3	1B.3
<i>Muhlenbergia californica</i> California muhly	PMPOA480A0	None	None	G4	S4	4.3
<i>Muhlenbergia utilis</i> aparejo grass	PMPOA481X0	None	None	G4	S2S3	2B.2
<i>Myotis yumanensis</i> Yuma myotis	AMACC01020	None	None	G5	S4	
<i>Navarretia prostrata</i> prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.2
<i>Neolarra alba</i> white cuckoo bee	IIHYM81010	None	None	GH	SH	



Selected Elements by Scientific Name  
 California Department of Fish and Wildlife  
 California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Neotoma lepida intermedia</i></b> San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC
<b><i>Nyctinomops femorosaccus</i></b> pocketed free-tailed bat	AMACD04010	None	None	G5	S3	SSC
<b><i>Nyctinomops macrotis</i></b> big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
<b><i>Oncorhynchus mykiss irideus pop. 10</i></b> steelhead - southern California DPS	AFCHA0209J	Endangered	Candidate Endangered	G5T1Q	S1	
<b><i>Oreonana vestita</i></b> woolly mountain-parsley	PDAP11G030	None	None	G3	S3	1B.3
<b><i>Orobanche valida ssp. valida</i></b> Rock Creek broomrape	PDORO040G2	None	None	G4T2	S2	1B.2
<b><i>Ovis canadensis nelsoni</i></b> desert bighorn sheep	AMALE04013	None	None	G4T4	S3	FP
<b><i>Perognathus longimembris brevinasus</i></b> Los Angeles pocket mouse	AMAFD01041	None	None	G5T2	S1S2	SSC
<b><i>Phacelia stellaris</i></b> Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
<b><i>Phrynosoma blainvillii</i></b> coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
<b><i>Polioptila californica californica</i></b> coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
<b><i>Pseudognaphalium leucocephalum</i></b> white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
<b><i>Rana boylei</i></b> foothill yellow-legged frog	AAABH01050	None	Endangered	G3	S3	SSC
<b><i>Rana muscosa</i></b> southern mountain yellow-legged frog	AAABH01330	Endangered	Endangered	G1	S1	WL
<b><i>Rhaphiomidas terminatus abdominalis</i></b> Delhi Sands flower-loving fly	IIDIP05021	Endangered	None	G1T1	S1	
<b><i>Rhinichthys osculus ssp. 8</i></b> Santa Ana speckled dace	AFCJB3705K	None	None	G5T1	S1	SSC
<b><i>Riversidian Alluvial Fan Sage Scrub</i></b> Riversidian Alluvial Fan Sage Scrub	CTT32720CA	None	None	G1	S1.1	
<b><i>Sagittaria sanfordii</i></b> Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
<b><i>Salvadora hexalepis virgultea</i></b> coast patch-nosed snake	ARADB30033	None	None	G5T4	S2S3	SSC
<b><i>Senecio aphanactis</i></b> chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
<b><i>Setophaga petechia</i></b> yellow warbler	ABPBX03010	None	None	G5	S3S4	SSC



**Selected Elements by Scientific Name**  
**California Department of Fish and Wildlife**  
**California Natural Diversity Database**



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Sidalcea neomexicana</i> salt spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
<b>Southern California Arroyo Chub/Santa Ana Sucker Stream</b> Southern California Arroyo Chub/Santa Ana Sucker Stream	CARE2330CA	None	None	GNR	SNR	
<b>Southern Coast Live Oak Riparian Forest</b> Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
<b>Southern Cottonwood Willow Riparian Forest</b> Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
<b>Southern Sycamore Alder Riparian Woodland</b> Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
<b>Southern Willow Scrub</b> Southern Willow Scrub	CTT63320CA	None	None	G3	S2.1	
<b>Spea hammondi</b> western spadefoot	AAABF02020	None	None	G2G3	S3	SSC
<b>Streptanthus bernardinus</b> Laguna Mountains jewelflower	PDBRA2G060	None	None	G3G4	S3S4	4.3
<b>Symphyotrichum defoliatum</b> San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
<b>Symphyotrichum greatae</b> Greata's aster	PDASTE80U0	None	None	G2	S2	1B.3
<b>Taricha torosa</b> Coast Range newt	AAAAF02032	None	None	G4	S4	SSC
<b>Taxidea taxus</b> American badger	AMAJF04010	None	None	G5	S3	SSC
<b>Thamnophis hammondi</b> two-striped gartersnake	ARADB36160	None	None	G4	S3S4	SSC
<b>Thelypteris puberula var. sonorensis</b> Sonoran maiden fern	PPTHE05192	None	None	G5T3	S2	2B.2
<b>Thysanocarpus rigidus</b> rigid fringedpod	PDBRA2Q070	None	None	G1G2	S2	1B.2
<b>Viola pinetorum ssp. grisea</b> grey-leaved violet	PDVIO04431	None	None	G4G5T3	S3	1B.2
<b>Vireo bellii pusillus</b> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
<b>Walnut Forest</b> Walnut Forest	CTT81600CA	None	None	G1	S1.1	

**Record Count: 121**

## **Attachment 3 – IPaC Resource List**

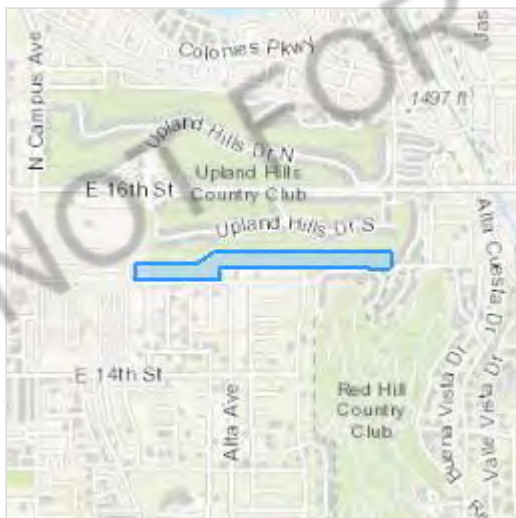
# IPaC resource list

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 Bernardino County, California



## Local office

Carlsbad Fish And Wildlife Office

☎ (760) 431-9440

📅 (760) 431-5901

# 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. IPaC only shows species that are regulated by USFWS (see FAQ).

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:

## Mammals

NAME	STATUS
San Bernardino Merriam's Kangaroo Rat <i>Dipodomys merriami parvus</i> Wherever found There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. <a href="https://ecos.fws.gov/ecp/species/2060">https://ecos.fws.gov/ecp/species/2060</a>	Endangered

## Birds

NAME	STATUS
Coastal California Gnatcatcher <i>Polioptila californica californica</i> Wherever found There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. <a href="https://ecos.fws.gov/ecp/species/8178">https://ecos.fws.gov/ecp/species/8178</a>	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> Wherever found There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a>	Endangered

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## Flowering Plants

NAME	STATUS
------	--------

San Diego Ambrosia *Ambrosia pumila*

Endangered

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.

<https://ecos.fws.gov/ecp/species/8287>

## 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 <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.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
<b>Allen's Hummingbird</b> <i>Selasphorus sasin</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9637">https://ecos.fws.gov/ecp/species/9637</a>	Breeds Feb 1 to Jul 15
<b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i> 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.	Breeds Jan 1 to Aug 31
<b>Belding's Savannah Sparrow</b> <i>Passerculus sandwichensis beldingi</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/8">https://ecos.fws.gov/ecp/species/8</a>	Breeds Apr 1 to Aug 15
<b>Black-chinned Sparrow</b> <i>Spizella atrogularis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9447">https://ecos.fws.gov/ecp/species/9447</a>	Breeds Apr 15 to Jul 31
<b>Bullock's Oriole</b> <i>Icterus bullockii</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
<b>California Thrasher</b> <i>Toxostoma redivivum</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31

<p>Common Yellowthroat <i>Geothlypis trichas sinuosa</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/2084">https://ecos.fws.gov/ecp/species/2084</a></p>	Breeds May 20 to Jul 31
<p>Lawrence's Goldfinch <i>Carduelis lawrencei</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9464">https://ecos.fws.gov/ecp/species/9464</a></p>	Breeds Mar 20 to Sep 20
<p>Nuttall's Woodpecker <i>Picoides nuttallii</i>  This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  <a href="https://ecos.fws.gov/ecp/species/9410">https://ecos.fws.gov/ecp/species/9410</a></p>	Breeds Apr 1 to Jul 20
<p>Oak Titmouse <i>Baeolophus inornatus</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9656">https://ecos.fws.gov/ecp/species/9656</a></p>	Breeds Mar 15 to Jul 15
<p>Olive-sided Flycatcher <i>Contopus cooperi</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/3914">https://ecos.fws.gov/ecp/species/3914</a></p>	Breeds May 20 to Aug 31
<p>Western Grebe <i>Aechmophorus occidentalis</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/6743">https://ecos.fws.gov/ecp/species/6743</a></p>	Breeds Jun 1 to Aug 31
<p>Wrentit <i>Chamaea fasciata</i>  This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Mar 15 to Aug 10

## 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 maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### **Breeding Season (■)**

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### **Survey Effort (|)**

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### **No Data (—)**

A week is marked as having no data if there were no survey events for that week.

### **Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

**How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

**What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### **What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn

more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Coastal Barrier Resources System

Projects within the [John H. Chafee Coastal Barrier Resources System](#) (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local [Ecological Services Field Office](#) or visit the [CBRA Consultations website](#). The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

There are no known coastal barriers at this location.

### Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the [official CBRS maps](#). The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation>

### Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact [CBRA@fws.gov](mailto:CBRA@fws.gov).

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

## Fish hatcheries

There are no fish hatcheries at this location.

## Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

[Palustrine](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

**NOTE:** This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

## **Attachment 4 – Special-Status Species Not Addressed**

#### Attachment 4. Special-Status Species Not Addressed<sup>1</sup>

Latin Name	Common Name	Reason for Exclusion
PLANTS		
<i>Abronia villosa</i> var. <i>aurita</i>	Chaparral sand-verbena	No suitable wash habitat.
<i>Ambrosia pumila</i>	San Diego ambrosia	No suitable alkali soils present
<i>Arctostaphylos glandulosa</i> ssp. <i>gabrielensis</i>	San Gabriel manzanita	Well below elevational range.
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	No suitable chaparral habitat.
<i>Atriplex coulteri</i>	Coulter's saltbush	So suitable alkali soils.
<i>Brodiaea filifolia</i>	Thread-leaved brodiaea	No suitable clays or alkali soils.
<i>Calochortus clavatus</i> var. <i>gracilis</i>	Slender mariposa-lily	No suitable chaparral habitat.
<i>Calochortus weedii</i> var. <i>intermedius</i>	Intermediate mariposa-lily	Well outside of the geographic range.
<i>Centromadia pungens</i> ssp. <i>laevis</i>	Smooth tarplant	So suitable alkali soils.
<i>Cladium californicum</i>	California saw-grass	No suitable perennial marsh habitat.
<i>Claytonia peirsonii</i> ssp. <i>peirsonii</i>	Peirson's spring beauty	Well below elevational range.
<i>Dodecahema leptoceras</i>	Slender-horned spineflower	No suitable mature alluvial scrub habitat.
<i>Dudleya densiflora</i>	San Gabriel Mountain dudleya	Well outside of the geographic range.
<i>Dudleya multicaulis</i>	Many-stemmed dudleya	Well outside of the geographic range.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Santa Ana River woollystar	No suitable wash habitat.
<i>Eriogonum microthecum</i> var. <i>johnstonii</i>	Johnston's buckwheat	Well below elevational range.
<i>Fimbristylis thermalis</i>	Hot springs fimbristylis	No suitable perennial marsh habitat.
<i>Glyptostoma gabrielense</i>	San Gabriel chestnut	No suitable chaparral or woodland habitat.
<i>Lilium parryi</i>	Lemon lily	Well below elevational range.
<i>Linanthus concinnus</i>	San Gabriel linanthus	Well below elevational range.
<i>Monardella australis</i> ssp. <i>jokerstii</i>	Jokerst's monardella	Well below elevational range.
<i>Monardella breweri</i> ssp. <i>glandulifera</i>	Brown's Flat monardella	Well below elevational range.
<i>Monardella macrantha</i> ssp. <i>hallii</i>	Hall's monardella	Well below elevational range.
<i>Muhlenbergia californica</i>	California muhly	No suitable mesic canyon habitat.
<i>Muhlenbergia utilis</i>	Aparejo grass	Well outside of the geographic range.
<i>Navarretia prostrata</i>	Prostrate vernal pool navarretia	No suitable vernal pool habitat.
<i>Oreonana vestita</i>	Woolly mountain-parsley	Well below elevational range.
<i>Orobanche valida</i> ssp. <i>valida</i>	Rock creek broomrape	Well outside of the geographic range.
<i>Phacelia stellaris</i>	Brand's star phacelia	Well outside of the geographic range.
<i>Senecio aphanactis</i>	Chaparral ragwort	No suitable alkali soils.
<i>Sidalcea neomexicana</i>	Salt spring checkerbloom	No suitable alkali substrates.
<i>Streptanthus bernardinus</i>	Laguna Mountains jewelflower	Well outside of the geographic range.
<i>Symphotrichum defoliatum</i>	San Bernardino aster	No suitable meadow habitat.
<i>Symphotrichum greatae</i>	Greata's aster	No suitable mesic canyon habitat.
<i>Thelypteris puberula</i> var. <i>sonorensis</i>	Sonoran maiden fern	No suitable mesic canyon habitat.
<i>Thysanocarpus rigidus</i>	Rigid fringe-pod	Well outside of the geographic range.
<i>Viola pinetorum</i> ssp. <i>grisea</i>	Grey-leaved violet	Well outside of the geographic range.
INVERTEBRATES		
<i>Atractelmis wawona</i>	Wawona riffle beetle	No suitable aquatic habitat.
<i>Callophrys mossii hidakupa</i>	San Gabriel Mountains elfin butterfly	Well below elevational range.
<i>Diplectrona californica</i>	California diplectronan caddisfly	No suitable stream habitat.
<i>Gonidea angulata</i>	Western ridged mussel	No suitable stream habitat.

#### Attachment 4. Special-Status Species Not Addressed<sup>1</sup>

Latin Name	Common Name	Reason for Exclusion
<i>Neolarra alba</i>	White cuckoo bee	Extirpated from Southern California.
<i>Rhaphiomidas terminatus abdominalis</i>	Delhi Sands flower-loving fly	No suitable sand dune habitat.
FISHES		
<i>Catostomus santaanae</i>	Santa Ana sucker	No suitable aquatic habitat.
<i>Gila orcuttii</i>	Arroyo chub	No suitable aquatic habitat.
<i>Rhinichthys osculus</i> ssp. 8	Santa Ana Speckled dace	No suitable aquatic habitat.
<i>Oncorhynchus mykiss irideus</i> pop. 10	Steelhead - Southern California DPS	No suitable aquatic habitat.
AMPHIBIANS		
<i>Anaxyrus californicus</i>	Arroyo toad	No suitable wash habitat.
<i>Batrachoseps gabrielli</i>	San Gabriel slender salamander	Well below elevational range.
<i>Ensatina eschscholtzii klauberi</i>	Large-blotched salamander	No suitable wetland habitat.
<i>Rana boylei</i>	Foothill yellow-legged frog	No suitable rocky pool creek habitat.
<i>Rana mucosa</i>	Southern mountain yellow-legged frog	No suitable aquatic habitat.
<i>Spea hammondi</i>	Western spadefoot	No suitable seasonal pool habitat.
<i>Taricha torosa</i>	Coast Range newt	No suitable aquatic habitat.
REPTILES AND AMPHIBIANS		
<i>Arizona elegans occidentalis</i>	California glossy snake	No suitable wash habitat.
<i>Aspidoscelis hyperythra</i>	Orange-throated whiptail	Well outside of the geographic range.
<i>Coleonyx variegatus abbotti</i>	San Diego banded gecko	No suitable wash habitat.
<i>Crotalus ruber</i>	Red-diamond rattlesnake	Well outside of the geographic range.
<i>Emys marmorata</i>	Western pond turtle	No suitable ponded habitat.
<i>Salvadora hexalepis virgulata</i>	Coast patch-nosed snake	Not adequately sized to support animals.
<i>Thamnophis hammondi</i>	Two-striped gartersnake	No suitable aquatic habitat.
BIRDS		
<i>Ammodramus savannarum</i>	Grasshopper sparrow	No suitable grassland habitat.
<i>Artemisiospiza belli belli</i>	Bell's sage sparrow	No suitable chaparral habitat.
<i>Asio otus</i>	Long-eared owl	Not adequately sized to support animals.
<i>Campylorhynchus brunneicapillus sandiegensis</i>	Coastal cactus wren	Well outside of the geographic range, no suitable cactus habitat.
<i>Coccyzus americanus occidentalis</i>	Western yellow-billed cuckoo	No suitable riparian habitat.
<i>Coturnicops noveboracensis</i>	Yellow rail	No suitable wetland habitat.
<i>Cypseloides niger</i>	Black swift	No suitable riparian habitat.
<i>Empidonax traillii extimus</i>	Southwestern willow flycatcher	No suitable riparian habitat.
<i>Laterallus jamaicensis coturniculus</i>	California black rail	No suitable wetland habitat.
MAMMALS		
<i>Chaetodipus fallax fallax</i>	Northwestern San Diego pocket mouse	Well outside of geographic range.
<i>Dipodomys merriami parvus</i>	San Bernardino kangaroo rat	Well outside of geographic range.
<i>Dipodomys stephensi</i>	Stephen's kangaroo rat	Well outside of geographic range.
<i>Ovis canadensis nelsoni</i>	Desert bighorn sheep	Well outside of geographic range.
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	No suitable alluvial scrub habitat.
<i>Taxidea taxus</i>	American badger	Not adequately sized to support animals.

Note:

<sup>1</sup> Special-status species reported from the region, but not addressed in this report due to habitat or geographic range.

## **Attachment 5 – Project Species List**

## Attachment 5. Project Species List

Latin Name	Common Name
VASCULAR PLANTS	
DICOTYLEDONS	
ADOXACEAE	ELDERBERRY FAMILY
<i>Sambucus nigra</i> ssp. <i>caerulea</i>	Blue elderberry
ANACARDIACEAE	SUMAC FAMILY
<i>Rhus aromatica</i>	Fragrant sumac
<i>Toxicodendron diversilobum</i>	Poison oak
APOCYNACEAE	DOGBANE FAMILY
* <i>Nerium oleander</i>	Oleander
ASTERACEAE	ASTER FAMILY
<i>Ambrosia acanthicarpa</i>	Annual sandbur
<i>Artemisia californica</i>	California sagebrush
<i>Baccharis salicifolia</i>	Mulefat
<i>Baccharis sarothroides</i>	Broom baccharis
* <i>Centaurea melitensis</i>	Tocalote
<i>Ericameria pinifolia</i>	Pinebush
<i>Helianthus annuus</i>	Annual sunflower
* <i>Helminthotheca echioides</i>	Bristly ox-tongue
<i>Heterotheca grandiflora</i>	Telegraphweed
<i>Lepidospartum squamatum</i>	Scalebroom
* <i>Logfia gallica</i>	Narrowleaf cottonrose
<i>Pseudognaphalium canescens</i>	Wright's cudweed
* <i>Pulicaria paludosa</i>	Spanish false fleabane
<i>Senecio flaccidus</i> var. <i>douglasii</i>	Bush senecio
* <i>Sonchus asper</i> ssp. <i>asper</i>	Prickly sow thistle
<i>Xanthium strumarium</i>	Cocklebur
BORAGINACEAE	BORAGE FAMILY
<i>Eriodictyon trichocalyx</i>	Hairy yerba santa
<i>Pectocarya linearis</i> ssp. <i>ferocula</i>	Slender comb seed
BRASSICACEAE	MUSTARD FAMILY
* <i>Brassica fruticulosa</i>	Mediterranean cabbage
* <i>Hirschfeldia incana</i>	Short-pod mustard
<i>Nasturtium officinale</i>	Watercress
* <i>Raphanus sativus</i>	Jointed charlock
* <i>Sisymbrium orientale</i>	Indian hedge mustard
CACTACEAE	CACTUS FAMILY
<i>Opuntia littoralis</i>	Prickly pear
CHENOPODIACEAE	GOOSEFOOT FAMILY
* <i>Dysphania ambrosioides</i>	Mexican tea
* <i>Salsola tragus</i>	Russian thistle
CISTACEAE	ROCKROSE FAMILY
<i>Crocanthemum scoparium</i> var. <i>scoparium</i>	Peak rushrose
CONVOLVULACEAE	MORNINGGLORY FAMILY
<i>Cuscuta</i> sp.	Unid. dodder
CUCURBITACEAE	GOURD FAMILY
<i>Cucurbita foetidissima</i>	Calabazilla
EUPHORBIACEAE	SPURGE FAMILY
<i>Croton californicus</i>	Desert croton
<i>Croton setiger</i>	Turkey-mulleion
* <i>Euphorbia peplus</i>	Petty spurge
<i>Euphorbia serpillifolia</i>	Thyme-leafed spurge

## Attachment 5. Project Species List

Latin Name	Common Name
* <i>Ricinus communis</i>	Castor bean
FABACEAE	PEA FAMILY
<i>Acmispon glaber</i>	Deerweed
<i>Astragalus pomonensis</i>	Pomona milkvetch
* <i>Mellilotus alba</i>	White sweet-clover
FAGACEAE	BEECH FAMILY
<i>Quercus agrifolia</i>	Coast live oak
GROSSULARIACEAE	CURRENT FAMILY
<i>Ribes aureum</i>	Golden currant
HYDROPHYLLACEAE	WATERLEAF FAMILY
<i>Emmenanthe penduliflora</i>	Whispering bells
<i>Phacelia ramosissima</i>	Branching phacelia
LAMIACEAE	MINT FAMILY
* <i>Marrubium vulgare</i>	Common horehound
* <i>Mentha spicata</i>	Spearmint
LYTHRACEAE	MYRTLE FAMILY
<i>Lagerstroemia indica</i>	Crepe myrtle
MORACEAE	MULBERRY FAMILY
* <i>Morus alba</i>	White mulberry
MYRSINACEAE	MYRSINE FAMILY
* <i>Lysimachia arvensis</i>	Scarlet pimpernel
MYRTACEAE	EUCALYPTUS FAMILY
* <i>Eucalyptus</i> sp.	Ornamental eucalyptus
OLEACEAE	OLIVE FAMILY
<i>Fraxinus uhdei</i>	Shamel ash
ONAGRACEAE	EVENING PRIMROSE FAMILY
<i>Camissoniopsis bistorta</i>	California sun cup
<i>Epilobium brachycarpum</i>	Annual fireweed
<i>Epilobium ciliatum</i>	Willow-herb
<i>Ludwigia peploides</i>	Floating water primrose
PLANTAGINACEAE	PLANTAIN FAMILY
<i>Penstemon spectabilis</i>	Showy penstemon
* <i>Plantago major</i>	Common plantain
* <i>Veronica anagallis-aquatica</i>	Water speedwell
PLANTANACEAE	SYCAMORE FAMILY
<i>Platanus racemosa</i>	California sycamore
* <i>Platanus</i> × <i>hispanica</i>	London plane tree
PHRYMACEAE	LOPSEED FAMILY
<i>Mimulus guttatus</i>	Seep monkeyflower
POLEMONIACEAE	PHLOX FAMILY
<i>Navarretia hamata</i>	Hooked navarretia
POLYGONACEAE	BUCKWHEAT FAMILY
<i>Eriogonum fasciculatum</i>	California buckwheat
* <i>Rumex crispus</i>	Curly dock
PORTULACAEAE	PURSLANE FAMILY
* <i>Portulaca oleraceae</i>	Common purslane
RHAMNACEAE	BUCKTHORN FAMILY
<i>Frangula californica</i>	California coffeeberry
ROSACEAE	ROSE FAMILY
<i>Cercocarpus betuloides</i>	Birch leaf mountain mahogany
SALICACEAE	WILLOW FAMILY

## Attachment 5. Project Species List

Latin Name	Common Name
<i>Salix exigua</i>	Narrow-leaf willow
<i>Salix goodingii</i>	Gooding's black willow
SAPINDACEAE	SOAPBERRY FAMILY
* <i>Koelreuteria bipinnata</i>	Goldenrain tree
SOLANACEAE	NIGHTSHADE FAMILY
<i>Datura wrightii</i>	Jimsonweed
* <i>Nicotiana glauca</i>	Tree tobacco
ULMACEAE	ELM FAMILY
* <i>Ulmus parvifolia</i>	Chinese elm
MONOCOTYLEDONS	
ARECACEAE	PALM FAMILY
* <i>Washingtonia filifera</i>	California fan palm
CYPERACEAE	SEDGE FAMILY
<i>Carex</i> sp.	Unid. sedge
* <i>Cyperus involucratus</i>	Umbrella sedge
LILIACEAE	LILY FAMILY
<i>Asparagus asparagoides</i>	African asparagus fern
POACEAE	GRASS FAMILY
* <i>Bromus diandrus</i>	Ripgut brome
* <i>Bromus madritensis</i> ssp. <i>rubens</i>	Red brome
* <i>Cynodon dactylon</i>	Bermuda grass
* <i>Echinochloa colona</i>	Jungle rice
* <i>Ehrharta erecta</i>	Upright veldt grass
* <i>Festuca myuros</i>	Rattail sixweeks grass
* <i>Hordeum murinum</i>	Foxtail barley
* <i>Paspalum dilatatum</i>	Dallis grass
* <i>Polypogon monspeliensis</i>	Annual beard grass
* <i>Stipa miliacea</i>	Smilo grass
TYPHACEAE	CATTAIL FAMILY
<i>Typha latifolia</i>	Broadleaf cattail
VERTEBRATE ANIMALS	
REPTILIA	REPTILES
IGUANIDAE	IGUANID LIZARDS
<i>Sceloporus occidentalis</i>	Western fence lizard
<i>Uta stansburiana</i>	Side-blotched lizard
TEIIDAE	WHIPTAIL FAMILY
** <i>Aspidoscelis tigris stejnegeri</i>	Coastal whiptail
AVES	BIRDS
CATHARTIDAE	NEW WORLD VULTURES
<i>Cathartes aura</i>	Turkey vulture
ACCIPITRIDAE	HAWKS, EAGLES, HARRIERS
<i>Buteo jamaicensis</i>	Red-tailed hawk
COLUMBIDAE	PIGEONS AND DOVES
<i>Zenaida macroura</i>	Mourning dove
TROCHILIDAE	HUMMINGBIRDS
<i>Calypte anna</i>	Anna's hummingbird
TYRANNIDAE	TYRANT FLYCATCHERS
<i>Sayornis nigricans</i>	Black phoebe
CORVIDAE	CROWS AND RAVENS
<i>Aphelocoma californica</i>	California scrub jay
<i>Corvus brachyrhynchos</i>	American crow

## Attachment 5. Project Species List

Latin Name	Common Name
AEGITHALIDAE	BUSHTITS
<i>Psaltriparus minimus</i>	Bushtit
MIMIDAE	MOCKINGBIRDS AND THRASHERS
<i>Mimus polyglottos</i>	Northern mockingbird
EMBERIZIDAE	SPARROWS AND TANAGERS
<i>Pipilo maculatus</i>	Spotted towhee
<i>Pipilo redivivum</i>	California towhee
<i>Melospiza melodia</i>	Song sparrow
FRINGILLIDAE	FINCHES
<i>Carpodacus mexicanus</i>	House finch
<i>Carduelis saltria</i>	Lesser goldfinch
MAMMALIA	MAMMALS
CRICETIDAE	PACKRAT FAMILY
<i>Neotoma</i> sp.	Unid. woodrat
SCIURIDAE	SQUIRRELS
<i>Spermophilus beecheyi</i>	California ground squirrel
CANIDAE	FOXES, WOLVES, AND COYOTES
<i>Canis latrans</i>	Coyote

Species introduced to California are indicated by an asterisk. Special-status species are indicated by two asterisks. This list includes only species observed on the site. Others may have been overlooked or unidentifiable due to season (amphibians are active during rains, reptiles during summer, some birds (and bats) migrate out of the area for summer or winter, some mammals hibernate, many plants are identifiable only in spring). Plants were identified using keys, descriptions, and illustrations in Baldwin et al (2012). Plant taxonomy and nomenclature generally follow Baldwin et al. (2012). Wildlife taxonomy and nomenclature generally follow Stebbins (2003) for amphibians and reptiles, AOU (1998) for birds, and Wilson and Ruff (1999) for mammals.

**Attachment 6 – Project Photos**



Photo 1: East-facing view of the Development Area with a small patch of wetland vegetation in the foreground.



Photo 2: Northwest-facing overview of the Development Area in the western portion of the Project Site.



Photo 3: East-facing view of the disturbed habitat within the central portion of the Development Area, within the western half of the Project Site.



Photo 4: Northwest-facing overview of the Conservation Area showing a stand of California buckwheat scrub and a narrow band of mulefat thickets.



Photo 5: Northeast-facing overview of the Conservation Area showing a stand of California buckwheat scrub and a narrow band of mulefat thickets.



Photo 6: Northeast-facing overview of cattail marshes at one of the side drainages within the Conservation Area.



Photo 7: Close-up view of dense cattail marshes at one of the side drainages within the Conservation Area.



Photo 8: North-facing view of cattail marshes at one of the side drainages within the Development Area.



Photo 9: West-facing view of California buckwheat scrub within the Conservation Area.



Photo 10: East-facing view of California buckwheat scrub within the Conservation Area.



Photo 11: Southwest-facing view of patchy California buckwheat scrub along the southern access road within the Development Area.



Photo 12: West-facing view of patchy California buckwheat scrub and disturbed habitat along the southern access road within the Development Area.

**Appendix A – San Bernardino Kangaroo Rat and California Gnatcatcher Habitat Assessment for a 19-acre parcel located in Upland, San Bernardino County, California.**



July 28, 2022

Robert Dalquest, City of Upland  
Carl Winter, LSA

***Subject: San Bernardino Kangaroo Rat and California Gnatcatcher Habitat Assessment for a 19-acre parcel located in Upland, San Bernardino County, California***

Dear Mr. Dalquest and Mr. Winter:

This letter report presents the results of a focused habitat assessment for the federally and state endangered San Bernardino kangaroo rat (*Dipodomys merriami parvus*) (SBKR) and federally threatened California gnatcatcher (*Polioptila californica*) (CAGN) conducted at an approximate 19-acre parcel (biological study area or study area) located in Upland, San Bernardino County, California. This was prepared in support of a proposed residential subdivision (Tract 20245). A previous general biological report was prepared by RCA Associates in May 2022.

## **PROJECT LOCATION**

The study area is located north of East 15<sup>th</sup> Street and Red Hill North Drive, east of Fernando Avenue and west of Cerito Rojo Drive in the City of Upland, San Bernardino County (Figure 1). The study area is surrounded by urban development, with the Upland Hills Country Club located to the north, Red Hill Country Club to the southwest, the Dry Dock Depot Boat and RV Storage located to the southwest, and residential development (including city streets) abutting the study area to the west, south, and east.

## **Methodology**


Permitted SBKR and CAGN biologist Mikael Romich (USFWS 10(A)1(a) permit # TE-068799-5 and state scientific collecting permit #7043) conducted a habitat assessment for SBKR and CAGN for the study site on June 3 and July 1, 2022. The study site was assessed on foot with meandering transects and noting vegetation and soil characteristics that would be suitable for SBKR. The condition of the vegetation was noted to determine suitability for CAGN. All plant and wildlife species observed were recorded.

## **SITE DESCRIPTION**

The survey area was formerly a water detention basin and thus the far western part of the basin has two large culverts, as well as an overspill area. There was pooled water present and hydric vegetation at the base of the larger culvert and western toad (*Anaxyrus boreas*) tadpoles were observed. In addition, five drainage swales appear to enter the site's basin area from the Upland Hills Country Club to the north where small patches of hydric vegetation were observed.

# Figure 1. Survey Area Location

**Legend**

-  Biological Survey Area



Hydric vegetation observed included cattails, sedges, willow herb, curly dock, stinging nettle, seep monkeyflower, and water primrose. The swales in the east part of the survey area support a narrow riparian swath consisting of sandbar willow (*Salix exigua*), western sycamore (*Platanus racemosa*), and mulefat (*Baccharis salicifolia*).

Much of the western part of the survey area was mechanically cleared between 2020 and 2021; it is currently largely ruderal with sparse vegetation as it recovers from this disturbance. Seedlings and short-stature shrub species common in a sage scrub community were observed in the ruderal areas, such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), hairy yerbasanta (*Eriodictyon trichocalyx*), scalebroom (*Lepidospartum squamatum*), and deerweed (*Acmispon glaber*). Other common species included jimsonweed (*Datura stramonium*), ribwort plantain (*Plantago lanceolata*), California poppy (*Eschscholzia californica*), holly leaf navarretia (*Navarretia atractyloides*), and prickly lettuce (*Lactuca serriola*). Not subject to mechanical clearing is a narrow strip of habitat north of and abutting East 15<sup>th</sup> Street that is California buckwheat scrub. In addition, the eastern portion of survey area has been cleared in the past but is now recovered and is dominated by a native California sagebrush-California buckwheat scrub with subdominant species as described above.

## RESULTS AND DISCUSSION

### SBKR Habitat Assessment

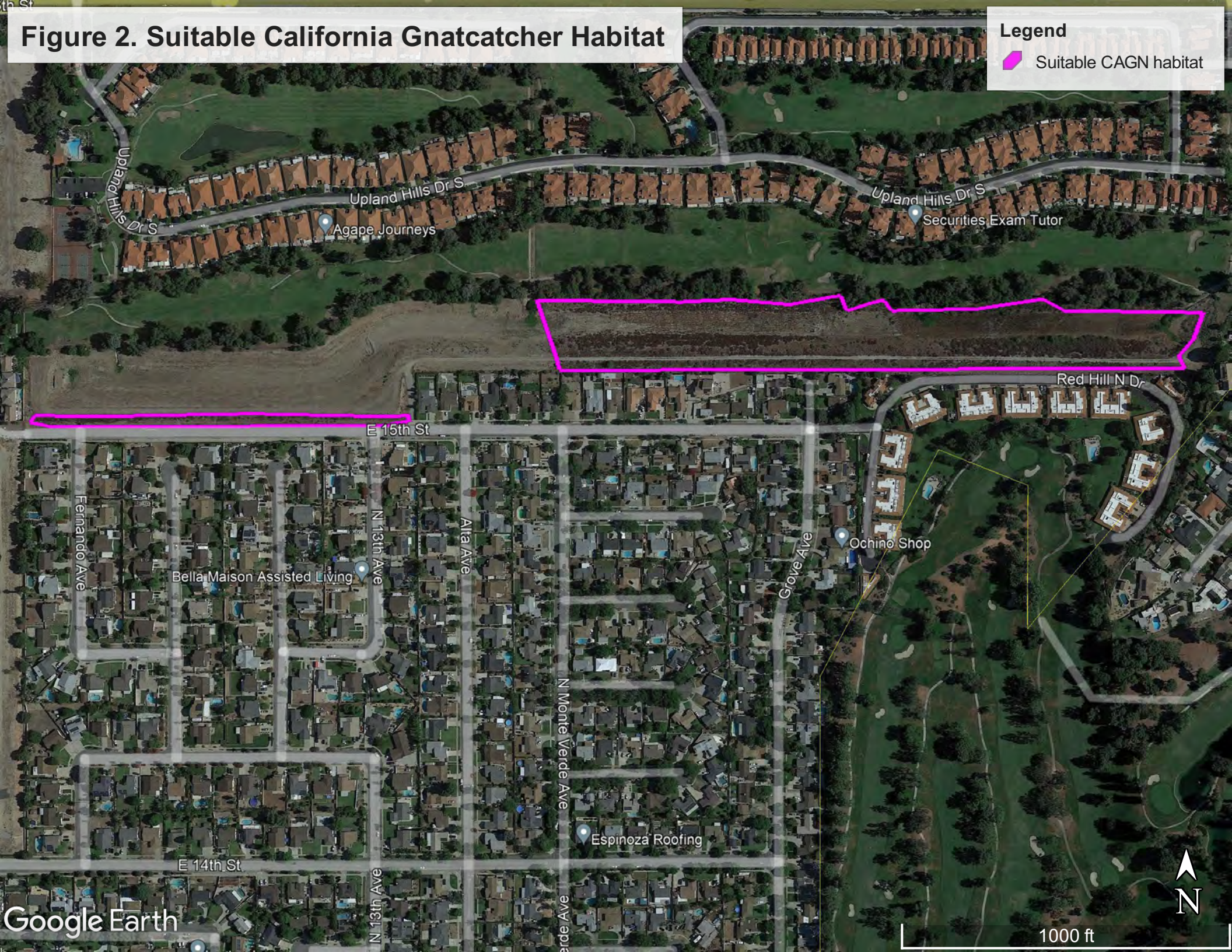
The habitat assessment determined that the study site does not provide suitable habitat characteristics for SBKR, primarily due to the lack of sandy substrates and absence of alluvial fan terraces. A review of 1938 aerial shows that even historically there was not evidence of fluvial processes at the study area. The soils on the basin bottom were compacted, which would also not be conducive to SBKR. Finally, the study area is outside of the current and historical known range of SBKR and does not overlap USFWS designated critical habitat for SBKR. SBKR would not occur at the study area.

### CAGN Habitat Assessment

The habitat assessment determined that the study area has habitat that could be suitable for CAGN, which consists of approximately 0.9 acre of California buckwheat scrub on the south facing slope north of and abutting East 15<sup>th</sup> Street in the western part of the survey area (Figure 2). In addition, 8.8 acres of habitat in the eastern part of the survey area was determined as suitable for CAGN (Figure 2). However, there are number of factors that suggest CAGN have a low potential to occur in the survey area. First, the study area occurs as a small island in a large matrix of urban development, making discovery, colonization, and dispersal of the site potentially difficult. Second, existing CAGN occupied habitat is not recorded nearby; the closest CAGN record is 5 miles to the northeast in an area that does not have any records since 1999. The next closest records occur 9 miles to the west near Bonelli Park where they appear to be regularly present. Finally, CAGN were not detected during the June 3 or July 1, 2022 surveys, nor during five (5) surveys conducted by RCA (2022) between January 25 and April 22, 2022. Considering these factors, CAGN have a low potential to occur in the survey area.

Figure 2. Suitable California Gnatcatcher Habitat

Legend  
Suitable CAGN habitat



## Least Bell's Vireo

In the eastern portion of the survey area, narrow strips of riparian vegetation at the north and south edges of the basin combined with non-native woodland habitat that separates the basin from the golf course, could provide suitable breeding habitat to the state and federally listed endangered least Bell's vireo (*Vireo bellii pusillus*) (Figure 3). Due to isolation of the survey area from other suitable habitat and the small size of the suitable habitat, least Bell's vireo is considered to have a low potential to occur in the eastern part of the survey area.

## Species Observed

Twenty-four avian species were observed during the habitat assessment: mourning dove, Anna's hummingbird, Cooper's hawk, red-tailed hawk, red shouldered hawk, acorn woodpecker, black phoebe, Say's phoebe, Cassin's kingbird, California scrub-jay, American crow, common raven, oak titmouse, barn swallow, cliff swallow, bushtit, Bewick's wren, American robin, northern mockingbird, house finch, lesser goldfinch, spotted towhee, hooded oriole, and common yellowthroat.

Other species observed were western toad (tadpoles), western whiptail (*Aspidoscelis tigris*), and desert cottontail (*Sylvilagus audubonii*). Likely due to the regular presence of ribwort plantain, a commonly used caterpillar host plant, butterfly activity in the basin area was high. In the western part of the survey area, monarch (*Danaus plexippus*) was observed, although its host plant (milkweed) was not recorded.

## Conclusion and Recommendations


The western part of the survey area was mechanically disturbed between 2020 and 2021 when much of the vegetation was cleared and is currently largely ruderal with sparse vegetation cover. The eastern part of the survey area is dominated by California sagebrush-California buckwheat scrub with some riparian and wetland species present. The study area was confirmed not to be suitable for SBKR and is outside of their current or historical range. Approximately 9.7 acres of California buckwheat scrub and California sagebrush-California buckwheat scrub habitat was found to be potentially suitable for CAGN on the site, but due to distance from other known occupied areas and that none have been detected during previous field work, CAGN have a low potential to occur. To confirm they are absent, a focused breeding or non-breeding survey may be warranted.

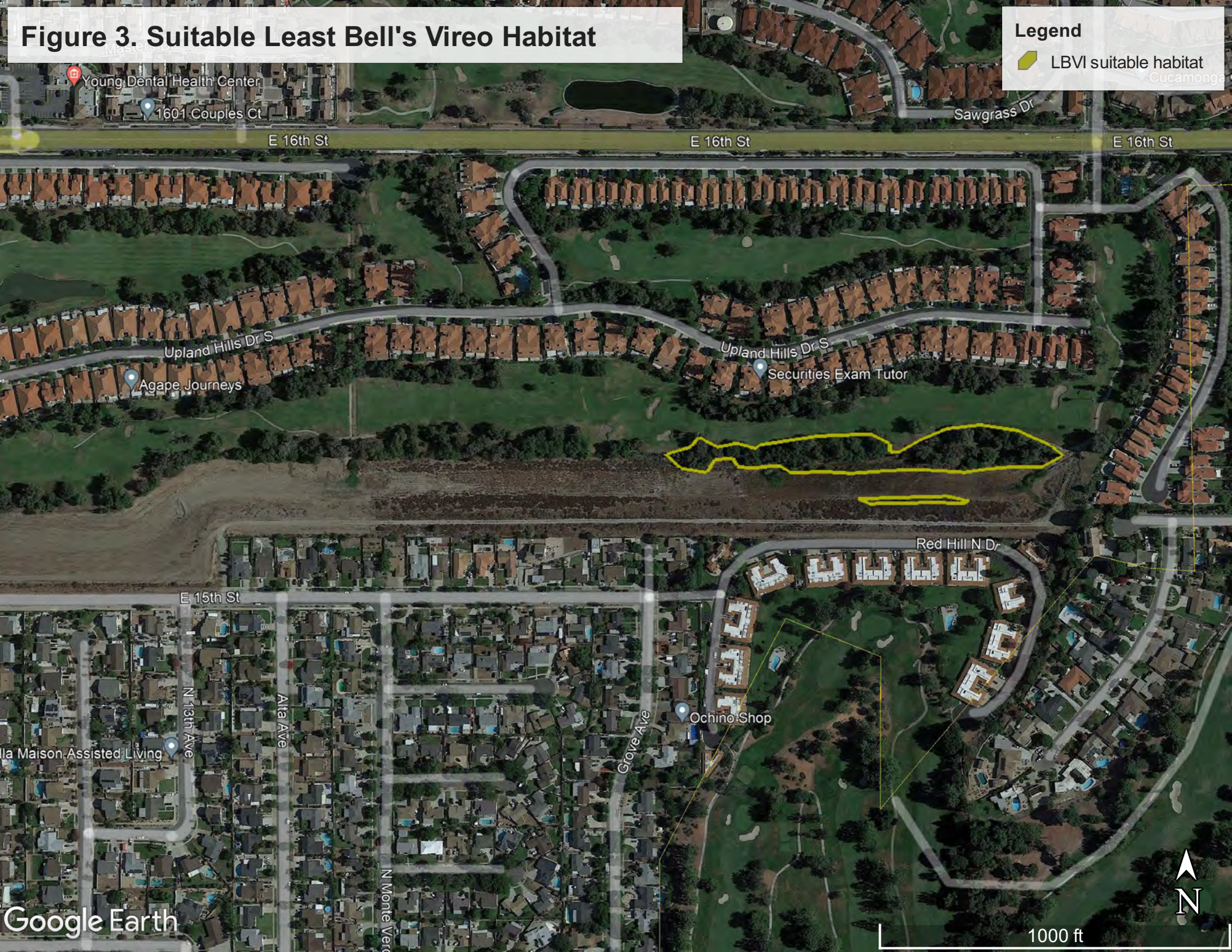
A small patch of potentially suitable habitat for breeding least Bell's vireo was observed in the eastern part of the survey area. Should project-related activities need to remove this habitat, a focused breeding survey for least Bell's vireo may be warranted.

A total of seven (8) areas of hydric vegetation were observed, one associated with the culverts at the western end of the basin, four small patches due to golf course drainage, one larger patch at east end of basin, and two narrow strips of riparian vegetation at the north and south parts of the basin in the eastern portion of the survey area. The presence of these drainages may warrant further investigation, such as an updated formal jurisdictional delineation, to determine if removal during project

# Figure 3. Suitable Least Bell's Vireo Habitat

**Legend**

-  LBVI suitable habitat



development may require regulatory permits from agencies such as the California Regional Water Control Board, California Department of Fish and Wildlife, and/or the Army Corps of Engineers.

I certify that the information submitted in this report is complete and accurate to the best of my knowledge and belief. Please let me know if you have any questions on this report. I can be reached at (909) 810-0718 or [mike.romich@gmail.com](mailto:mike.romich@gmail.com).

Sincerely,



Mikael Romich  
Senior Biologist



C+1 909.810.0718

[romich@originbioloy.com](mailto:romich@originbioloy.com)

[originbiology.com](http://originbiology.com)

### Literature Cited

RCA Associates. 2022. General Biological Resources Assessment (APN: 3105-171-08). Prepared for: The Colonies Partners, LLC. 37 p.

Appendix A – Site Photographs



Photo 1. Example of the ruderal habitat within the basin in the central part of the survey area. On the southern slope scalebroom shrubs are evident.



Photo 2. Example of the ruderal habitat within the basin in the western part of the survey area.



Photo 3. Example of California buckwheat scrub located in the southwestern part of the survey area that is suitable for California gnatcatcher.



Photo 4. Example of California sagebrush-California buckwheat scrub located in the eastern part of the survey area that is suitable for California gnatcatcher.



Photo 5. Example of California sagebrush-California buckwheat scrub located in the eastern part of the survey area that is suitable for California gnatcatcher.



Photo 6. Example of one of the hydrophytic vegetation areas in the survey area supported by golf course run-off.



Photo 7. In the background is riparian habitat and non-native woodland in the eastern part of the survey area that that is suitable for least Bell's vireo.



Photo 8. Example of mulefat scrub in the eastern part of the survey area that that is suitable for least Bell's vireo.