



November 11, 2017

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SUBJECT: *Results of a Habitat Suitability Evaluation, ±8.45-acre Site, City of Placentia, Orange County, California*

Dear Jeremy:

This letter report presents findings of a reconnaissance-level survey conducted to generally evaluate the suitability of a ±8.45-acre site to support sensitive biological resources as part of the environmental review process.

Introduction

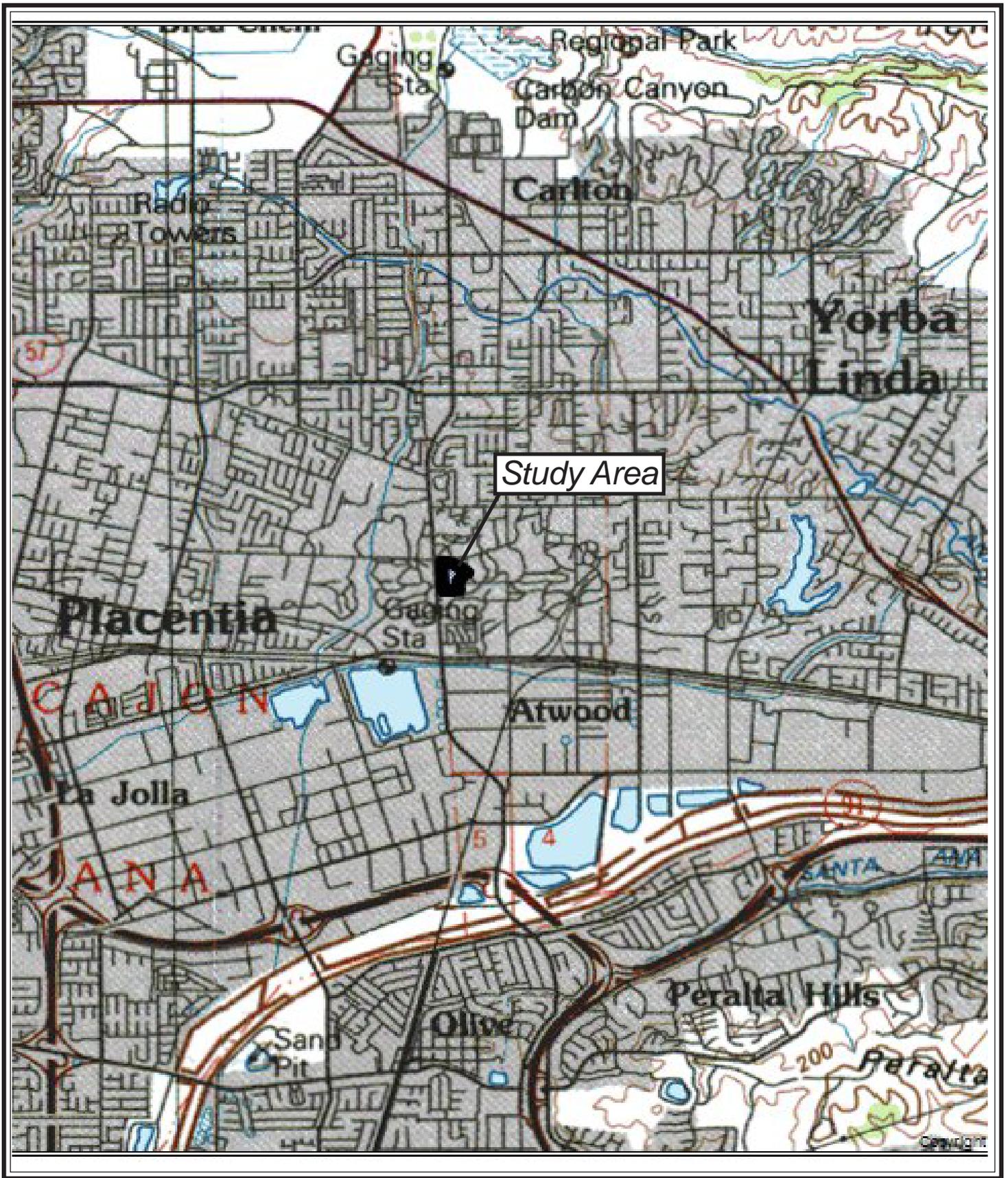
The subject ±8.45-acre site is regionally located in Orange County, California (***Plate 1***). More specifically, the site is located at the southeast intersection of Alta Vista Street and South Rose Drive in the City of Placentia; Township 3 South, Range 9 West, unnumbered Section on the “Yorba Linda” and “Orange” USGS 7.5-minute quadrangle maps (***Plate 2***).

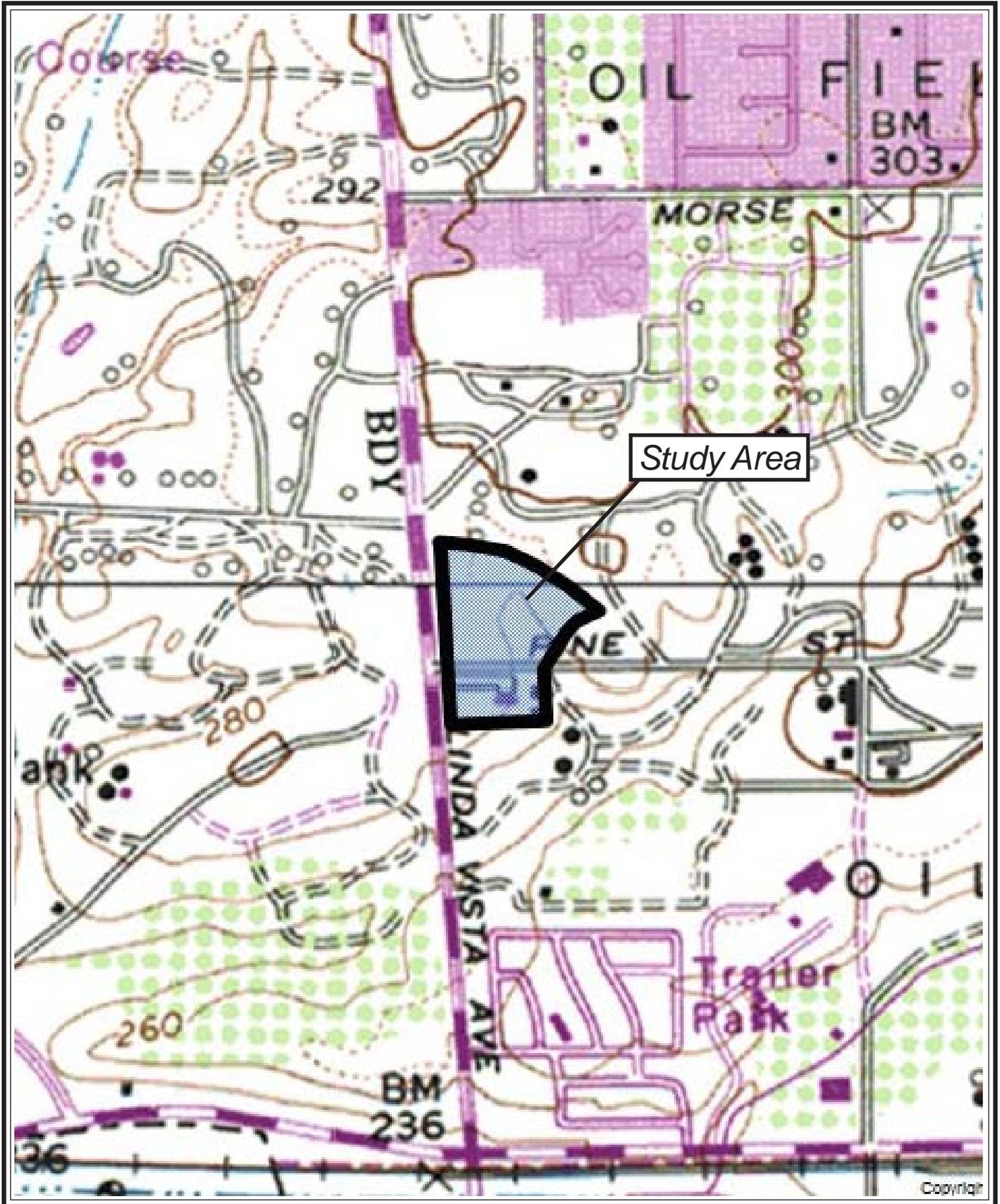
Projects proposed in the area that contain potentially suitable habitat to support sensitive biological resources must demonstrate to reviewing agencies that potential project-related impacts to sensitive biological resources are adequately addressed and mitigated pursuant to the California Environmental Quality Act (CEQA) and the federal Endangered Species Act (Act) of 1973, as amended. Accordingly, results of this habitat suitability evaluation are intended to provide the applicant and resource agencies with preliminary biological information required for planning and permitting decisions concerning the proposed project. Due to the inherent limitations of unseasonal or habitat-based data, definitive conclusions regarding the actual presence or absence of certain sensitive biological resources cannot necessarily be made in this report. Therefore, conclusions relative to potential presence or absence of selected sensitive biological resources are based solely on the nature of habitat present.

Regulatory Setting

Biological resources within the project site may fall under the jurisdiction of several federal and state agencies, including, but not necessarily limited to, California Department of Fish and Game/Wildlife (CDFG/CDFW), U.S. Fish and Wildlife Service (FWS), County of Orange (County), City of Placentia (City), Regional Water Quality Control Board (RWQCB), and U.S. Army Corps of Engineers (USACE).

Potential constraints posed by biological resources upon the project site were generally evaluated by ranking the following sensitive biological issues, listed in descending order of significance: (1) a federally or state-listed endangered or threatened species of plant or animal; (2) streambeds, wetlands, and their associated vegetation; (3) habitats suitable to support a federally or state-listed endangered or threatened species of plant or wildlife; (4) species designated as candidates for federal listing; (5) habitat, other than





wetlands, considered sensitive by regulatory agencies or resource conservation organizations; and (6) other species or issues of special concern to agencies, resource conservation organizations, or other interest groups. This analysis of biological resources is based on information compiled through field reconnaissance, extensive literature review, and by applicable reference materials. Methods used in this study are outlined below.

Methodology

Literature Search

Documentation pertinent to the biological resources in the vicinity of the site was reviewed and analyzed. Primary data sources reviewed to evaluate the occurrence potential of special-status resources on the subject site, included, but were not necessarily limited to: (1) California Natural Diversity Data Base (CNDDB 2017) and (2) California Native Plant Society (CNPS 2017) online inventory for the "Yorba Linda" and "Orange" USGS 7.5-minute quadrangle maps, (3) available literature pertaining to habitat requirements of special-status species potentially occurring in the project site; and (4) distribution data contained in Hall (1981); Grinnell and Miller (1944); Garrett and Dunn (1981); Holland (1986); Stebbins (1985); Hickman (1993); and CNPS (2001).

Field Survey

Ecological Sciences biologists conducted a reconnaissance-level field survey to characterize on-site habitats and to generally evaluate their potential to support sensitive species on October 9, 2017. Plant species and vegetation communities were primarily identified by walking meandering transects over the site. All direct observations of wildlife were recorded, as was wildlife sign. In addition to species actually detected, expected use of the site by other wildlife was evaluated from habitat analysis of the site, combined with known habitat preferences of locally occurring wildlife species. The site was also evaluated for the potential presence of plant, animal, or habitat considered rare, threatened, sensitive, endangered, or otherwise unique by regulatory or resource agencies. Weather conditions during the survey included 1-3 m.p.h. breeze, clear skies, and air temperatures of approximately 75-83°F.

Existing Site Conditions

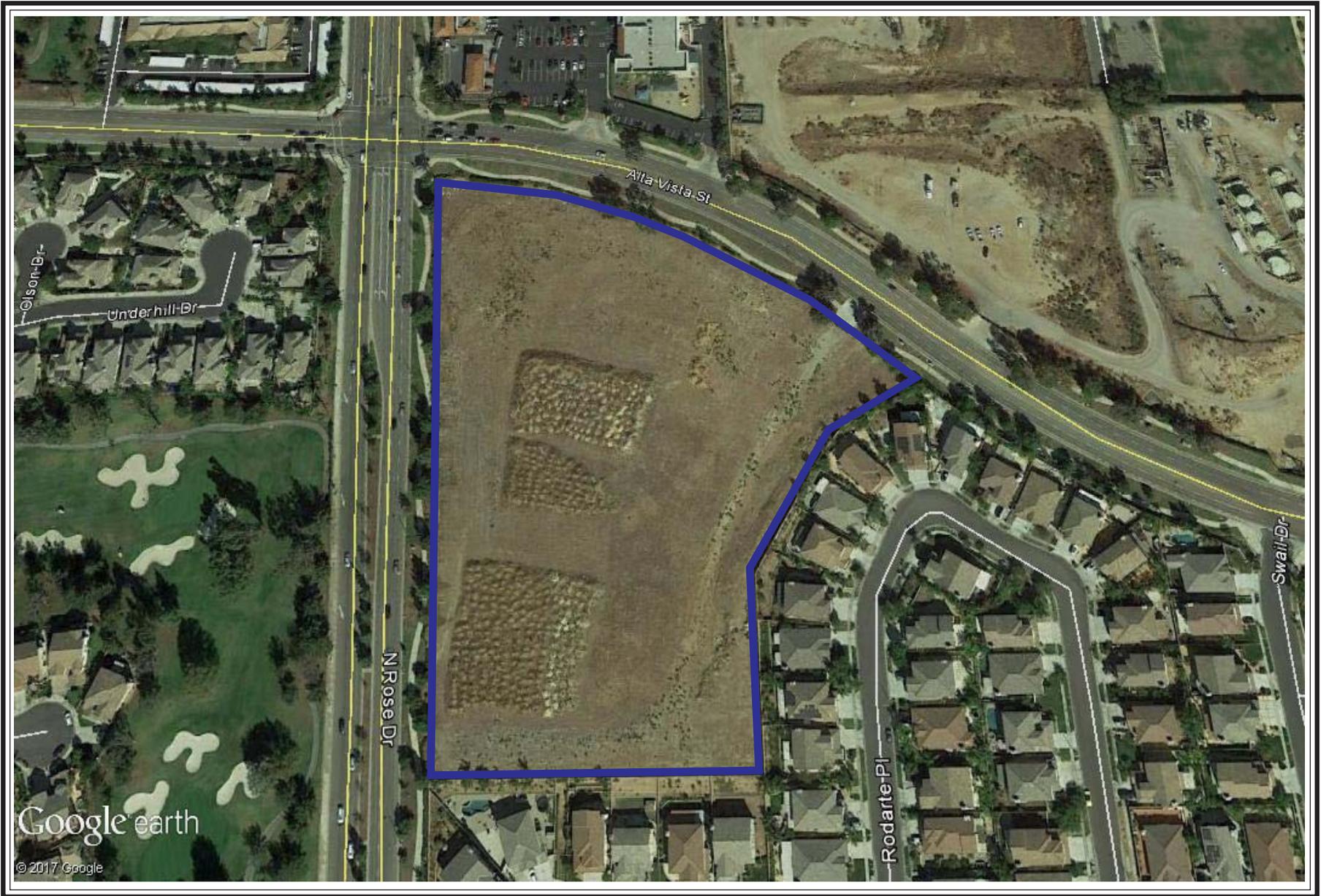
The site is characterized as disturbed vacant lot located in a developed area of Placentia. The site contains soil and debris piles and a riser drain near the center of the parcel. The site is entirely fenced and appears to be exposed to recurring anthropogenic disturbances. **Plate 3** provides an aerial view of the site and vicinity. **Plates 4a-4b** illustrate existing site conditions at the time of the survey.

Vegetation

Introduced (non-native) plant species dominate the site. Ruderal species recorded included Mediterranean grass (*Schismus barbatus*), foxtail chess (*Bromus madritensis* ssp. *rubens*), Russian thistle (*Salsola tragus*), Jimsonweed (*Datura stramonium*), black mustard (*Brassica nigra*), spotted spurge (*Euphorbia maculata*), and Australian saltbush (*Atriplex semibaccata*). Landscaping species included gum tree (*Eucalyptus* sp.) and fan palm (*Washingtonia filifera*).

Wildlife

Common bird species observed during the survey included northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaidura macroura*), European starling (*Sturnus vulgaris*), and house sparrow (*Passer domesticus*). One reptile species was recorded that included side-blotched lizard (*Uta stansburiana*). Mammals recorded included California ground squirrel (*Spermophilus beecheyi*).



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October 2017

 = Study Area

plate 3

Site Vicinity Aerial

8.45-acre Site



View to south



View to north



View to east



View to west

General Soils Analysis / Soil Conservation Map Review

A review of soil maps prepared for the area by the Natural Resource Conservation Service (NRCS 2017) Custom Soil Resource Report for Orange County and Part of Riverside County, California indicate that the subject site is located within an area mapped as Myford sandy loam, Rincon clay loam (2-9% slopes), Rincon clay loam (9-15% slopes), and Yorba gravelly sandy loam.

Sensitive Biological Resources Evaluation

Discussed in this section are plant and wildlife species potentially present in the study area that have been afforded special recognition by federal or state agencies. The focus of this discussion is on those species that would potentially pose considerable constraints on the proposed project because of their high sensitivity status (listed or proposed for listing as rare, threatened, or endangered) with state and/or federal resource agencies. In addition, plants included on Lists 1, 2, 3, or 4 of the CNPS inventory are also considered of special-status. Vegetation communities that are unique, of relatively limited distribution, or of particular value to wildlife and considered sensitive by state and/or federal resource agencies are also generally discussed.

In general, those species presented in **Tables 1 and 2** that are “not expected” or that have a “low occurrence potential” generally correspond to “less than significant” under CEQA. The occurrence potential of special-status plant and wildlife species is primarily based on habitat types present, occurrence records of sensitive species from the site vicinity, and results of the on-site reconnaissance survey. No focused botanical or zoological surveys were conducted.

Special-Status Plant Species

No special-status plant species were detected on site during the reconnaissance survey and none are expected due to lack of suitable habitat. Special-status plant species known from the region that potentially occur within the project site are summarized below in **Table 1**.

Table 1

Special-Status Plant Species Known to Occur in the Site Vicinity¹

Common Name Scientific Name	Status			Habitat Requirements	Occurrence Potential
	Federal	State	CNPS		
Chaparral sand-verbena <i>Abronia villosa</i> var. <i>aurita</i>	--	--	1B	Chaparral, coastal scrub with sandy soils	Not Expected: suitable habitat not present on site
Southern tarplant <i>Centromadia parryi</i> ssp. <i>australis</i>	--	--	1B	Valley and foothill grassland, sage scrub, riparian woodland	Not Expected: suitable habitat not present on site
Plummer's mariposa lily <i>Calochortus plummerae</i>	FSC	--	1B	Chaparral, cismontane woodlands, coastal scrub, Lower coniferous forests, and grasslands; associated with granitic soils.	Not Expected: suitable habitat not present on site
Intermediate mariposa lily <i>Calochortus weedii</i> var. <i>intermedius</i>	FSC	--	1B	Chaparral, coastal scrub, grasslands; often associated with dry, rocky, open slopes.	Not Expected: suitable habitat not present on site
Parry's spineflower <i>Chorizanthe parryi</i> ssp. <i>parryi</i>	FSC	--	3	Chaparral and coastal scrub; associated with sandy or rocky openings.	Not Expected: suitable habitat not present
Many-stemmed dudleya <i>Dudleya multicaulis</i>	FSC	--	1B	Chaparral, coastal scrub, and grasslands; often associated with clay soils.	Not Expected: suitable habitat not present

Table 1-continued

Special-Status Plant Species Known to Occur in the Site Vicinity¹

Common Name Scientific Name	Status			Habitat Requirements	Occurrence Potential
	Federal	State	CNPS		
Santa Ana River woollystar <i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	FE	CE	1B	Coastal scrub, chaparral, and alluvial scrub; associated with sandy soil in river floodplains or terraced fluvial deposits.	Not Expected: suitable habitat not present
Robinson's pepper-grass <i>Lepidium virginicum</i> var. <i>robinsonii</i>	--	--	1B	Chaparral and coastal scrub; associated with dry soils; known to occur on roadsides.	Not Expected: suitable habitat not present
California muhly <i>Muhlenbergia californica</i>	--	--	1B	Chaparral, coastal scrub, lower montane coniferous forest, and meadows; associated with moist soils, seeps, and streambanks.	Not Expected: suitable habitat not present
Salt spring checkerbloom <i>Sidalcea neomexicana</i>	--	--	2	Chaparral, coastal scrub, lower montane coniferous forest, Mohavean desert scrub, coastal brackish marsh, and alkali playas, seeps, and marshes; associated with moist, alkaline soils.	Not Expected: suitable habitat not present

KEY: ¹Based primarily on review of 2017 CNDDDB and 2017 CNPS online databases

Federal	CNPS
FE: Federally Endangered	List 1A: Plants presumed extinct in California.
FT: Federally Threatened Species	List 1B: Plants rare and endangered in California and elsewhere
FPE: Federally Proposed Endangered	List 2: Plants rare and endangered in California, but more common elsewhere
FPT: Federally Proposed Threatened	List 3: Taxa about which more information is needed
FC: Federal Candidate Species	List 4: Plants of limited distribution
State	
CE: State Endangered	
CT: State Threatened	
CR: State Rare	

Special-Status Wildlife Species

No special-status wildlife species were directly observed on site, and none are expected due to absence of suitable habitat. Sensitive wildlife species known from the site vicinity are summarized below in **Table 2**.

Table 2

Special-Status Wildlife Species Known from the Site Vicinity¹

Common Name Scientific Name	Status		Habitat Requirements	Occurrence Potential
	Federal	State		
REPTILES				
San Diego horned lizard <i>Phrynosoma coronatum</i> <i>blainvillii</i>	FSC	CSC	Relatively open grasslands, scrublands, and woodlands with fine, loose soil	Not Expected: no suitable habitat present
Western pond turtle <i>Emys marmorata</i>	--	CSC	Permanent or nearly permanent bodies of water with basking sites	Not Expected: suitable habitat not present
Coast patch-nosed snake <i>Salvadora hexalepis</i> <i>virgultea</i>	--	CSC	Semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains	Not Expected: suitable habitat not present
Orange-throated whiptail <i>Aspidoscelis hyperythra</i>	--	--	Relatively open grasslands, scrublands, and woodlands with fine, loose soil	Not Expected: suitable habitat not present
Northern red diamond rattlesnake <i>Crotalus ruber ruber</i>	--	CSC	Sage scrub, chaparral, grasslands	Not Expected: suitable habitat not present

Table 2-continued

Special-Status Wildlife Species Known from the Site Vicinity¹

Common Name Scientific Name	Status		Habitat Requirements	Occurrence Potential
	Federal	State		
BIRDS				
White-tailed kite (nesting) <i>Elanus leucurus</i>	MNBMC	CFP	Open vegetation and uses dense woodlands for cover	Not Expected: no suitable habitat present
Northern harrier (nesting) <i>Circus cyaneus</i>	--	CSC	Coastal salt marsh, freshwater marsh, grasslands, and agricultural fields	Not Expected: no suitable habitat present
Sharp-shinned hawk (nesting) <i>Accipiter striatus</i>	--	CSC	Woodlands and forages over dense chaparral and scrublands	Not Expected: no suitable habitat present
Cooper's hawk (nesting) <i>Accipiter cooperi</i>	--	CSC	Dense stands of live oaks and riparian woodlands	Not Expected: no suitable habitat present
Western burrowing owl <i>Athene cunicularia hypugea</i>	FSC, MNBMC	CSC	Grasslands and open scrub	Not Expected: no suitable habitat present
California horned lark <i>Eremophila alpestris actia</i>	--	CSC	Grasslands, disturbed areas, agriculture fields, and beach areas	Not Expected: no suitable habitat present
Loggerhead shrike <i>Lanius ludovicianus</i>	FSC, MNBMC	CSC	Grasslands with scattered shrubs, trees, fences or other perches	Low Potential: marginally suitable habitat present
California coastal gnatcatcher <i>Polioptila californica californica</i>	FT	CSC	Coastal sage scrub in areas of flat or gently sloping terrain	Not Expected: suitable habitat not present
Mountain plover <i>Charadrius montanus</i>	FPT	CSC	Agricultural areas, fallow fields, grasslands, prairies	Not Expected: no suitable habitat present
Peregrine falcon <i>Falco peregrinus</i>	FE	CE	Rocky cliffs, scrub, wooded habitats	Not Expected: no suitable habitat present
Yellow-breasted chat <i>Icteria virens</i>	--	CSC	Riparian thickets and riparian woodlands with dense understory	Not Expected: suitable habitat not present
Least Bell's vireo <i>Vireo bellii pusillus</i>	FE	CE	Willow dominated riparian habitat with dense understory	Not expected; suitable habitat not present
Long-eared owl <i>Asio otus</i>	--	CSC	Cismontane woodland, riparian woodland	Not expected; suitable habitat not present
California black rail <i>laterallus jamaicensis coturniculus</i>	FSC	CT	Coastal salt marshes but also in some freshwater marshes	Not expected; suitable habitat not present
Tricolored blackbird <i>Agelaius tricolor</i>	--	CCE	Marshes for nesting; forages in fields and scrub habitats	Not expected; suitable habitat not present
Grasshopper sparrow <i>Ammodramus savannarum</i>		CSC	Coastal sage scrub, grassland	Not expected; suitable habitat not present
Coastal cactus wren <i>Campylorhynchus brunneicapillus couesi</i>	--	CSC	Desert succulent scrub, desert wash, scrub and chaparral habitats with cactus	Not Expected: suitable habitat not present
S. California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	--	CSC	Coastal sage scrub, grasslands	Not Expected: suitable habitat not present
MAMMALS				
Yuma myotis <i>Myotis yumanensis</i>	--	CSC	Found in a variety of habitats; optimal habitats are open forests and woodlands with sources of water over within to feed	Not Expected: no suitable habitat present
Western mastiff bat <i>Eumops perotis californicus</i>	--	CSC	Primarily arid lowlands and coastal basins with rugged, rocky terrain, along with suitable crevices for day-roosts; primarily a cliff-dweller	Not Expected: no suitable habitat present
Mexican long-tongued bat <i>Choeronycteris mexicana</i>	--	CSC	Desert, montane, riparian, to pinyon-juniper habitats.	Not Expected: no suitable habitat present

Table 2-continued

Special-Status Wildlife Species Known from the Site Vicinity¹

Common Name Scientific Name	Status		Habitat Requirements	Occurrence Potential
	Federal	State		
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	--	CSC	Moderate to dense sage scrub; rocky outcrops	Not Expected: no suitable habitat present
San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	FSC	CSC	Chaparral, coastal scrub, grasslands	Not Expected: suitable habitat not present
Los Angeles pocket mouse <i>Perognathus longimembris brevinasus</i>	FSC	CSC	Grasslands and coastal sage scrub; prefers lower elevational areas with open ground and sandy soils	Not Expected: suitable habitat not present

KEY: ¹Based primarily on review of 2017 CNDDDB; (nesting) = For most taxa the CNDDDB is interested in sightings for the presence of resident populations. For some species (primarily birds), the CNDDDB only tracks certain parts of the species range or life history (e.g., nesting locations). The area or life stage is indicated in parenthesis after the common name.

Status:

Federal—U.S. Fish and Wildlife Service	State—California Department of Fish and Game
FE: Federally Endangered	CE: California Endangered
FT: Federally Threatened	CCE: California Candidate Endangered
FPE: Federally Proposed Endangered	CT: California Threatened
FPT: Federally Proposed Threatened	CCE: California Candidate (Endangered)
FC: Federal Candidate for listing as threatened or endangered	CCT: California Candidate (Threatened)
FSC: Federal Species of Concern- no formal protection is granted to this designation	CFP: California Fully Protected
MNBMC: Migratory Nongame Birds of Management Concern	CP: California Fully Protected
	CSC: California Species of Special Concern

Special-Status Habitats

Special-status habitat types are vegetation communities that support concentrations of sensitive plant or wildlife species, are of relatively limited distribution, or are of particular value to wildlife. Although sensitive habitats are not necessarily afforded legal protection unless they support protected species, potential impacts to them may increase concerns and mitigation suggestions by resources agencies. No native or special-status habitats were recorded on the subject site due to long-standing site disturbances.

Jurisdictional Resources

Based on the field investigation conducted by Ecological Sciences, USACE “waters of the United States” per Sections 401-404 of the Federal Clean Water Act and “streambeds” per Section 1600-1603 of the CDFW Code were not observed on the property.

Wildlife Movement Corridors

The proposed project site is surrounded by existing development, and therefore, the subject site does not occupy an important location relative to regional wildlife movement. As such, development of the site would not be expected to have any significant effect on local or regional wildlife movement.

Discussion

The level of constraint that a sensitive biological resource would pose to potential development typically depends on the following criteria: (1) the relative value of that resource; (2) the amount or degree of

impact to the resource; (3) whether or not impacts to the resource would be in violation of state and/or federal regulations or laws; (4) whether or not impacts to the resource would require permitting by resource agencies; and (5) the degree to which impacts on the resource would otherwise be considered "significant" under CEQA. On-site habitats have been assigned a low biological constraint rating based on the degree in which expected impacts to on-site resources would meet the criteria discussed above. This designation is primarily due to the high level of site disturbances (associated with recurring anthropogenic disturbances) resulting in low biological diversity (i.e., replacement and exclusion of most native species with just a few non-native species) and an low potential for special-status species to utilize or reside within areas proposed for development due to absence of suitable habitat.

No **special-status plant species** are expected on site due to the absence of suitable habitat. The intent of the botanical survey was to generally evaluate the potential of the site to support sensitive plant species based on existing site conditions and habitat types present. Long-standing use of the site for commercial purposes and other anthropogenic disturbances have altered soil chemistry and other substrate characteristics such that on-site soils are not capable of supporting any sensitive plant species known from the site vicinity. Site development would not eliminate significant amounts of habitat for potentially occurring special-status plant species, nor reduce population size of sensitive plant species below self-sustaining levels on a local or regional basis (if present). No CEQA significant impacts are expected.

No **special-status wildlife species** were directly recorded on site and no special-status wildlife species are expected because of the disturbed nature of the site. Site development would not eliminate any habitat for special-status species, nor reduce population sizes below self-sustaining levels on a local or regional basis. No CEQA significant impacts are expected.

Conclusion

Results of the habitat suitability evaluation conducted in October 2017 indicate that habitats located within the ±8.45-acre site represent low biological resource values based on the degree in which expected impacts to on-site resources would meet the criteria discussed above (1-5) and the context in which they occur (e.g., highly disturbed site conditions present in a predominantly degraded and isolated environment). The existing degraded condition of the site is the direct consequence of long-standing anthropogenic activities resulting in low biological diversity (e.g., dominance of non-native species), absence of special-status plant communities, and low or no potential for special-status species to utilize or reside on site. Construction activities would not be expected to directly impact federal- or state-listed threatened or endangered species, jeopardize the continued existence of listed species (or special-status species), nor directly impact designated critical habitat. Site development would also not be expected to substantially alter the diversity of plants or wildlife in the area because of current degraded site conditions. The loss of these habitats would not be expected to substantially affect special-status resources or cause a population of plant or wildlife species to drop below self-sustaining levels.

Φ

I hereby certify that the statements and exhibits furnished herein present the data and information required for this biological survey, and that the facts, statements, and information presented herein are true and correct to the best of my knowledge and belief. If you have any questions regarding the results presented in this report, please don't hesitate to call.

Sincerely,

Ecological Sciences, Inc.



Scott D. Cameron
Principal Biologist



References

California Native Plant Society. 2017. CNPS Website Inventory of Rare and Endangered Vascular Plants of California for the "Orange" and "Yorba Linda" U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle maps.

California Native Plant Society, 2001. *Inventory of Rare and Endangered Plants of California* (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA. x + 388pp.

California Natural Diversity Data Base (CNDDB). 2017. Computer Reports for the "Yorba Linda" and "Orange" USGS 7.5-minute quadrangle maps.

California, State of. 1989. *Fish and Game Code*.

Garrett, K. and J. Dunn. 1981. *Birds of Southern California, Status and Distribution*. The Artisan Press, Los Angeles, California. 408 pp.

Grinnell, J., and A. H. Miller. 1944. The Distribution of the Birds of California. In *Pacific Coast Avifauna*. No. 27. Cooper Ornithological Club. Berkeley, California.

Hall, E.R. 1981. *The Mammals of North America*. John Wiley and Sons, New York (2 vol.).

Hickman, James C., ed. 1993. *The Jepson Manual*. University of California Press, Berkeley and Los Angeles, California. 1400 pp.

Holland, R.F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. California Department of Fish and Game Report. 156 pp.

Natural Resource Conservation Service (NRCS). 2017. Custom Soil Resource Report for Orange and Part of Riverside County, California. U.S. United States Department of Agriculture. NRCS website accessed September 2017.

Stebbins, R.C. 1985. *A Field Guide to Western Reptiles and Amphibians, Second Edition*. Peterson field guide series, Houghton Mifflin Co. 336 pp.