

Appendix B

Biological Technical Report

ORANGE PALMYRA CEMETERY PROJECT

February 2021

Biological Technical Report

Orange United States Geological Survey
7.5-Minute Topographic Quadrangle Map
Township 04 South and Range 09 West within Section 33

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1.0 INTRODUCTION AND EXECUTIVE SUMMARY

NOREAS Inc. (NOREAS) is pleased to provide this Biological Technical Report for the Orange Palmyra Cemetery Project (hereafter referred to as the “Project”). The Project is located east of the Costa Mesa Freeway in Orange County, California, near the intersection of East Palmyra Boulevard and Tracy Lane (Figure 1). The Project occurs on the Orange United States Geological Survey 7.5-Minute Topographic Quadrangle Map (Figure 1). This document details the methods and results of baseline biological resources surveys and habitat assessments for the Project. The intended use of this document is to disclose and evaluate baseline biological conditions within the Project Site. For the purposes of this assessment, the “study area” includes the Project’s proposed ground disturbance footprint (Project Site), and a buffer (Figure 2). In general terms, the Project Site is a former landfill, Young Men's Christian Association (YMCA) Facility and Bicycle Motocross (BMX) Track. The Project is characterized as a proposed reuse of the aforementioned Project Site as an Islamic Cemetery. But more specifically, the Project – as proposed, will avoid all impacts to the bed, bank, channel, and riparian vegetation associated with Santiago Creek.

The Project Site is not collocated with US Fish and Wildlife Service (USFWS) designated critical habitat, or known wildlife movement or migration corridors. No wetlands or waterways, no special status species¹, no nesting birds, and no remnant raptor nests were detected within the Project Site in 2021. Three dominant land cover types were observed within the Project Site: Eucalyptus Woodland, Non-native Grassland and Developed/Disturbed. Representative photos of the study area are provided in Appendix A. Greater than 99% percent of the Project Site consists of developed, disturbed, and non-native land cover types. The study area also includes substantial anthropogenic disturbances (e.g., highways, paved roads, buildings, playground equipment, parking areas, sports fields, bleachers, disked lands, dog park, bike tracks, school, trash/debris piles and concrete pads).

The Project Site is lacking in both numbers and variety of plant species, and does not support a robust population of native wildlife. Additionally, the Project Site’s location greatly reduces the land’s ability to support both common and special-status species. Given the extent of human disturbances within the study area, any species currently using these lands are presumed to be mobile or acclimated to the disturbance regime present. Furthermore, the Project does not alter ultimate land use in any way that would adversely affect known wildlife linkages, migration corridors, etc.

¹ For the purposes of this analysis, “special-status species” refers to any species that has been afforded special protection by federal, state, or local resource agencies (e.g., U.S. Fish and Wildlife Service, California Department of Fish and Wildlife) or resource conservation organizations (e.g., California Native Plant Society). The term “special-status species” excludes those avian species solely identified under Section 10 of the Migratory Bird Treaty Act (MBTA) for federal protection. Nonetheless, MBTA Section 10 protected species are afforded avoidance and minimization measures per state and federal requirements.

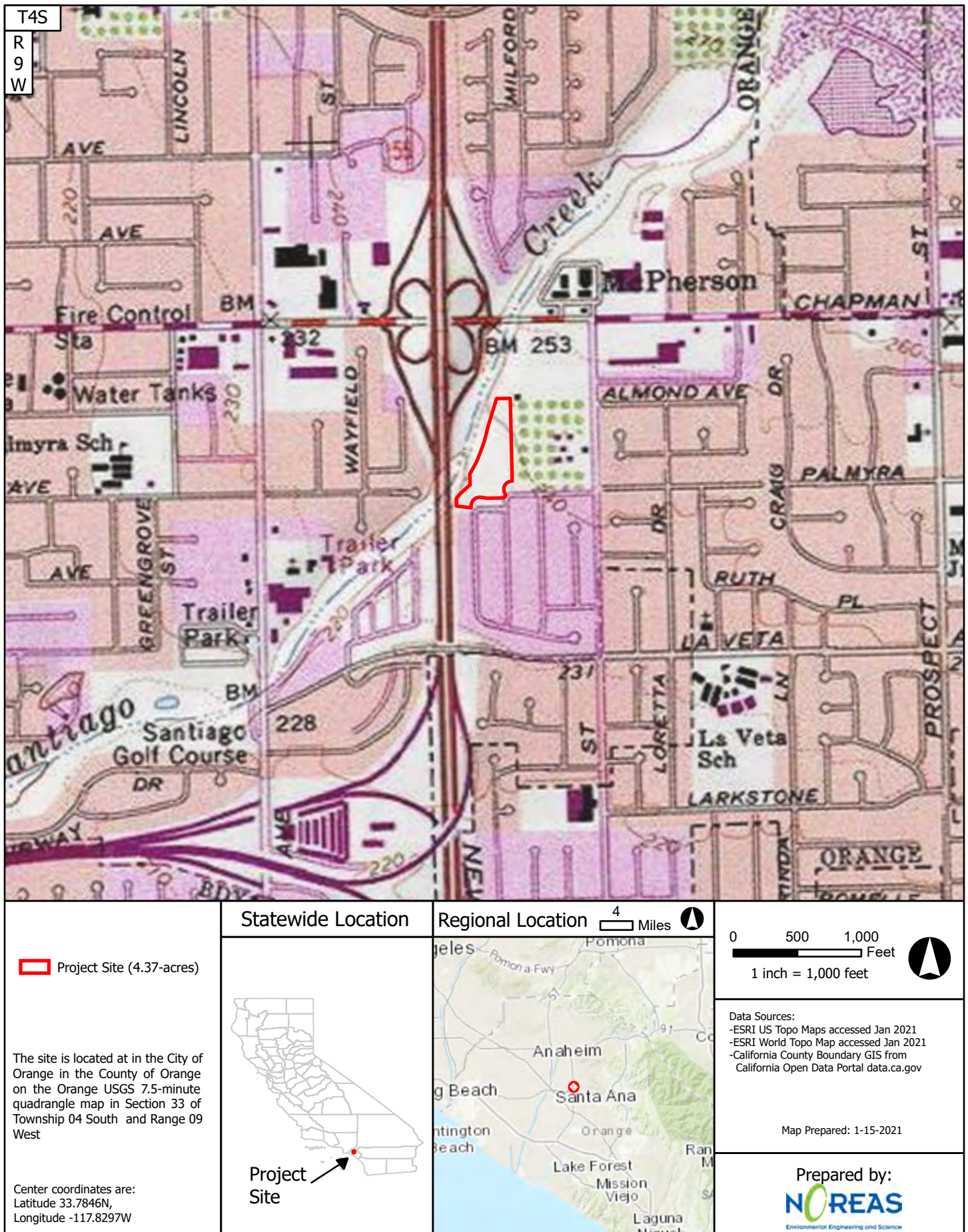


Figure 1. Regional Location



Figure 2. Site Vicinity

2.0 LITERATURE REVIEW

Prior to beginning field surveys, resource specialists were consulted and available information from resource management plans and relevant documents were reviewed. This was done to determine the locations and types of biological resources² that have the potential to exist within - and adjacent to, the study area. Resources were evaluated within several miles of the Project (Figures 4, 5 and 6).

The materials reviewed included - but were not limited to, the following:

- ✓ USFWS Critical Habitat Mapper and File Data (USFWS 2021a);
- ✓ USFWS Carlsbad Field Office Species List for Orange County (USFWS 2021b);
- ✓ USFWS National Wetlands Inventory database (USFWS 2021c);
- ✓ California Natural Diversity Database maintained by the California Department of Fish and Wildlife (CDFW 2021);
- ✓ California Native Plant Society (CNPS) Electronic Inventory (CNPS 2021);
- ✓ Proposed Palmyra Cemetery Site Tree Evaluation Report, Arborgate Consulting, Inc. 2020;
- ✓ Regional South Coast Missing Linkages Project Report (South Coast Wildlands 2008); and
- ✓ Aerial Photographs (Microsoft Corporation 2021).

² For the purposes of this analysis, “biological resources” refers to the plants, wildlife, and habitats that occur, or have the potential to occur, within the study area.

3.0 METHODS

To support the analysis detailed within Section 2.0 above, pedestrian-based field surveys were performed to assess land cover, general and dominant vegetation communities, habitat types, and species present within communities. Community descriptions were based on observed dominant vegetation composition, and derived from the criteria and definitions of widely accepted vegetation classification systems (Holland 1986 and Sawyer et al. 2009).

Plants were identified to the lowest taxonomic level sufficient to determine whether the species observed were non-native, native, or special-status. Plants of uncertain identity were subsequently identified from taxonomic keys (Baldwin et al. 2012). Scientific and common species names were recorded according to Baldwin et al. (2012). The presence of a wildlife species was based on direct observation and wildlife sign (e.g., tracks, burrows, nests, scat, or vocalization). Field data compiled for wildlife species included scientific name, and common name. Wildlife of uncertain identity was documented and subsequently identified from specialized field guides and other related literature (Burt and Grossenheider 1980; Halfpenny 2000; Sibley 2000; Elbroch 2003 and Stebbins 2003).

The Project Site was also assessed for its potential to support special-status species based on habitat³ suitability comparisons with reported occupied habitats (Appendix B). The following potential for occurrence definitions were utilized within Appendix B:

- **Absent [A]** – Species distribution is restricted by substantive habitat requirements which do not occur within the Project Site, and no further survey or study is necessary to determine likely presence or absence of this species.
- **Low [L]** – Species distribution is restricted by substantive habitat requirements which are negligible within the Project Site, and no further survey or study is necessary to determine likely presence or absence of this species.
- **Habitat Present [HP]** – Species distribution is restricted by substantive habitat requirements which occur within the Project Site, and further study may be necessary to determine likely presence or absence of species.
- **Present [P]** – Species or species sign were observed within the Project Site, or historically have been documented within Project limits.
- **Critical Habitat [CH]** – The Project Site is located within a USFWS-designated critical habitat unit.

3.1 Wetlands and Waterways

Based on the aforementioned desktop review of commercially available literature, and the habitat assessment, the presence and/or absence of surface water conveyance features, riparian plant communities and wetlands - including vernal pools, was evaluated within the Project Site. Potential features were identified based on professional judgement, aerial photographic signature reviews, and the presence of a well-defined ordinary high water mark, bed, bank, channel, and/or the limits of riparian habitat in the field; with deference to vegetation, soils, and observed hydrology.

³ A “habitat” is defined as the place or type of locale where a plant or animal naturally or normally lives and grows.

4.0 GENERAL BIOLOGICAL SURVEY RESULTS

Weather conditions during the January 2021 surveys included clear skies, temperatures ranging from 48–70 °F, and winds fluctuating from 0 to 10 miles per hour (mph). Representative photos of the study area are provided in Appendix A.

4.1 Vegetation Communities and Land Cover Types

The following four vegetation communities/land cover types were observed within the study area: Coastal Sage Scrub, Eucalyptus Woodland, Non-Native Grassland and Developed/Disturbed (Figure 3). These land cover types are described below. However, the Project Site (i.e., the Project's proposed ground disturbance footprint) is limited to Eucalyptus Woodland, Non-Native Grassland and Developed/Disturbed lands. To that end, greater than 99% percent of the Project Site consists of developed, disturbed, and non-native land cover types. Plant species observed within the study area are listed in Appendix C.

Coastal Sage Scrub

The Coastal Sage Scrub vegetation community within the study area is a relatively open, xeric plant community. That said, this type is not located within the Project's disturbance footprint (Project Site). The Coastal Sage Scrub consisted of plants from one to five feet tall. Dominant shrubs within this community included California sagebrush (*Artemisia californica*), Deerweed *Acmispon glabe*, California Buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*) and Western Sycamore (*Plantanus racemosa*).

Eucalyptus Woodland

Eucalyptus Woodland within the study area consists of mature exotic Red river gum trees (*Eucalyptus camaldulensis*), red box trees (*Eucalyptus polyanthemos*) and patches of non-native grasses such as black mustard (*Brassica nigra*), Ripgut brome (*Bromus diandrus*) and red brome (*Bromus madritensis*).

Non-Native Grassland

The Non-Native Grassland within the study area are characterized by a dominance of black mustard, ripgut brome, Redstem stork's bill (*Erodium cicutarium*), and wild oat (*Avena barbata*). This community also included anthropogenic disturbances. Negligible patches of native vegetation such as mulefat (*Baccharis Salicifolia*) were detected sporadically throughout the Non-Native Grassland community.

Developed/Disturbed

Developed and disturbed lands within the study area include locales that have been paved, cleared, graded, or otherwise altered by human activities (e.g., roads, highways, buildings, playgrounds, parking areas, dog park, sports fields, bleachers, disked lands, former BMX track, trash/debris piles, etc.). This cover type includes non-native ruderal and weedy species, interposed with exposed mineral soils. Common non-native plants species within this type include Peruvian pepper tree (*Schinus molle*), Mexican fan palm (*Washingtonia robusta*), Chinese banyan (*Ficus microcarpa*), ripgut brome and wild oat. Within the developed/disturbed land cover type, negligible patches of native vegetation - such as mulefat and California sagebrush (*Artemisia californica*), were detected sporadically. Furthermore the developed/disturbed land cover type includes Santiago Creek, which is a modified flood control channel that receives storm water flows from seasonal precipitation events, as well as from surface water runoff.

4.2 Wildlife

Wildlife species observed within the study area consisted of commonly-occurring species - including, but not limited to, white crowned sparrow (*Zonotrichia leucophrys*), Common Raven (*Corvus corax*), House Finch (*Carpodacus mexicanus*), Say's Phoebe (*Sayornis saya*), and Side-blotched Lizard (*Uta stansburiana*). Wildlife detected during the surveys is identified in Appendix D.

4.3 Special-Status Plants

No special-status plants were observed during the field surveys in 2021. Special-status plants known to occur within 10 miles of the Project, and their potential for occurrence, are detailed within figure 4 and Appendix B. The study area also includes no USFWS-critical habitat for plants (Figure 5). Plant species observed during the field surveys are listed in Appendix C.

4.4 Special-Status Wildlife

No special-status wildlife species were detected during the field surveys. Special-status wildlife known to occur within 10 miles of the Project, and their potential for occurrence, are detailed within Figure 4 and Appendix B. The study area also includes no USFWS-critical habitat for wildlife (Figure 5).

4.5 Wetlands and Waterways

The literature review and field survey data suggests that it is appropriate to characterize the Project Site as an upland. To that end, no riparian habitats or obvious indicators of a well-defined water conveyance bed, bank, or channel were observed within the Project Site. The field assessment, general topography and literature reviewed suggests that the Project Site lacks waters which are typically subject to Clean Water Act, or California Fish and Game Code Section 1600 jurisdiction. Furthermore, the National Wetland Inventory has no records of special aquatic resource areas within the Project Site (Figure 6).

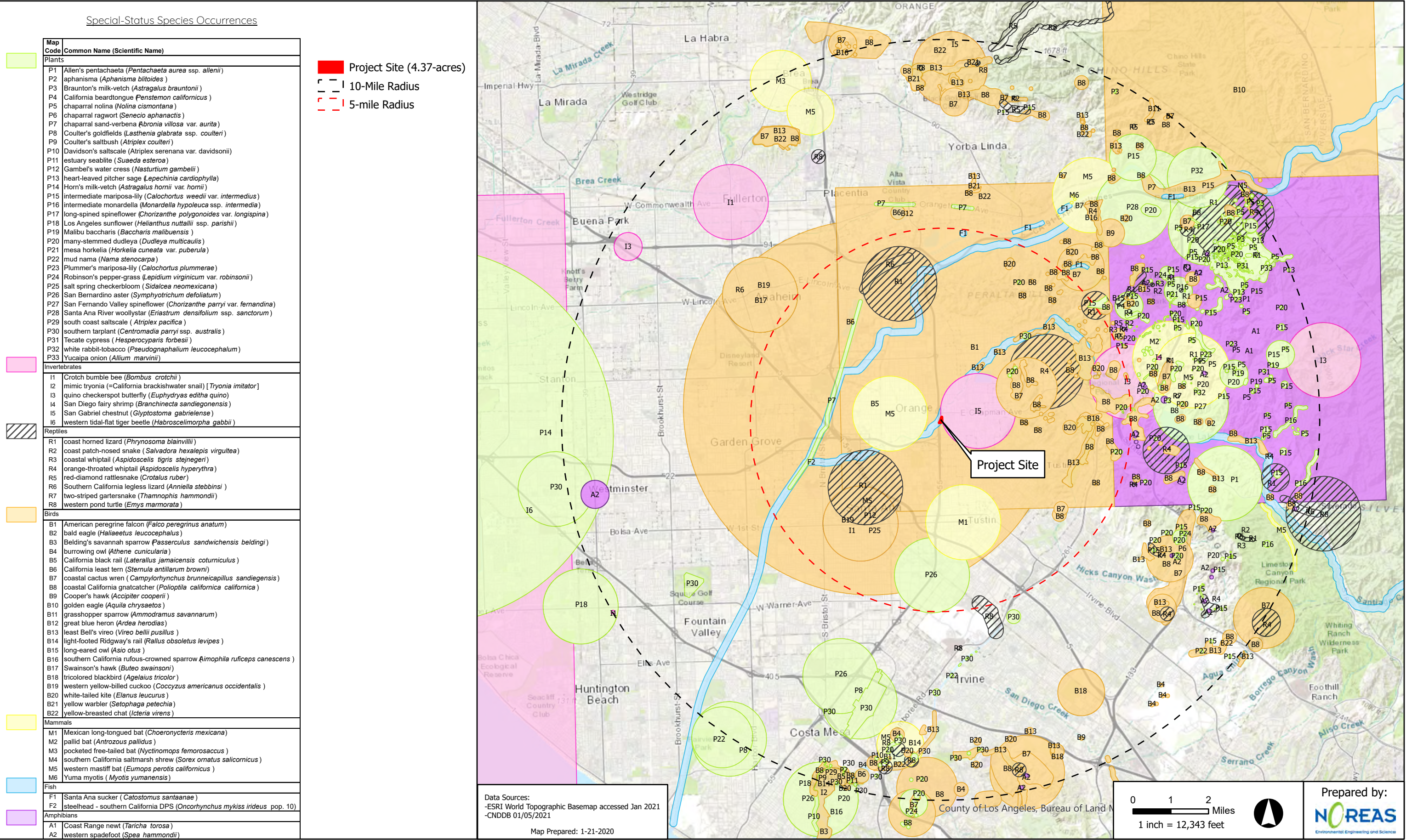
4.6 Wildlife Movement

The Project Site does not directly impact any known wildlife movement or migration corridors; nor does it support State or Federally-listed flora and fauna. The Project Site is surrounded by the Costa Mesa Freeway, East Palmyra Boulevard, Tracy Lane, residential and commercial developments (e.g., buildings, playground equipment, parking areas, sports fields, bleachers, disked lands, Dog Park, school, trash/debris piles, etc.). The aforementioned are a significant barrier which impede and block wildlife movement throughout the region. As such, the Project Site's location greatly reduces its value as a migration corridor, and overland dispersal habitat for wildlife, because these lands are severely movement constrained (e.g., surrounding land uses, topography, lack of appropriate cover, exposure to predation and/or desiccation, etc.). The more factors that constrain common and special-status species habitats, dispersal and movement corridors/linkages, the less likely individual species are to occur, or continue to occur within that specific locale.

Nonetheless, Santiago Creek can allow wildlife movement to persist throughout the region; and the creek (i.e., its associated flood plain and alluvial fan habitat areas) has higher species diversity and value for local and migratory wildlife than the adjacent Project Site. But, the Project does not adversely affect Santiago Creek – it completely avoids the resource. This is being done deliberately to maintain local existing wildlife movement and dispersal connectivity. Additionally, the Project includes setbacks from Santiago Creek that completely avoid the water conveyance feature's bed, bank, channel and riparian vegetation to safeguard that affects from the proposed development of an Islamic Cemetery would be less-than-significant. Therefore, there is no reasonable presumption that the Project would substantially interfere with the movement of any native resident or migratory wildlife species or migratory wildlife corridors.



Figure 3. Vegetation Communities and Land Cover Types



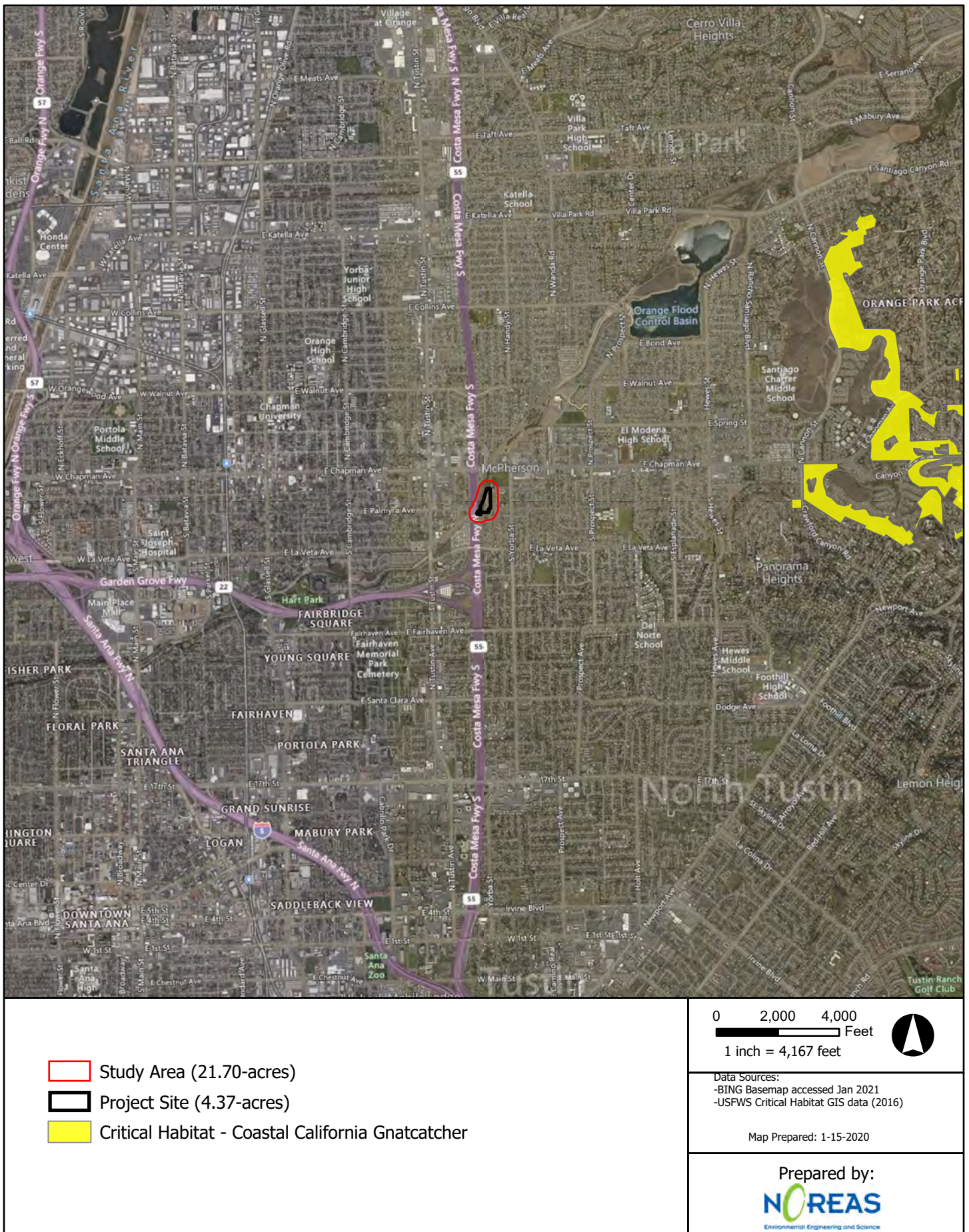


Figure 5. Critical Habitat



Figure 6. National Wetlands Inventory

5.0 CONCLUSION AND RECOMMENDATIONS

The Project Site is not collocated with USFWS designated critical habitat, or known wildlife movement or migration corridors. No wetlands or waterways, no special status species, no nesting birds and no remnant raptor nests have been detected within the Project Site. Three land cover types were observed within the Project Site: Eucalyptus Woodland, Non-native grassland and Developed/Disturbed. As such, greater than 99% percent of the Project Site consists of developed, disturbed, and non-native land cover types.

The Project Site is surrounded by the Costa Mesa Freeway, East Palmyra Boulevard, Tracy Lane, residential and commercial developments (e.g., buildings, playground equipment, parking areas, sports fields, bleachers, disked lands, Dog Park, school, trash/debris piles, etc.). The aforementioned are significant barrier which impede and block wildlife movement throughout the region and greatly reduces its value as a migration corridor, and/or overland dispersal habitat for wildlife.

The Project Site is lacking in both numbers and variety of species and does not support a robust population of native wildlife. The small quantity of habitat loss associated with the Project would be considered an insignificant effect, as a consequence of the amount of similar and higher-value vegetation communities and land cover types within the region that are already held in conservation and/or managed as open space in Orange County. Therefore, Project implementation would be expected to result in less-than-significant impacts to biological resources.

Nonetheless, the following measure is recommended as a means of avoiding and minimizing adverse impacts to protected resources that have the potential to occur within the Project Site, and on adjacent lands:

- In order to comply with Section 10 of the Migratory Bird Treaty Act and relevant sections of the California Fish and Game Code, any vegetation clearing within the Project Site should take place outside of the typical avian nesting season (e.g., March 15th until September 1st) to the maximum extent practical. If work needs to take place between March 15th and September 1st, a pre-construction survey for nesting passerines and raptors should be completed prior to the onset of Project activities. To the maximum extent practicable, a buffer zone from occupied nests should be maintained during physical ground-disturbing activities. Once nesting has ended, the buffer may be removed.

The services performed and documented in this report have been conducted in a manner consistent with the level of care and skill ordinarily exercised by other professional consultants under similar circumstances. No other representations are either expressed or implied, and no warranty or guarantee is included or intended in this report. Opinions relating to presence, absence, or potential for occurrence of biological resources are based on limited data and actual conditions may vary from those encountered at the times and locations where the data were obtained despite due professional care.

6.0 REFERENCES

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**APPENDIX A
PHOTOGRAPH LOG**

APPENDIX A

PHOTOGRAPH LOG



Photograph 1. Northeast



Photograph 2. West

APPENDIX A

PHOTOGRAPH LOG



Photograph 3. North



Photograph 4. Southwest

APPENDIX B
SPECIAL-STATUS SPECIES POTENTIAL FOR
OCCURRENCE WITHIN THE PROJECT SITE

Potential for occurrence	Common name (Scientific name)	Federal listing status	State listing status	CNPS list	Number of records within 10 miles	Year(s) sighted
A	San Gabriel chestnut (<i>Glyptostoma gabrielense</i>)	None	None	-	2	1930-1952
A	American peregrine falcon (<i>Falco peregrinus anatum</i>)	Delisted	Candidate Endangered	-	1	2015
A	Steelhead - southern California DPS (<i>Oncorhynchus mykiss irideus</i>)	Endangered	None	-	1	2013
A	Chaparral sand-verbena (<i>Abronia villosa</i> var. <i>aurita</i>)	None	Threatened	1B.1	4	1924-1935
A	Gambel's water cress (<i>Nasturtium gambelii</i>)	Endangered	Endangered	1B.1	1	1927
A	Many-stemmed dudleya (<i>Dudleya multicaulis</i>)	None	None	1B.2	34	1982-2016
A	Salt spring checkerbloom (<i>Sidalcea neomexicana</i>)	None	None	2B.2	1	1929
L	Southern tarplant (<i>Centromadia parryi</i> ssp. <i>australis</i>)	None	None	1B.1	17	1933-2018
A	Crotch bumble bee (<i>Bombus crotchii</i>)	None	None	-	3	1942-2020
L	Coast horned lizard (<i>Phrynosoma blainvillii</i>)	None	None	-	13	1922-2000
A	Orange-throated whiptail (<i>Aspidoscelis hyperythra</i>)	None	None	-	14	1962-2005
A	Coastal cactus wren (<i>Campylorhynchus brunneicapillus sandiegensis</i>)	None	Candidate Endangered	-	16	1989-2013
A	Coastal California gnatcatcher (<i>Poliophtila californica californica</i>)	Threatened	None	-	74	1988-2016
A	Least Bell's vireo (<i>Vireo bellii pusillus</i>)	Endangered	None	-	25	2001-2018
A	Western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	Threatened	None	-	2	1918
A	Mexican long-tongued bat (<i>Choeronycteris mexicana</i>)	None	None	-	1	1995
A	Intermediate mariposa-lily (<i>Calochortus weedii</i> var. <i>intermedius</i>)	None	None	1B.2	35	1927-2017
A	San Bernardino aster (<i>Symphyotrichum defoliatum</i>)	None	Endangered	1B.2	3	1924-1933
A	Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	Endangered	None	-	3	1930-1983
A	Southern California legless lizard (<i>Anniella stebbinsi</i>)	None	None	-	3	1916-1970
A	western pond turtle (<i>Emys marmorata</i>)	None	None	-	11	1987-2013
A	California least tern (<i>Sternula antillarum browni</i>)	Endangered	None	-	3	2016-2018
A	Swainson's hawk (<i>Buteo swainsoni</i>)	None	None	-	1	1888
A	Tricolored blackbird (<i>Agelaius tricolor</i>)	None	State Species of Special Concern	-	3	2014
L	White-tailed kite (<i>Elanus leucurus</i>)	None	None	-	11	2008-2009
A	Santa Ana sucker (<i>Catostomus santaanae</i>)	Threatened	None	-	5	1987-2000
A	Coast Range newt (<i>Taricha torosa</i>)	None	None		2	1997-1998
A	Allen's pentachaeta (<i>Pentachaeta aurea</i> ssp. <i>allenii</i>)	None	Endangered	1B.1	2	2000-2003
A	Aphanisma (<i>Aphanisma blitoides</i>)	None	None	1B.2	1	1995
A	Braunton's milk-vetch (<i>Astragalus brauntonii</i>)	Endangered	None	1B.1	5	2012-2020

Potential for occurrence	Common name (Scientific name)	Federal listing status	State listing status	CNPS list	Number of records within 10 miles	Year(s) sighted
A	California beardtongue (<i>Penstemon californicus</i>)	None	None	1B.2	1	1981
A	Chaparral nolina (<i>Nolina cismontana</i>)	None	None	1B.2	22	1993-2017
A	Chaparral ragwort (<i>Senecio aphanactis</i>)	None	None	2B.2	1	1989
A	Coulter's goldfields (<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>)	None	None	1B.1	2	1934-1965
A	Coulter's saltbush (<i>Atriplex coulteri</i>)	None	None	1B.2	2	1932-1998
A	Davidson's saltscale (<i>Atriplex serenana</i> var. <i>davidsonii</i>)	None	None	1B.2	2	1988-1998
A	Estuary seablite (<i>Suaeda esteroa</i>)	None	None	1B.2	1	2015
A	Heart-leaved pitcher sage (<i>Lepechinia cardiophylla</i>)	None	None	1B.2	4	2000-2016
A	Horn's milk-vetch (<i>Astragalus hornii</i> var. <i>hornii</i>)	None	None	1B.1	1	1896
A	Intermediate monardella (<i>Monardella hypoleuca</i> ssp. <i>intermedia</i>)	None	None	1B.3	4	1949-2008
A	Long-spined spineflower (<i>Chorizanthe polygonoides</i> var. <i>longispina</i>)	None	Endangered	1B.2	1	2001
A	Los Angeles sunflower (<i>Helianthus nuttallii</i> ssp. <i>parishii</i>)	None	None	1A	2	1924-1933
A	Malibu baccharis (<i>Baccharis malibuensis</i>)	None	None	1B.1	3	2008
A	Mesa horkelia (<i>Horkelia cuneata</i> var. <i>puberula</i>)	None	None	1B.1	1	2018
A	Mud nama (<i>Nama stenocarpa</i>)	None	Endangered	2B.2	3	1998
A	Plummer's mariposa-lily (<i>Calochortus plummerae</i>)	None	Endangered	4.2	3	2000
A	Robinson's pepper-grass (<i>Lepidium virginicum</i> var. <i>robinsonii</i>)	None	None	4.3	3	2003-2008
A	San Fernando Valley spineflower (<i>Chorizanthe parryi</i> var. <i>fernandina</i>)	None	None	1B.1	1	1902
A	Santa Ana River woollystar (<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>)	Endangered	Endangered	1B.1	1	1927
A	South coast saltscale (<i>Atriplex pacifica</i>)	None	None	1B.2	1	1932
A	Tecate cypress (<i>Hesperocyparis forbesii</i>)	None	None	1B.1	2	2000-2010
A	White rabbit-tobacco (<i>Pseudognaphalium leucocephalum</i>)	None	None	2B.2	2	1928-2008
A	Yucaipa onion (<i>Allium marvinii</i>)	None	None	1B.2	1	1992
A	Mimic tryonia (California brackishwater snail)	None	Delisted	-	1	1996
A	San Diego fairy shrimp (<i>Branchinecta sandiegonensis</i>)	Endangered	None	-	1	2006
A	Western tidal-flat tiger beetle (<i>Habroscelimorpha gabbii</i>)	None	None	-	1	1998
A	Coast patch-nosed snake (<i>Salvadora hexalepis virgulata</i>)	None	Threatened	-	4	1999
L	Coastal whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	None	None	-	4	1999
A	Red-diamond rattlesnake (<i>Crotalus ruber</i>)	None	None	-	6	1995-2001
A	Two-striped gartersnake (<i>Thamnophis hammondi</i>)	None	None	-	1	2000
A	Bald eagle (<i>Haliaeetus leucocephalus</i>)	Delisted	Candidate Endangered	-	1	2011
A	Belding's savannah sparrow (<i>Passerculus sandwichensis beldingi</i>)	None	None	-	1	2001

Potential for occurrence	Common name (Scientific name)	Federal listing status	State listing status	CNPS list	Number of records within 10 miles	Year(s) sighted
A	Burrowing owl (<i>Athene cunicularia</i>)	None	None	-	6	1981-2010
A	California black rail (<i>Laterallus jamaicensis coturniculus</i>)	None	None	-	2	1983-1986
L	Cooper's hawk (<i>Accipiter cooperii</i>)	None	None	-	2	2016-2020
A	Golden eagle (<i>Aquila chrysaetos</i>)	None	Endangered	-	1	2007
A	Grasshopper sparrow (<i>Ammodramus savannarum</i>)	None	Endangered	-	2	2001-2003
L	Great blue heron (<i>Ardea herodias</i>)	None	None	-	1	2004
A	Light-footed Ridgway's rail (<i>Rallus obsoletus levipes</i>)	Endangered	None	-	2	2007
A	Long-eared owl (<i>Asio otus</i>)	None	None	-	2	1968-1974
A	Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	None	None	-	2	2000-2005
L	Yellow warbler (<i>Setophaga petechia</i>)	None	None	-	3	2003-2016
L	Yellow-breasted chat (<i>Icteria virens</i>)	None	None	-	6	2001-2016
A	Pallid bat (<i>Antrozous pallidus</i>)	None	Endangered	-	1	1993
A	Pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)	None	Threatened	-	1	1989
A	Southern California saltmarsh shrew (<i>Sorex ornatus salicornicus</i>)	None	Threatened	-	1	1933
A	Yuma myotis (<i>Myotis yumanensis</i>)	None	None	-	1	1998
A	Western spadefoot (<i>Spea hammondi</i>)	None	None	-	19	1952-2019
A	Western mastiff bat (<i>Eumops perotis californicus</i>)	None	None	-	8	1949-1993

CNPS List Definitions

List 1A: Plants presumed extinct in CA

List 1B.1: Plants rare, threatened, or endangered in CA and elsewhere; seriously threatened in CA

List 1B.2: Plants rare, threatened, or endangered in CA and elsewhere, fairly threatened in CA

List 1B.3: Plants rare, threatened, or endangered in CA and elsewhere, not very threatened in CA

List 2.1: Plants rare, threatened, or endangered in CA, but more common elsewhere; seriously threatened in CA

List 2.2: Plants rare, threatened, or endangered in CA, but more common elsewhere; fairly threatened in CA

APPENDIX C
PLANT SPECIES OBSERVED WITHIN THE STUDY AREA

APPENDIX C

PLANT SPECIES OBSERVED WITHIN THE STUDY AREA

<i>Scientific Name</i>	<i>Common Name</i>
<i>Ambrosia acanthicarpa</i> *	Annual bur-sage
<i>Artemisia californica</i>	California sagebrush
<i>Centaurea melitensis</i> *	Tocalote
<i>Encelia farinosa</i>	Brittlebush
<i>Helianthus californicus</i> *	California sunflower
<i>Heterotheca grandiflora</i>	Telegraph Weed
<i>Senecio flaccidus</i> *	Threadleaf ragwort
<i>Stephanomeria exigua</i>	Small wirelettuce
<i>Rhus ovata</i>	Sugar bush
<i>Brassica nigra</i> *	Black mustard
<i>Hirschfeldia incana</i> *	Shortpod mustard
<i>Baccharis Salicifolia</i>	Mulefat
<i>Atriplex semibaccata</i> *	Berry saltbush
<i>Oxalis pes-caprae</i> *	Bermuda buttercup
<i>Arundo Donax</i> *	Arundo
<i>Cenchrus Ciliaris</i> *	Buffelgrass
<i>Frankenia salina</i> *	Alkali heath
<i>Artemisia Californica</i>	California sagebrush
<i>Isocoma menziesii</i>	Goldenbush
<i>Salvia Mellifera</i>	Black sage
<i>Chenopodium sp.</i> *	Goosefoot
<i>Salsola tragus</i> *	Prickly Russian thistle
<i>Medicago polymorpha</i> *	Bur Clover
<i>Acmispon glaber</i>	Deer Weed
<i>Erodium botrys</i> *	Filaree
<i>Erodium cicutarium</i> *	Redstem stork's bill
<i>Avena barbata</i> *	Wild oat
<i>Bromus diandrus</i> *	Ripgut brome
<i>Bromus madritensis subsp. Rubens</i> *	Red brome
<i>Cynodon dactylon</i> *	Bermuda grass,
<i>Hordeum marinum</i> *	Mediterranean barley
<i>Schismus barbatus</i> *	Schismus
<i>Platanus racemosa</i>	Western sycamore
<i>Eriogonum fasciculatum</i>	Buckwheat
<i>Nicotiana glauca</i> *	Tree tobacco

APPENDIX C

PLANT SPECIES OBSERVED WITHIN THE STUDY AREA

<i>Scientific Name</i>	<i>Common Name</i>
<i>Eucalyptus camaldulensis</i> *	River red gum
<i>Washingtonia robusta</i> *	Mexican fan palm
<i>Cupaniopsis anacardioides</i> *	Carrotwood tree
<i>Platanus acerifolia</i> *	London Planetree
<i>Quercus agrifolia</i>	Coast live oak
<i>Quercus suber</i>	Cork oak
<i>Pinus halepensis</i> *	Aleppo pine
<i>Pinus eldarica</i> *	Eldarica Pine
<i>Schinus molle</i> *	Peruvian pepper tree
<i>Jacaranda mimosifolia</i> *	Jacaranda
<i>Quercus lobata</i>	Valley oak
<i>Schinus terebinthifolius</i> *	Brazilian pepper tree
<i>Ficus elastic</i> *	Rubber fig
<i>Eucalyptus polyanthemos</i> *	Red box tree
<i>Morus alba</i> *	Mulberry
<i>Ficus microcarpa</i> *	Chinese banyan

Nomenclature follows the Jepson Manual, Second Edition (Baldwin et al 2011).

* = naturalized, and/or non- native plant species.

APPENDIX D
WILDLIFE SPECIES OBSERVED WITHIN THE STUDY AREA

Scientific name	Common name
Reptiles	
<i>Sceloporus occidentalis</i>	Western fence lizard
<i>Uta stansburiana</i>	Common Side-blotched Lizard
Birds	
<i>Mimus polyglottos</i>	Northern mockingbird
<i>Euphagus cyanocephalus</i>	Brewer's blackbird
<i>Sturnus vulgaris</i>	European starling
<i>Corvus corax</i>	Common Raven
<i>Carpodacus mexicanus</i>	House Finch
<i>Passer domesticus</i>	House Sparrow
<i>Dendroica coronata</i>	Yellow-rumped Warbler
<i>Zonotrichia leucophrys</i>	White-crowned Sparrow
<i>Euphagus cyanocephalus</i>	Brewer's Blackbird
<i>Psaltiriparus minimus</i>	American Bushtit
<i>Sayornis saya</i>	Say's Phoebe
<i>Buteo jamaicensis</i>	Red-Tailed Hawk
<i>Sayornis nigricans</i>	Black Phoebe
<i>Sturnella neglecta</i>	Western Meadowlark
<i>Eremophila alpestris</i>	Horned Lark
<i>Calypte anna</i>	Anna's Hummingbird
<i>Tyrannus verticalis</i>	Western Kingbird
<i>Carduelis psaltria</i>	Lesser goldfinch
<i>Mimus polyglottos</i>	Northern mockingbird
Mammals	
<i>Otospermophilus beecheyi</i>	California ground squirrel
<i>Sylvilagus audubonii</i>	Cottontail rabbit