

WILSON WAREHOUSE PROJECT

March 2023

General Biological Resources Assessment

Perris United States Geological Survey
7.5-Minute Topographic Quadrangle Map

Prepared By



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1.0 INTRODUCTION AND EXECUTIVE SUMMARY

NOREAS Inc. (NOREAS) is pleased to provide this General Biological Resources Assessment for the Wilson Warehouse Project (hereafter referred to as the “Project”). The Project Site is located within the City of Perris California, north of Placentia Avenue and west of Wilson Avenue (Assessor’s Parcel Number [APN] 300-210-017, -025) (Figures 1 and 2). This document details the methods and results of baseline biological resources surveys and habitat assessments for the Project Site. The intended use of this document is to disclose and evaluate the Project Site’s biological conditions, and determine the potential for occurrence of common and special-status species¹ - and their habitats. For the purposes of this document, the “study area” includes the Project Site’s proposed ground disturbance footprint and a buffer (Figure 2). Additionally, the Project Site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), within the Mead Valley Area Plan and the San Jacinto Habitat Management Unit. The Project Site is not within the boundaries of any MSHCP established Subunit, Cell Group, Criteria Cell, Public/Quasi-Public Land, Linkages/Cores, Conserved Lands, or Regional Conservation Authority (RCA) Easements. With that said, a detailed MSHCP Consistency Analysis Report will be provided under a separate cover.

During pedestrian surveys in 2022, it was determined that greater than 99% of the Project Site was comprised of developed, disturbed and/or non-native land cover types. To that end, the Project Site is not collocated with any United States Fish and Wildlife Service (USFWS) designated critical habitat, nor were any special status species detected during the 2022 field surveys. No nesting birds, remnant raptor nests, or bat guano were detected within the Project Site either.

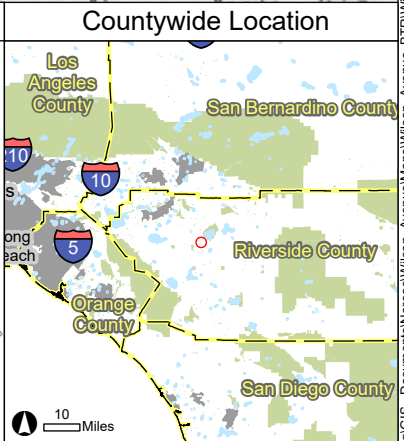
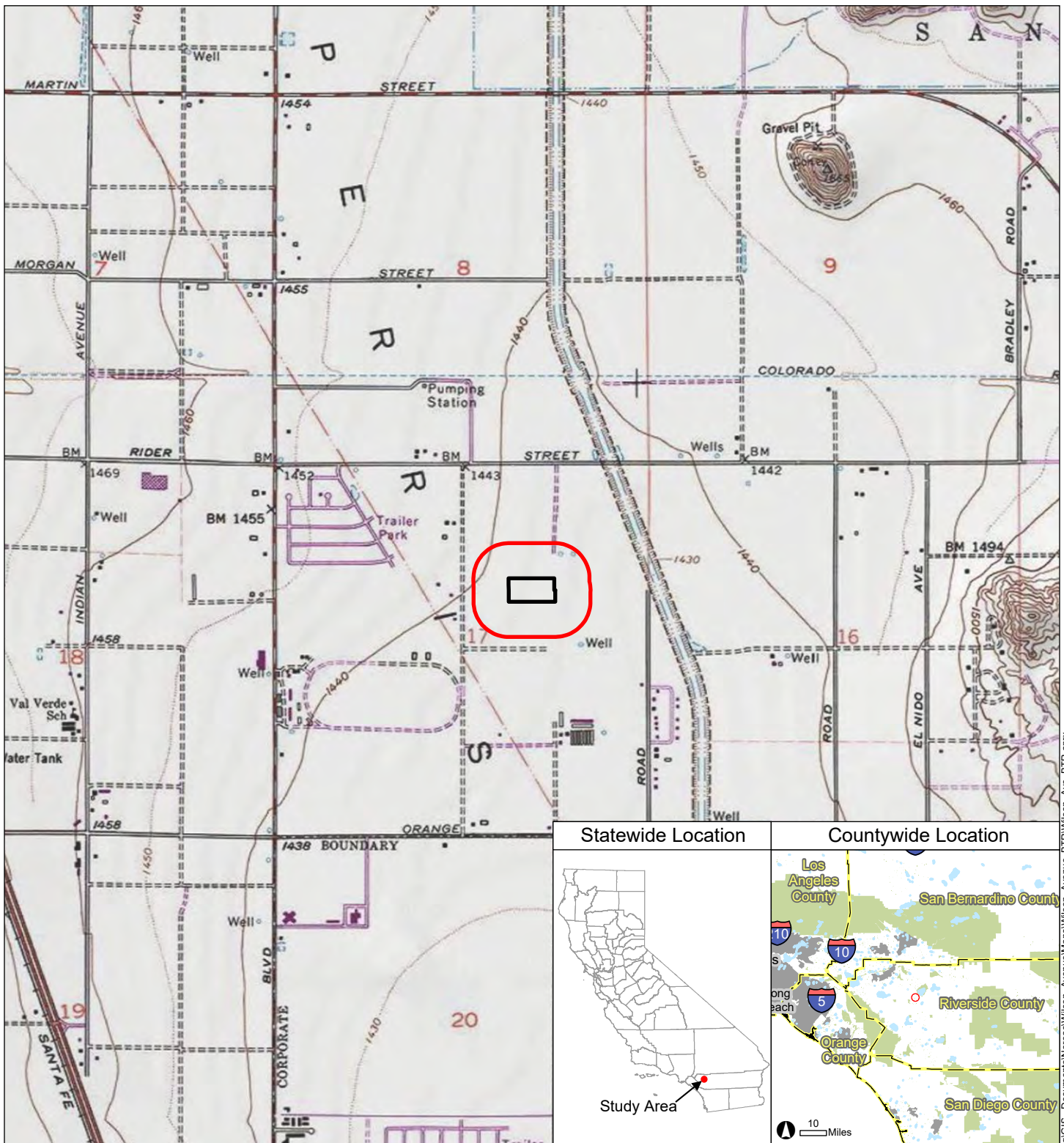
The Project Site’s developed and disturbed land cover has substantially decreased its value as suitable breeding / nesting and foraging habitat for native species. Furthermore, the Project Site has limited – if any, value as a low quality migration corridor or overland dispersal habitat for wildlife, because it is severely movement constrained by the surrounding residential, industrial and commercial developments, and public infrastructure. Nonetheless, the substantive habitat requirements needed to support the Burrowing Owl (*Athene cunicularia*) were observed within the Project Site. Burrowing Owl are of limited distribution - or occur infrequently, throughout California, and their status is therefore monitored by resource agencies². The Burrowing Owl is not a Federal and/or State listed species. Therefore, measures are recommended for implementation during the construction of the Project as a means of avoiding and minimizing adverse effects to Burrowing Owl and other biological resources that have a reasonable presumption of occurrence within the Project Site, and on adjacent lands.

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 [USFWS], California Department of Fish and Wildlife [CDFW]) or resource conservation organizations (e.g., California Native Plant Society [CNPS], Western Riverside County Regional Conservation Authority [RCA], etc.). 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 protections per state and federal requirements.

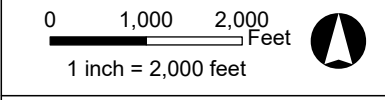
² This species could be important locally with deference to preparation of environmental documents relating to the California Environmental Quality Act (CEQA) - based on CEQA Guidelines §15125 (c), and/or §15380.

2.0 PROJECT AND PROPERTY DESCRIPTION

For the purposes of this document, the “study area” includes the Project’s proposed ground disturbance footprint (Project Site) and a buffer (Figure 2). The Project Site can be found on the Perris United States Geological Survey (USGS) 7.5-Minute Topographic Quadrangle Map (USGS 1981). The Project involves the construction of an industrial warehouse building and associated landscaping, parking, and drive aisles with vehicular parking stalls. Truck dock positions would be provided with trailer parking stalls in a distinct truck court as well.



- Study Area
- Project Site
- County Boundary (inset)
- Urban Area (inset)
- Interstate or State Highway (inset)
- Water Body (inset)
- Park or National Forest (inset)



Data Sources:
 - Bureau of Land Management Cadastral GIS 2015
 - USGS 7.5-minute quadrangle map
 - ESRI US Topo Maps accessed Jun 2022
 Map Prepared: 6-6-22

Prepared by:
NOREAS
 Environmental Engineering and Science

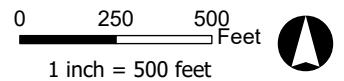
The Study Area is located in Riverside County on the Perris USGS 7.5-minute quadrangle map; San Bernardino Meridian, Township 4 South, Range 3 West, in Section 17 Center coordinate (WGS 1984): Latitude 33.825, Longitude -117.214

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Figure 1. Regional Location



- Study Area (45.8 ac)
- Project Site (5.0 ac)



Data Sources:
- Bing Maps Hybrid accessed Jul 2022

Map Prepared: 7-29-22

Prepared by:
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Environmental Engineering and Science

Figure 2. Site Vicinity

3.0 FOCUSED STUDY/SPECIES OF CONCERN

Prior to beginning field surveys, resource specialists were consulted and available information from resource management plans, databases and relevant documents were reviewed to determine the locations and types of biological resources³ that have the potential to exist within - and adjacent to the study area. Biological resources were evaluated within several miles of the Project Site.

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

- ✓ US Fish and Wildlife Service (USFWS) Critical Habitat Mapper and File Data (USFWS 2022a);
- ✓ USFWS Riverside County Field Office Species List (USFWS 2022b);
- ✓ USFWS National Wetlands Inventory database (USFWS 2022c);
- ✓ Regional South Coast Missing Linkages Project Report (South Coast Wildlands 2008);
- ✓ California Natural Diversity Database maintained by the California Department of Fish and Wildlife (CDFW) (CDFW 2022);
- ✓ Natural Resource Conservation Service, Soil Survey Geographic Database (SSURGO) (USDA-NRCS 2022a);
- ✓ California Native Plant Society (CNPS) Electronic Inventory (CNPS 2022);
- ✓ MSHCP Transportation and Land Management Agency Geographic Information Services Database (GISD 2022);
- ✓ Regional Conservation Authority GIS Data Mapping Tool (RCA 2022, <https://www.wrc-rca.org/rcamaps/>);
- ✓ Western Riverside County Multiple Species Habitat Conservation Plan (Dudek 2003); and
- ✓ Aerial Photographs (Microsoft Corporation 2022).

³ 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.

4.0 METHODS

To support the analysis detailed within Section 3.0 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/or detection of wildlife sign (e.g., tracks, burrows, nests, scat, skeletal remains or vocalization). Field data compiled for wildlife species included scientific name, and common name. Wildlife of uncertain identity were documented and subsequently identified from specialized field guides and related literature (Burt and Grossenheider 1980; Halfpenny 2000; Sibley 2000; Elbroch 2003 and Stebbins 2003).

Additionally, the Project Site was assessed for its potential to support special-status species based on habitat⁴ suitability comparisons with reported occupied habitats (Appendix A). The following potential for occurrence definitions were utilized within Appendix A:

- **Absent [A]** – Species distribution is restricted by substantive habitat requirements which do not occur – or 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 has been documented within Project limits.
- **Critical Habitat [CH]** – The Project Site is located within a USFWS-designated critical habitat unit.

4.1 Evaluation of Wetlands and Waterways

Based on the aforementioned review of commercially available literature and habitat assessments, the presence and/or absence of surface water conveyance features, riparian plant communities, riverine land cover types and wetlands - including vernal pools, was evaluated within the Project Site. Potential features were identified based on professional judgement, aerial photographic signatures, 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.

⁴ A “habitat” is defined as the place or type of locale where a plant or animal naturally or normally lives and grows.

5.0 GENERAL BIOLOGICAL SURVEY RESULTS

Weather conditions during the May 2022 surveys included clear skies, temperatures ranging from 67–74 °F, and winds fluctuating from 0 to 10 miles per hour (mph). Representative photos of the study area are provided in Appendix B.

5.1 Vegetation Communities and Land Cover Types

Three land cover types were observed within the study area: Disturbed/Developed, Ruderal and Non-native Grassland (Figure 3). These types are described below.

Developed/Disturbed

Disturbed/Developed lands within the study area include locales that have been developed, paved, cleared, graded, or otherwise altered by anthropogenic activities (i.e., industrial warehouses, access roads, concrete pads, ornamental landscaping, industrial facilities, storage yards, commercial enterprises, etc.). Common non-native plants species detected within this type included ripgut brome (*Bromus diandrus*), Sahara mustard (*Brassica Tournefortii*) and Schismus (*Schismus barbatus*).

Ruderal

The ruderal vegetation community includes locales that have been subject to recent grading, clearing, or other physical human modification of soils and/or vegetation. These lands also include areas with exposed soils with minimal vegetation, and moderate cover by various non-native annual grasses, and weeds (adapted for growth on substrates subject to disturbance). Common non-native plants species detected within this type included Maltese star-thistle (*Centaurea melitensis*), stinknet (*Oncosiphon piluliferum*), and cheeseweed (*Malva neglecta*).

Non-Native Grassland

The non-native grassland vegetation community is characterized by a dominance of nonnative grasses and forbs. Dominant plant species found in this community include black mustard (*Brassica nigra*), ripgut brome, Redstem stork's bill (*Erodium cicutarium*), Maltese star-thistle and other non-native forbs. This vegetation community also includes negligible numbers of scattered native forbs such as fiddleneck (*Amsinckia menziesii*).

5.2 Wildlife

Wildlife species observed within the study area consisted of commonly-occurring species - including, but not limited to, rock pigeon (*Columba livia*), Red-tailed hawk (*Buteo jamaicensis*) common raven (*Corvus corax*), and Side-blotched Lizard (*Uta stansburiana*). Wildlife detected during the surveys are identified in Appendix D.

5.3 Special-Status Plants

No Federal or State listed plant species were observed within the study area during the 2022 field surveys. Nonetheless, several have been documented within 10 miles (Figure 4). The study area includes no USFWS-designated critical habitat for plants (Figure 5), and the Project Site does not include the substantive habitat requirements necessary to support special-status flora. Special-status species known to occur within 10 miles of the Project Site and their potential for occurrence within the Project Site are detailed within Appendix A. Plant species observed during the surveys are listed in Appendix C.

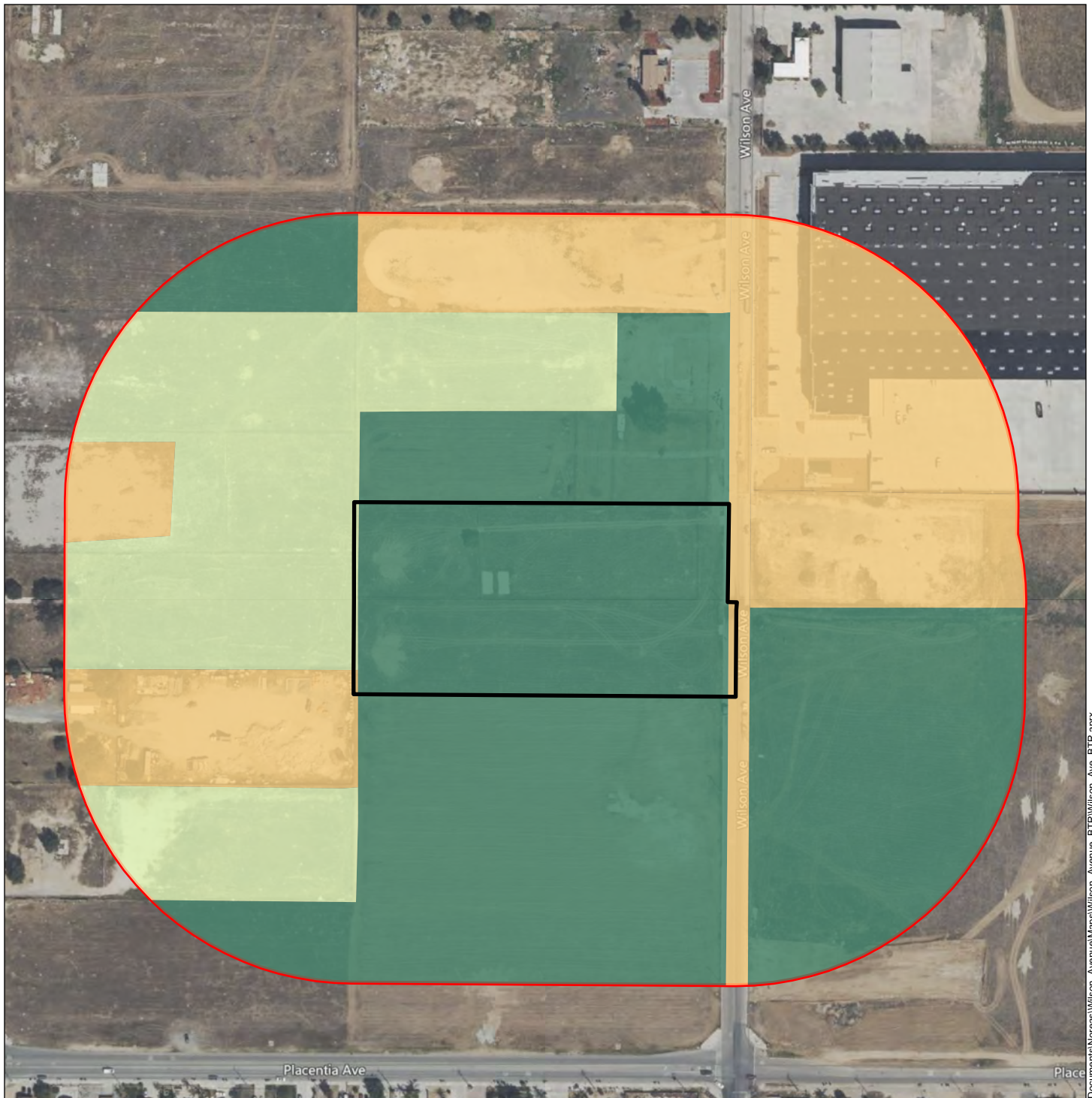
5.4 Special-Status Wildlife






No special status wildlife species were observed within the study area during the 2022 field survey events. The study area includes no USFWS-designated critical habitat for wildlife (Figure 5). Special-

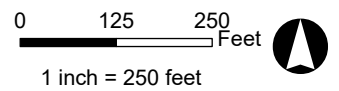
status species known to occur within 10 miles of the Project Site and their potential for occurrence within the Project Site are detailed within Appendix A and Figure 4. The substantive habitat requirements needed to support the Burrowing Owl were observed within portions of the Project Site. The Burrowing Owl is not a Federal and/or State listed species, but they are of limited distribution and/or occur infrequently throughout California. Wildlife species detected during the surveys are listed in Appendix D.

5.5 Wetlands and Waterways

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



-  Project Site
-  Study Area
- Vegetation Communities**
-  Developed/Disturbed (12.7 ac)
-  Non-native Grassland (9.9 ac)
-  Ruderal (23.2 ac)



Data Sources:
-Bing Maps Hybrid accessed Sep 2022

Map Prepared: 9-20-22

Prepared by:
NOREAS
Environmental Engineering and Science

Figure 3. Vegetation Communities and Land Cover Types

Special-Status Species Occurrences

Map Code	Common Name (Scientific Name)	
Plants		
P1	California Orcutt grass	Orcuttia californica
P2	California screw moss	Tortula californica
P3	chaparral sand-verbena	Abronia villosa var. aurita
P4	Coulter's goldfields	Lasthenia glabrata ssp. coulteri
P5	Davidson's saltscale	Atriplex serenana var. davidsonii
P6	little mouse-tail	Myosurus minimus ssp. apus
P7	long-spined spineflower	Chorizanthe polygonoides var. longispina
P8	mud nama	Nama stenocarpa
P9	Munz's onion	Allium munzii
P10	Palmer's grapplinghook	Harpagonella palmeri
P11	Parish's brittlescale	Atriplex parishii
P12	Parry's spineflower	Chorizanthe parryi var. parryi
P13	Payson's jewelflower	Caulanthus simulans
P14	Plummer's maniposa-lily	Calochortus plummerae
P15	Robinson's pepper-grass	Lepidium virginicum var. robinsonii
P16	San Diego ambrosia	Ambrosia pumila
P17	San Jacinto Valley crowscale	Atriplex coronata var. notator
P18	smooth tarplant	Centromadia pungens ssp. laevis
P19	Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest
P20	Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest
P21	Southern Riparian Scrub	Southern Riparian Scrub
P22	Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland
P23	spreading navaretia	Navaretia fossalis
P24	thread-leaved brodiaea	Brodiaea filifolia
P25	woven-spored lichen	Texosporium sancti-jacobi
P26	Wright's trichocoronis	Trichocoronis wrightii var. wrightii
Invertebrates		
I1	Crotch bumble bee	Bombus crotchii
I2	Icenogle's socialchemmis spider	Socialchemmis icenoglei
I3	quino checkerspot butterfly	Euphydryas editha quino
I4	Riverside fairy shrimp	Streptocephalus woottoni
I5	white cuckoo bee	Neolarra alba
Mammals		
M1	American badger	Taxidea taxus
M2	Dulzura pocket mouse	Chaetodipus californicus femoralis
M3	Los Angeles pocket mouse	Perognathus longimembris brevinasus
M4	northwestern San Diego pocket mouse	Chaetodipus fallax fallax
M5	pocketed free-tailed bat	Nyctinomops femorosaccus
M6	San Bernardino kangaroo rat	Dipodomys merriami parvus
M7	San Diego black-tailed jackrabbit	Lepus californicus bennettii
M8	San Diego desert woodrat	Neotoma lepida intermedia
M9	southern grasshopper mouse	Onychomys torridus ramona
M10	Stephens' kangaroo rat	Dipodomys stephensi
M11	western mastiff bat	Eumops perotis californicus
Birds		
B1	bald eagle	Haliaeetus leucocephalus
B2	Bell's sage sparrow	Artemisiospiza belli belli
B3	burrowing owl	Aethya cucularia
B4	California horned lark	Eremophila alpestris actia
B5	coastal California gnatcatcher	Poliotilia californica californica
B6	Cooper's hawk	Accipiter cooperii
B7	ferruginous hawk	Buteo regalis
B8	golden eagle	Aquila chrysaetos
B9	Lawrence's goldfinch	Spinus lawrencei
B10	least Bell's vireo	Vireo bellii pusillus
B11	loggerhead shrike	Lanius ludovicianus
B12	long-eared owl	Asio otus
B13	southern California rufous-crowned sparrow	Aimophila ruficeps canescens
B14	tricolored blackbird	Agelaius tricolor
B15	western yellow-billed cuckoo	Coccyzus americanus occidentalis
B16	white-faced ibis	Plegadis chihi
B17	white-tailed kite	Elanus leucurus
B18	yellow-breasted chat	Icteria virens
B19	yellow warbler	Setophaga petechia
Reptiles		
R1	California glossy snake	Arizona elegans occidentalis
R2	coast horned lizard	Phrynosoma blainvillii
R3	coastal whiptail	Aspidoscelis tigris stehnegeri
R4	orange-throated whiptail	Aspidoscelis hyperythra
R5	red-diamond rattlesnake	Crotalus ruber
R6	San Bernardino ringneck snake	Diadophis punctatus modestus
R7	Southern California legless lizard	Anniella stebbinsi
R8	western pond turtle	Emys marmorata
Amphibians		
A1	western spadefoot	Spea hammondi

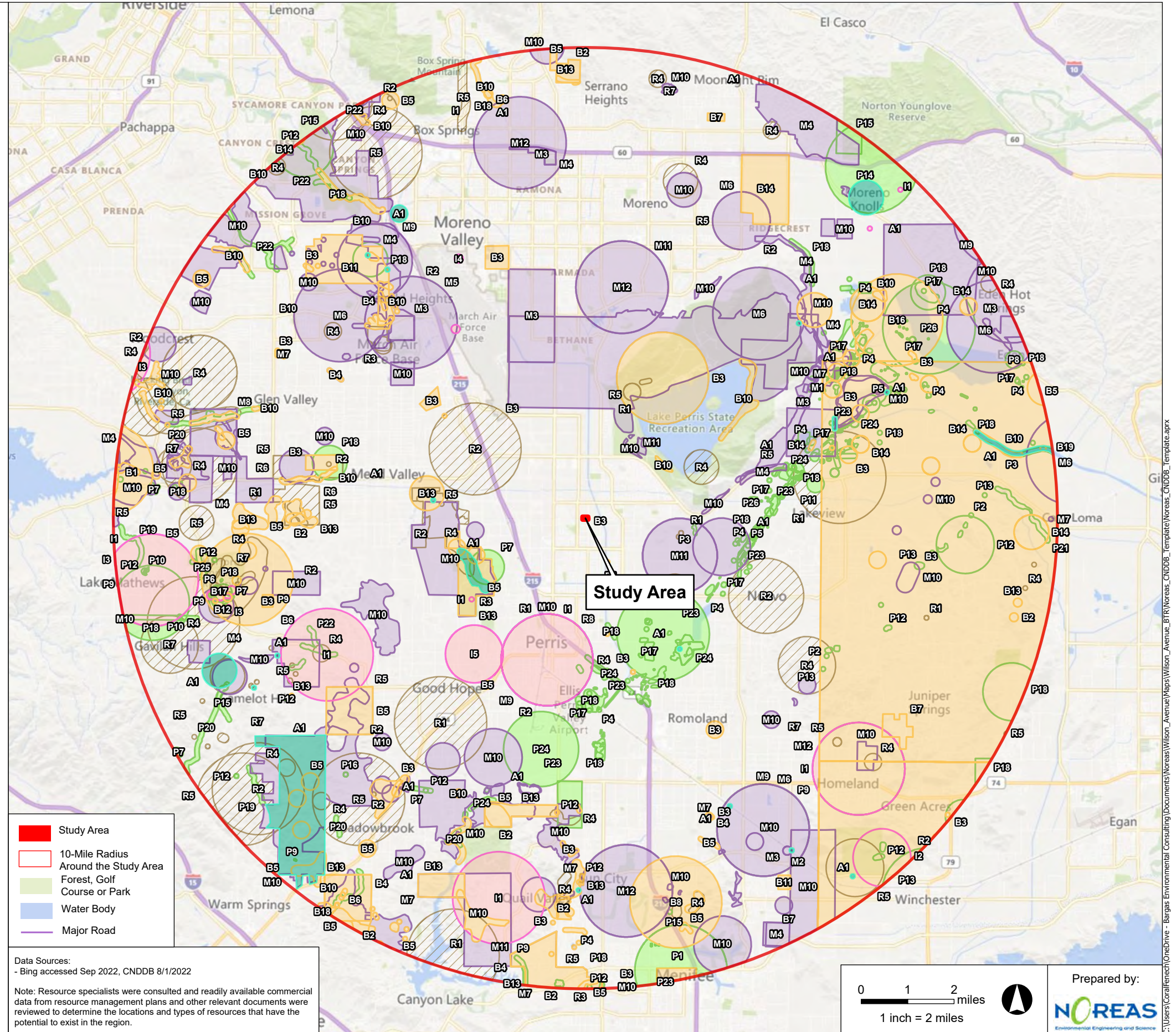
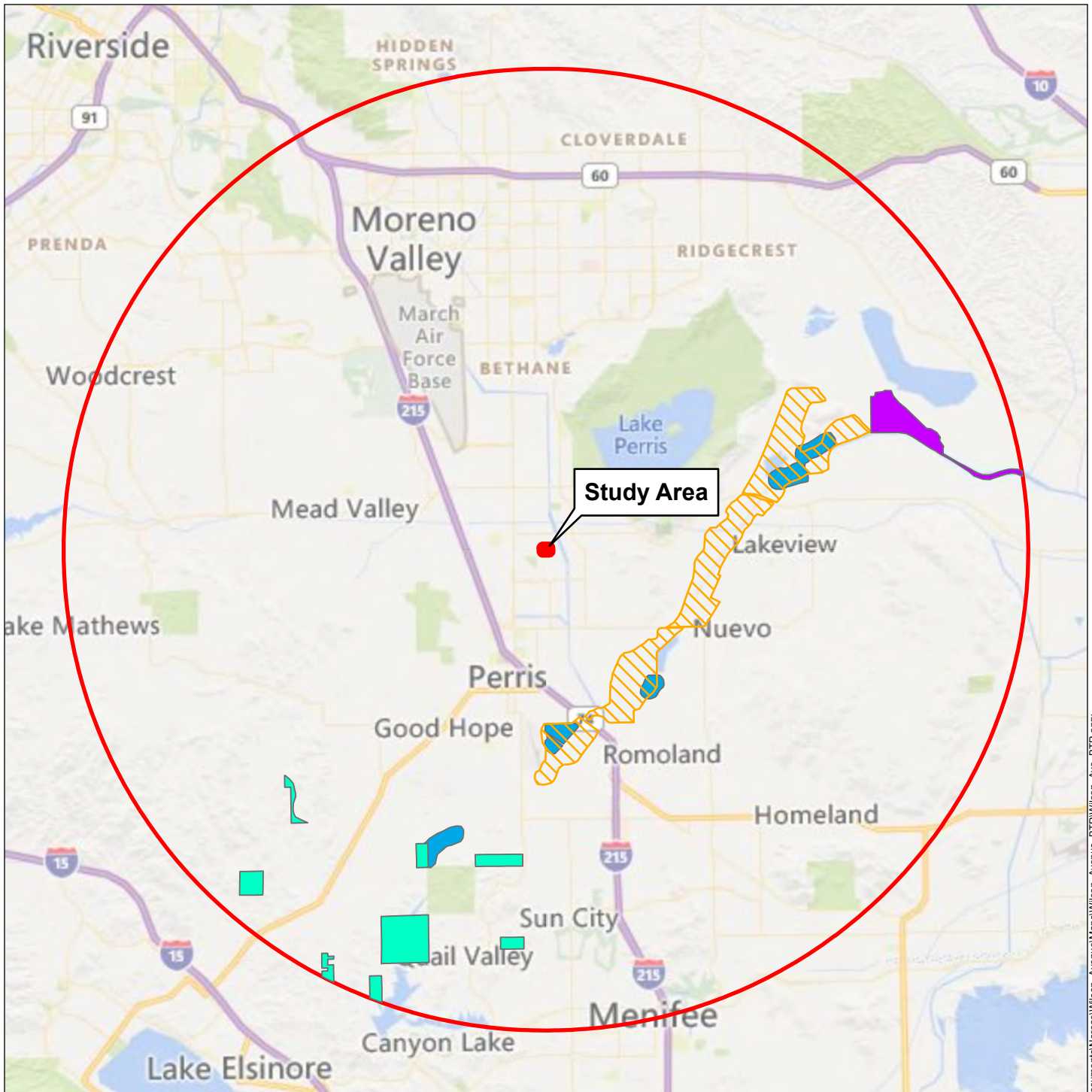
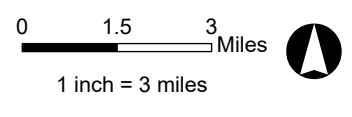


Figure 4. Literature Review



- | | |
|--|---|
|  Study Area | Critical Habitat |
|  10-Mile Radius Around the Study Area |  Coastal California gnatcatcher |
|  Freeway |  San Bernardino Merriam's kangaroo rat |
|  Major Road |  Spreading navarretia |
|  Forest, Golf Course or Park |  Thread-leaved brodiaea |
|  Water Body | |



Data Sources:
 - Bing accessed Jul 2022
 - US Fish and Wildlife Service Critical Habitat data date: Dec 2021
 Map Prepared: 7-29-22

Prepared by:

 Environmental Engineering and Science

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Figure 5. Critical Habitat



Project Site

Study Area

National Wetland Inventory (NWI)

Riverine

0 500 1,000 Feet

1 inch = 1,000 feet

Data Sources:
 - Bing Maps Hybrid accessed Jul 2022
 - US Fish and Wildlife Service
 National Wetland Inventory geodatabase
 data date: Dec 2020

Map Prepared: 7-29-22

Prepared by:

NOREAS
 Environmental Engineering and Science

Figure 6. National Wetland Inventory

6.0 CONCLUSION AND RECOMMENDATIONS

In 2022, it was determined that greater than 99% of the Project Site was comprised of developed, disturbed and/or non-native habitats. Additionally, the Project Site is not collocated with any USFWS designated critical habitat, nor were any special status species detected during the 2022 field surveys. No nesting birds, remnant raptor nests, or bat guano were detected within the Project Site either. The Project Site's developed and disturbed land cover has substantially decreased its value as suitable breeding / nesting, and foraging habitat for native species as well. Furthermore, the Project Site has limited – if any, value as a low quality migration corridor or overland dispersal habitat for wildlife, because it is severely movement constrained by the surrounding residential, industrial and commercial developments, and public infrastructure.

However, the substantive habitat requirements needed to support Burrowing Owl were observed within portions of the Project Site. With regard to the Burrowing Owl, it is not a Federal and/or State listed species, but it is of limited distribution and/or occurs infrequently throughout California. Therefore, their status is monitored by resource agencies. As such, measures are recommended for implementation during the Project as a means of avoiding and minimizing adverse effects to Burrowing Owl and other biological resources that have a reasonable presumption of occurrence within the Project Site, and on adjacent lands.

The following are recommended for implementation during the Project:


- Training of all field staff on applicable or relevant and appropriate local, state, and federal regulatory agency requirements, environmental laws, and regulations associated with working within special status species habitats and biological resources.
- No personnel working within Project limits will “take” or destroy plants, animals, or active nests (or eggs) of birds that are protected under the Federal or State Endangered Species Acts and Migratory Bird Treaty Act (MBTA)
- In order to comply with Section 10 of the Migratory Bird Treaty Act and relevant sections of the California Fish and Game Code, any necessary vegetation clearing should take place outside of the typical avian nesting season (e.g., March 15th until September 1st).
 - If work needs to take place between March 15th and September 1st, a pre – activity clearance survey for nesting birds should be completed prior to the onset of ground disturbance.
 - An activity exclusion buffer zone around occupied nests should be maintained during physical ground disturbing undertakings. Once nesting has ended, the buffer may be removed.
- No more than 72 hours prior to initiation of ground-disturbing activities, a pre-construction clearance survey should be completed by a professional biologist. The survey will identify (if any) special status species (e.g., Burrowing Owl) are present within locales proposed for disturbance within the Project Site. In the event no special status species are identified within the limits of disturbance, no further action is required.
 - If special status species are determined to occupy the Project Site within an area proposed for disturbance, no Project activity shall take place within 300 feet of the species, the location will be flagged for avoidance until the resource is no longer present, delineated on maps, photographed, and reported to the appropriate resource agency to determine how to proceed.

With the implementation of the measures recommended herein, there would be no presumption that the Project would result in the loss of individual species, nor that it would adversely affect local or regional populations of them.

7.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached figures present the data and information required for this resource assessment, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this investigation was performed by me and under my direct supervision. I certify that I have not signed a nondisclosure or consultant confidentiality agreement with Lake Creek Industrial LLC Planning and Environmental representatives, and that I have no financial interest in the Project. 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.

DATE: March 06, 2023

SIGNED: 
Lincoln Hulse

The following NOREAS employees performed the field work and/or participated in preparation of this report: Lenny Malo MS, Lincoln Hulse BS, Vir McCoy BS, and Erin Serra BS.

REFERENCES

- Baldwin, J., D. Goldman, D. Keil, R. Patterson, and T. Rosatti. 2012. *The Jepson Manual: Higher Plants of California*. Berkeley: University of California Press.
- Burt, W. H. and R. P. Grossenheider. 1980. *A Field Guide to Mammals: North America; North of Mexico*. New York, NY: Houghton Mifflin Company.
- CDFW (California Department of Fish and Wildlife). 2022. RareFind. California Department of Fish and Game, Natural Diversity Database (CNDDDB). Sacramento, CA: California Department of Fish and Game, Biogeographic Data Branch.
- CNPS (California Native Plant Society). 2022. CNPS Electronic Inventory of Rare and Endangered Plants: CNPS.
- Dudek. 2003. Final Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Riverside, CA: County of Riverside.
- Geographic Information Services Database (GISD). 2022. Transportation and Land Management Agency Geographic Information Services Database.
- Elbroch, M. 2003. *Mammal Tracks & Sign, A Guide to North American Species*. Mechanicsburg, PA: Stackpole Books.
- Halfpenny, J.C. 2000. *Scats and Tracks of the Desert Southwest, A Field Guide to the Signs of 70 Wildlife Species*. Helena, MT: Falcon Publishing, Inc.
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California (California Department of Fish and Game, The Resources Agency, ed), p. 156. Sacramento, CA.
- Microsoft Corporation. 2022. Bing Maps Aerial Imagery. Redmond, WA
- RCA. 2022. Regional Conservation Authority GIS Data Mapping Tool (RCA 2022, <https://www.wrc-rca.org/rcamaps/>).
- Sawyer, J., T. Keeler-Wolf, and J. Evens. 2009. *A Manual of California Vegetation*. Sacramento, CA: California Native Plant Society.
- Sibley, D.A. 2000. National Audubon Society. *The Sibley Guide to Birds*. New York, NY: Alfred A. Knopf, Inc.
- Stebbins, R.C. 2003. *A Field Guide to Western Reptiles and Amphibians*. New York, NY: Houghton Mifflin.
- USGS (United States Geological Service). 1981 7.5-Minute Quadrangle Perris, California.
- USFWS (United States Fish and Wildlife Service). 2022a. Critical Habitat Portal. USFWS
- USFWS (United States Fish and Wildlife Service). 2022b. Los Angeles County Fish and Wildlife Office. Endangered and Threatened Species List. In: U.S. Department of the Interior, editor. San Bernardino, CA: USFWS.

APPENDIX A
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
HP	Burrowing owl (<i>Athene cunicularia</i>)	None	None	-	65	1980-2017
A	California horned lark (<i>Eremophila alpestris actia</i>)	None	None	-	8	1992-2015
A	Stephens' kangaroo rat (<i>Dipodomys stephensi</i>)	Threatened	Threatened	-	80	1923-2011
A	Western mastiff bat (<i>Eumops perotis californicus</i>)	None	None	-	5	1957-2001
A	Smooth tarplant (<i>Centromadia pungens ssp. laevis</i>)	None	None	1B.1	42	1969
A	Coast horned lizard (<i>Phrynosoma blainvillii</i>)	None	None	-	18	1929
A	Least Bell's vireo Vireo (<i>bellii pusillus</i>)	Endangered	Endangered	-	21	2007-2015
A	Long-spined spineflower (<i>Chorizanthe polygonoides var. longispina</i>)	None	None	1B.2	7	1980-2015
A	California glossy snake (<i>Arizona elegans occidentalis</i>)	None	None	-	9	1929-2016
A	Parish's brittlescale (<i>Atriplex parishii</i>)	None	None	1B.1	2	1999
A	Orange-throated whiptail (<i>Aspidoscelis hyperythra</i>)	None	None	-	33	1918-2005
A	Crotch bumble bee (<i>Bombus crotchii</i>)	None	None	-	9	1938-2020
A	Western pond turtle (<i>Emys marmorata</i>)	None	None	-	1	1987
A	Southern grasshopper mouse (<i>Onychomys torridus ramona</i>)	None	None	-	4	1908-1938
A	Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	None	None	-	13	1992-2011
A	Coastal California gnatcatcher (<i>Polioptila californica californica</i>)	Threatened	None	-	33	1980-2015
A	Chaparral sand-verbena (<i>Abronia villosa var. aurita</i>)	None	None	1B.1	2	2004-2014
A	Western spadefoot (<i>Spea hammondi</i>)	None	None	-	33	1958-2019
A	Coastal whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	None	None	-	3	1993-2001
A	San Jacinto Valley crownscale (<i>Atriplex coronata var. notatior</i>)	Endangered	None	1B.1	13	2000-2015
A	Red-diamond rattlesnake (<i>Crotalus ruber</i>)	None	None	-	29	1923
A	Spreading navarretia (<i>Navarretia fossalis</i>)	Threatened	None	1B.1	12	1995-2020
A	White cuckoo bee (<i>Neolarra alba</i>)	None	None	-	1	1938
A	Coulter's goldfields (<i>Lasthenia glabrata ssp. coulteri</i>)	None	None	1B.1	20	2000-2017
A	Thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	Threatened	Endangered	1B.1	8	2000-2017
A	Northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)	None	None	-	13	1992-2017
A	Los Angeles pocket mouse (<i>Perognathus longimembris brevinasus</i>)	None	None	-	8	1940-2016
A	Wright's trichocoronis (<i>Trichocoronis wrightii var.</i>	None	None	2B.1	4	1937-2011

Potential for occurrence	Common name (Scientific name)	Federal listing status	State listing status	CNPS list	Number of records within 10 miles	Year(s) sighted
	<i>wrightii</i>					
A	Davidson's saltscale (<i>Atriplex serenana</i> var. <i>dauidsonii</i>)	None	None	1B.2	7	1991-2013
A	Western yellow bat (<i>Lasiurus xanthinus</i>)	None	None	-	4	1981-1992
A	Pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)	None	None	-	1	1985
A	San Bernardino kangaroo rat (<i>Dipodomys merriami parvus</i>)	Endangered	Candidate Endangered	-	6	1908-1957
A	Riverside fairy shrimp (<i>Streptocephalus woottoni</i>)	Endangered	None	-	2	2009
A	Tricolored blackbird (<i>Agelaius tricolor</i>)	None	Threatened	-	13	2011-2015
A	San Bernardino ringneck snake (<i>Diadophis punctatus modestus</i>)	None	None	-	1	2000
A	American badger (<i>Taxidea taxus</i>)	None	None	-	2	1990
A	Parry's spineflower (<i>Chorizanthe parryi</i> var. <i>parryi</i>)	None	None	1B.1	13	1936-2012
A	Payson's jewelflower (<i>Caulanthus simulans</i>)	None	None	4.2	7	1902-1982
A	San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	None	None	-	8	1998-2015
A	Bell's sage sparrow (<i>Artemisiospiza belli belli</i>)	None	None	-	7	1998-2002
A	California screw moss (<i>Tortula californica</i>)	None	None	1B.2	2	2012-2013
A	Loggerhead shrike (<i>Lanius ludovicianus</i>)	None	None	-	2	1994-2007
A	Southern Sycamore Alder Riparian Woodland (<i>Southern Sycamore Alder Riparian Woodland</i>)	None	None	-	6	1980-1985
A	Southern California legless lizard (<i>Anniella stebbinsi</i>)	None	None	-	13	1967-2018
A	Cooper's hawk (<i>Accipiter cooperii</i>)	None	None	-	3	1983-2001
A	Munz's onion (<i>Allium munzii</i>)	Endangered	Threatened	1B.1	6	1897-2016
A	White-faced ibis (<i>Plegadis chihi</i>)	None	None	-	1	1993
A	Southern Cottonwood Willow Riparian Forest (<i>Southern Cottonwood Willow Riparian Forest</i>)	None	None	-	5	1980
A	San Diego ambrosia (<i>Ambrosia pumila</i>)	Endangered	None	1B.1	1	2009
A	Golden eagle (<i>Aquila chrysaetos</i>)	None	None	-	1	1974
A	Long-eared owl (<i>Asio otus</i>)	None	None	-	2	1983
A	San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)	None	None	-	1	1999
A	Ferruginous hawk (<i>Buteo regalis</i>)	None	None	-	3	1989-2008
A	Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	Endangered	None	-	4	1945 - 1998
A	Palmer's grapplinghook (<i>Harpagonella palmeri</i>)	None	None	4.2	3	1986-1990
A	Little mouselink (<i>Myosurus minimus</i> ssp. <i>apus</i>)	None	None	3.1	1	1981

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	White-tailed kite (<i>Elanus leucurus</i>)	None	None	-	1	1983
A	Round-leaved filaree (<i>California macrophylla</i>)	None	None	2.2	2	1987
A	Southern Coast Live Oak Riparian Forest (<i>Southern Coast Live Oak Riparian Forest</i>)	None	None	-	3	1980
A	Woven-spored lichen (<i>Texosporium sancti-jacobi</i>)	None	None	3	1	2002
A	Dulzura pocket mouse (<i>Chaetodipus californicus femoralis</i>)	None	None	-	1	1993
A	Robinson's pepper-grass (<i>Lepidium virginicum var. robinsonii</i>)	None	None	4.3	4	1962-2008
A	Yellow warbler (<i>Setophaga petechia</i>)	None	None	-	1	2014
A	Plummer's mariposa-lily (<i>Calochortus plummerae</i>)	None	None	4.2	1	1989
A	Southern Riparian Scrub (<i>Southern Riparian Scrub</i>)	None	None	-	1	1980
A	California Orcutt grass (<i>Orcuttia californica</i>)	Endangered	Endangered	1B.1	1	1941
A	Icenogle's socalchemmis spider (<i>Socalchemmis icenoglei</i>)	None	None	-	1	1997
A	Lawrence's goldfinch (<i>Spinus lawrencei</i>)	None	None	-	1	2001
A	Western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	Threatened	Endangered	-	1	2001
A	Yellow-breasted chat (<i>Icteria virens</i>)	None	None	-	2	2001-2015
A	Bald eagle (<i>Haliaeetus leucocephalus</i>)	Delisted	Endangered	-	4	1975-1981
A	Mud nama (<i>Nama stenocarpa</i>)	None	None	2B.2	1	2010

CNPS List Definitions

List 1A: Plants presumed extinct in California

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

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

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

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

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

Potential for Occurrence Definitions

Absent [A] – Species distribution is restricted by substantive habitat requirements, which do not occur – or are negligible within the Project Site, and no further survey or study is obligatory 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 survey or 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 has been documented within Project limits

Critical Habitat [CH] – The Project Site is located within a USFWS-designated critical habitat unit.

**APPENDIX B
PHOTOGRAPH LOG**



Photograph 1. Facing West.



Photograph 2. Facing South.



Photograph 3. Facing East.



Photograph 4. Facing North.

APPENDIX C
PLANT SPECIES OBSERVED WITHIN THE STUDY AREA

Scientific Name	Common Name
Anacardiaceae (Cashew family)	
<i>Schinus molle</i> *	Peruvian pepper
Asteraceae (Aster family)	
<i>Centaurea melitensis</i> *	Maltese star-thistle
<i>Conyza canadensis</i>	Horseweed
<i>Helianthus californicus</i>	Sunflower
<i>Heterotheca grandiflora</i>	Telegraphweed
<i>Lactuca serriola</i> *	Prickly lettuce
<i>Oncosiphon piluliferum</i> *	Stinknet
Boraginaceae (Forget-me-not family)	
<i>Amsinckia menziesii</i>	Fiddleneck
Brassicaceae (Mustard family)	
<i>Brassica nigra</i>	Black mustard
<i>Brassica Tournefortii</i> *	Sahara mustard
<i>Lepidium latifolium</i> *	Pepper weed
<i>Sisymbrium irio</i> *	London rocket
Chenopodiaceae (Goosefoot family)	
<i>Atriplex canescens</i>	Fourwing saltbush
<i>Salsola tragus</i> *	Prickly Russian thistle
Geraniaceae (Geranium family)	
<i>Erodium cicutarium</i> *	Redstem stork's bill
Fabaceae (Pea family)	
<i>Melilotus indicus</i> *	Sourclover
<i>Parkinsonia florida</i>	Blue palo verde
Malvaceae (Mallow family)	
<i>Malva neglecta</i> *	Cheeseweed
Myrtaceae (myrtle family)	
<i>Eucalyptus sp</i> *	Eucalyptus
Plantaginaceae (Plantain family)	
<i>Plantago sp.</i>	Narrow leaf plantain
Poaceae (Grass family)	
<i>Bromus diandrus</i> *	Ripgut brome
<i>Bromus madritensis subsp. Rubens</i> *	Red brome
<i>Hordeum marinum subsp. Gussoneanum</i> *	Mediterranean barley
<i>Schismus barbatus</i> *	Schismus
Solanaceae (Nightshade family)	
<i>Datura stramonium</i> *	Jimsonweed

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

* = naturalized, 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
Birds	
<i>Buteo jamaicensis</i>	Red-Tailed Hawk
<i>Carduelis psaltria</i>	Lesser goldfinch
<i>Charadrius vociferus</i>	Killdeer
<i>Sayornis nigrican</i>	Black phoebe
<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>Zenaida macroura</i>	Mourning Dove
<i>Columba livia</i>	Rock Pigeon
Mammals	
<i>Otospermophilus beecheyi</i>	California ground squirrel