



Appendix B-1

Harley Knox Industrial Project, General Biological Resources Assessment

Noreas Environmental Engineering and Science

December 2021

Harley Knox Industrial Project

December 2021

General Biological Resources Assessment

Perris United States Geological Survey
7.5-Minute Topographic Quadrangle Map

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TABLE OF CONTENTS

Section	Page
1.0 INTRODUCTION AND EXECUTIVE SUMMARY	1-1
2.0 PROJECT AND PROPERTY DESCRIPTION.....	2-1
3.0 FOCUSED STUDY/SPECIES OF CONCERN.....	3-1
4.0 METHODS.....	4-1
4.1 Evaluation of Wetlands and Waterways.....	4-1
5.0 GENERAL BIOLOGICAL SURVEY RESULTS	5-1
5.1 Vegetation Communities and Land Cover Types	5-1
5.2 Wildlife	5-1
5.3 Special-Status Plants	5-1
5.4 Special-Status Wildlife.....	5-1
5.5 Wetlands and Waterways	5-2
6.0 CONCLUSION AND RECOMMENDATIONS.....	6-1
7.0 CERTIFICATION.....	7-1
 FIGURES	
Figure 1 Regional Location.....	2-2
Figure 2 Site Vicinity.....	2-3
Figure 3 Vegetation Communities and Land Cover Types	5-3
Figure 4 Literature Review	5-4
Figure 5 Critical Habitat	5-5
Figure 6 National Wetland Inventory	5-6
 APPENDICES	
Appendix A Special-Status Species Potential for Occurrence within the Project Site	
Appendix B Photograph Log	
Appendix C Plant Species Observed within the Study Area	
Appendix D Wildlife Species Detected within the Study Area	

1.0 INTRODUCTION AND EXECUTIVE SUMMARY

NOREAS Inc. (NOREAS) is pleased to provide this General Biological Resources Assessment for the Harley Knox Industrial Project (hereafter referred to as the “Project”). The Project is located at 150 Harley Knox Blvd (Assessor’s Parcel Number [APN] 302-100-002 and 302-100-007) in Perris, California (Figures 1 and 2). 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 the Project’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’s proposed ground disturbance footprint (hereafter referred to as the Project Site), and a buffer (Figure 2). Additionally, the Project is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), within the Mead Valley Area Plan. 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 to Riverside County.

During pedestrian surveys in 2021, 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 is not collocated with any United States Fish and Wildlife Service (USFWS) designated critical habitat, nor were any special status species detected during the 2021 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 agencies. The Burrowing Owl is not a Federal and/or State listed species. 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. To that end, 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.

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]). 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.

2.0 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 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 building and associated landscaping, parking, and drive aisles with vehicular parking stalls, plus bicycle parking stalls. Truck dock positions would be provided with trailer parking stalls in a distinct truck court as well.

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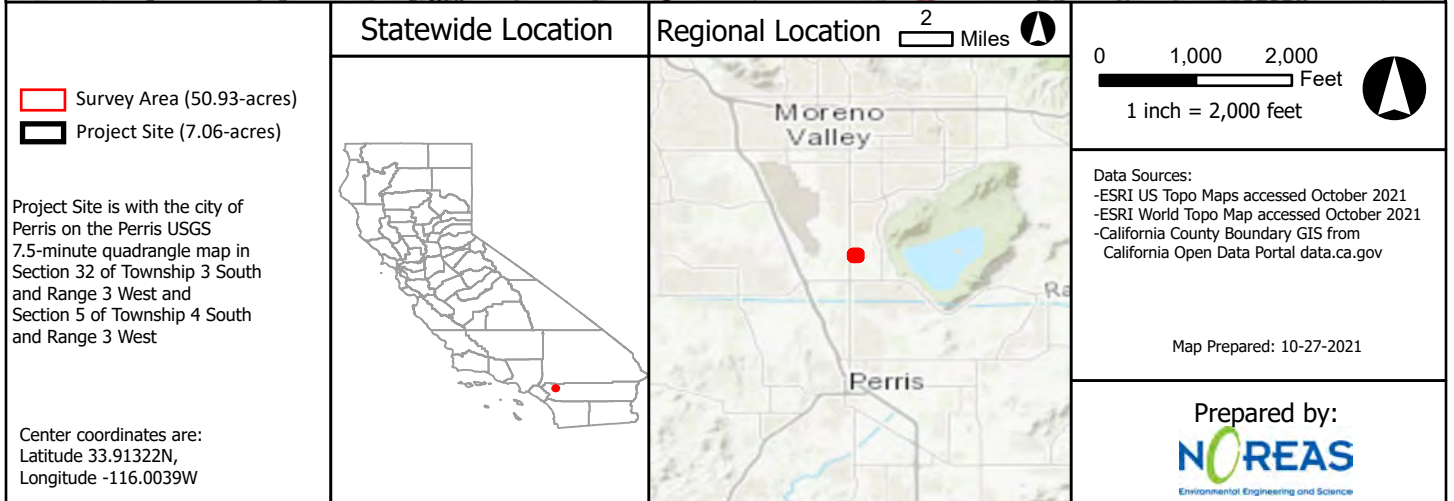
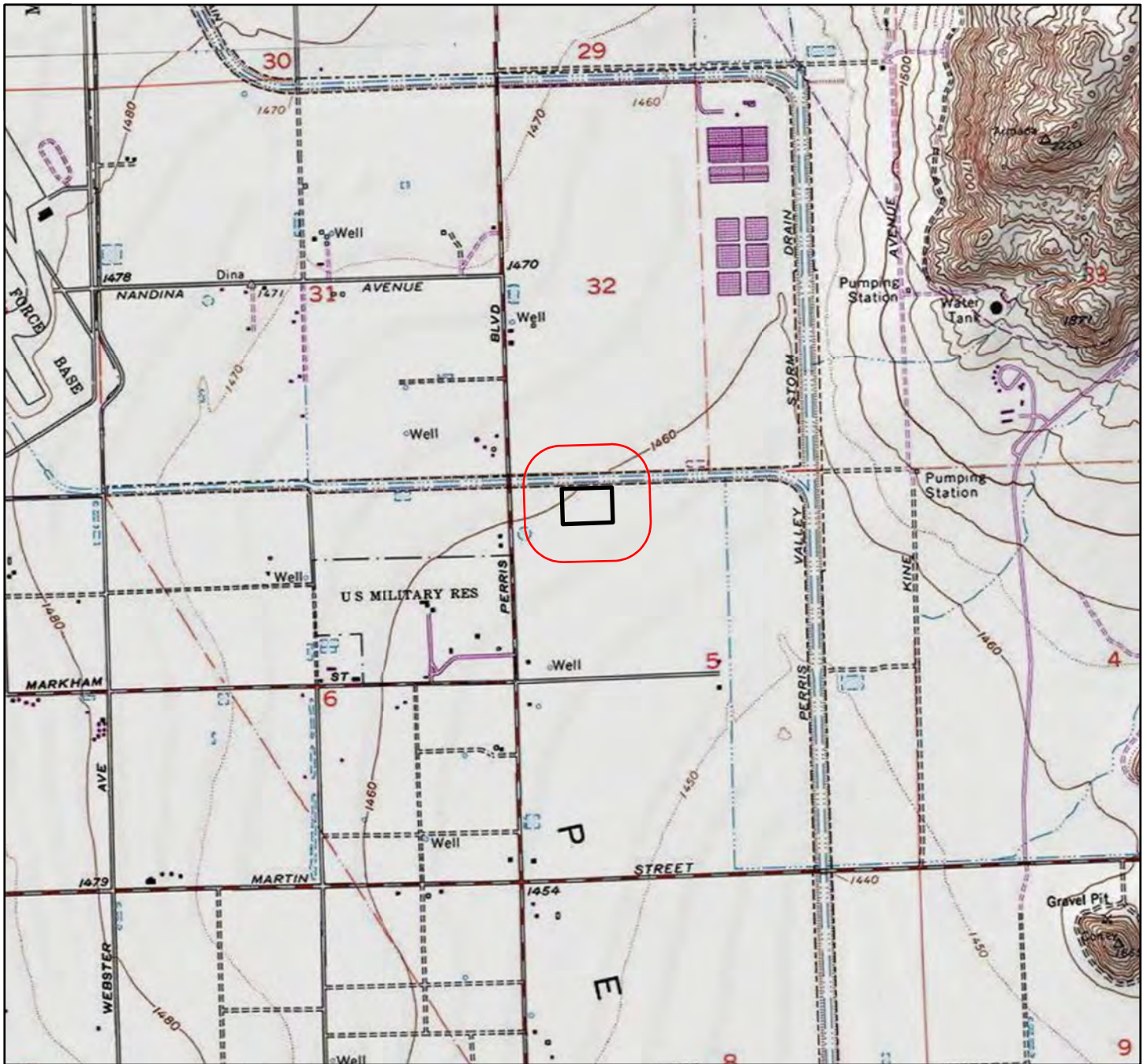


Figure 1. Regional Location



- Survey Area (50.93-acres)
- Project Site (7.06-acres)

0 500 1,000
 Feet
 1 inch = 1,250 feet



Data Sources:
 -BING Basemap accessed October 2021

Map Prepared: 10-27-2021

Prepared by:
NOREAS
 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 resources² that have the potential to exist within - and adjacent to the study area. Biological resources were evaluated within several miles of the Project.

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

- ✓ US Fish and Wildlife Service (USFWS) Critical Habitat Mapper and File Data (USFWS 2021a);
- ✓ USFWS Riverside County Field Office Species List (USFWS 2021b);
- ✓ USFWS National Wetlands Inventory database (USFWS 2021c);
- ✓ 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 2021);
- ✓ Natural Resource Conservation Service, Soil Survey Geographic Database (SSURGO) (USDA-NRCS 2021a);
- ✓ California Native Plant Society (CNPS) Electronic Inventory (CNPS 2021);
- ✓ MSHCP Transportation and Land Management Agency Geographic Information Services Database (GISD 2021);
- ✓ Regional Conservation Authority GIS Data Mapping Tool (RCA 2021, <https://www.wrc-rca.org/rcamaps/>);
- ✓ Western Riverside County Multiple Species Habitat Conservation Plan (Dudek 2003); 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.

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 habitat³ 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.

³ 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 October 2021 surveys included clear skies, temperatures ranging from 65–76 °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

Two land cover types were observed within the study area: Disturbed/Developed and Ruderal (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, residential housing, 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*), Mexican fan palm (*Washingtonia Robusta*), 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 ripgut brome, Sahara mustard, and Schismus.

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 2021 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, 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 2021 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, and their potential for occurrence within it is detailed within Appendix A and Figure 4. Nonetheless, 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 within the Project Site. 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).

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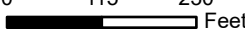
 Survey Area (50.93-acres)

 Project Site (7.06-acres)

Vegetation Communities and Land Cover Types

 Developed/Disturbed (26.50-acres)

 Ruderal (27.25-acres)

0 115 230
 Feet
 1 inch = 233 feet



Data Sources:
 -BING Basemap accessed October 2021

Map Prepared: 11-2-2021




Prepared by:

 Environmental Engineering and Science

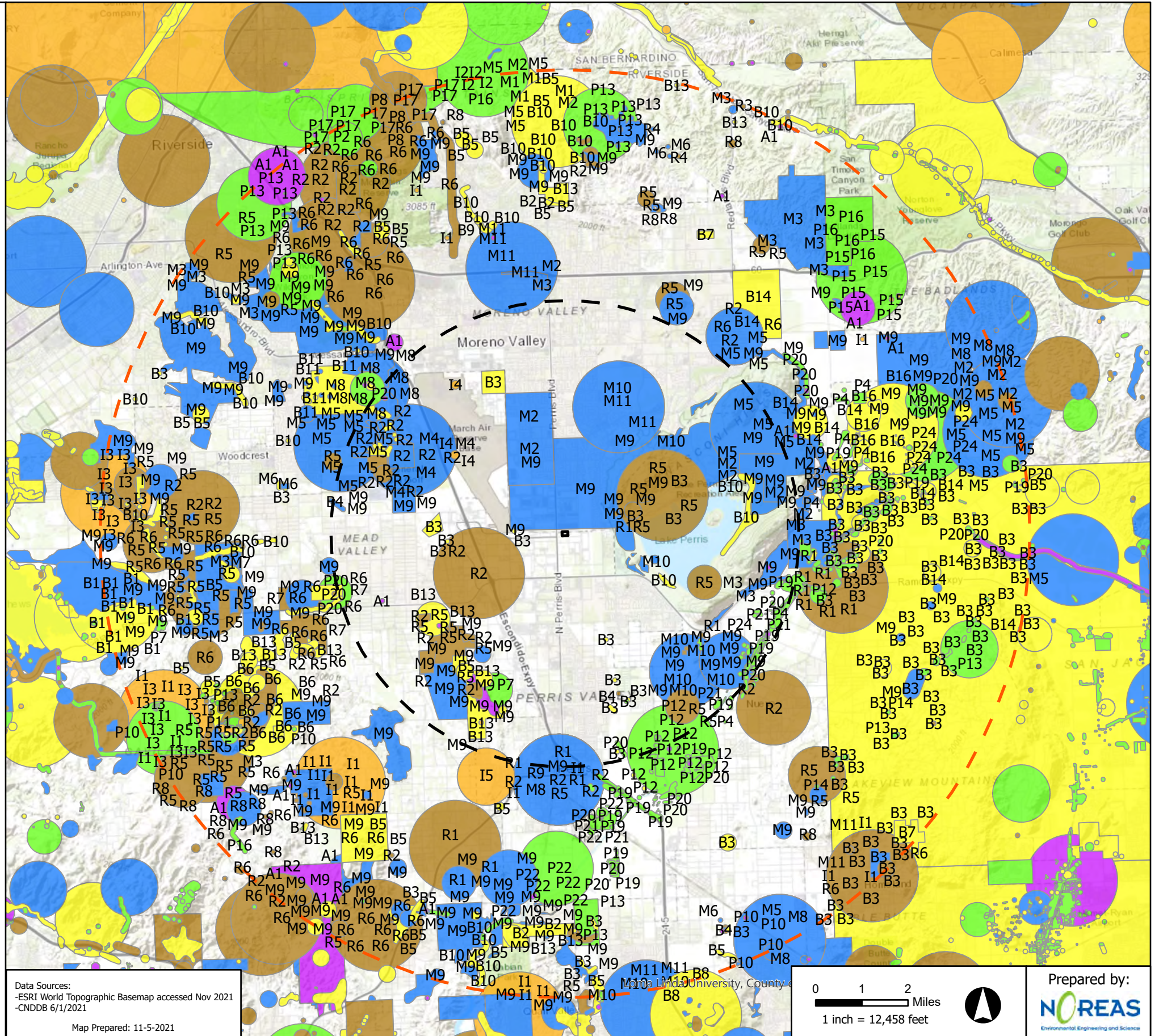
Figure 3. Vegetation Communities/Land Cover Types

Special-Status Species Occurrences

Map Code	Common Name (Scientific Name)
Plants	
P1	California screw moss (<i>Tortula californica</i>)
P2	chaparral ragwort (<i>Senecio aphanactis</i>)
P3	chaparral sand-verbena (<i>Abronia villosa</i> var. <i>aurita</i>)
P4	Coulter's goldfields (<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>)
P5	Davidson's saltscale (<i>Atriplex serenana</i> var. <i>dauidsonii</i>)
P6	little mousetail (<i>Myosurus minimus</i> ssp. <i>apus</i>)
P7	long-spined spineflower (<i>Chorizanthe polygonoides</i> var. <i>longispina</i>)
P8	marsh sandwort (<i>Arenaria paludicola</i>)
P9	mud nama (<i>Nama stenocarpa</i>)
P10	Munz's onion (<i>Allium munzii</i>)
P11	Palmer's grappleshook (<i>Harpagonella palmeri</i>)
P12	Parish's brittlescale (<i>Atriplex parishii</i>)
P13	Parry's spineflower (<i>Chorizanthe parryi</i> var. <i>parryi</i>)
P14	Payson's jewelflower (<i>Caulanthus simulans</i>)
P15	Plummer's mariposa-lily (<i>Calochortus plummerae</i>)
P16	Robinson's pepper-grass (<i>Lepidium virginicum</i> var. <i>robinsonii</i>)
P17	salt marsh bird's-beak (<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>)
P18	San Diego ambrosia (<i>Ambrosia pumila</i>)
P19	San Jacinto Valley crownscale (<i>Atriplex coronata</i> var. <i>notator</i>)
P20	smooth tarplant (<i>Centromadia pungens</i> ssp. <i>laevis</i>)
P21	spreading navarretia (<i>Navarretia fossalis</i>)
P22	thread-leaved brodiaea (<i>Brodiaea filifolia</i>)
P23	woven-spored lichen (<i>Texosporium sancti-jacobi</i>)
P24	Wright's trichocoronis (<i>Trichocoronis wrightii</i> var. <i>wrightii</i>)
Invertebrates	
I1	Crotch bumble bee (<i>Bombus crotchii</i>)
I2	Delhi Sands flower-loving fly (<i>Rhaphiomidas terminatus abdominalis</i>)
I3	quino checkerspot butterfly (<i>Euphydryas editha quino</i>)
I4	Riverside fairy shrimp (<i>Streptocephalus woottoni</i>)
I5	white cuckoo bee (<i>Neolarra alba</i>)
Reptiles	
R1	California glossy snake (<i>Arizona elegans occidentalis</i>)
R2	coast horned lizard (<i>Phrynosoma blainvillii</i>)
R3	coast patch-nosed snake (<i>Salvadora hexalepis virgulata</i>)
R4	coastal whiptail (<i>Aspidoscelis tigris stejnegeri</i>)
R5	orange-throated whiptail (<i>Aspidoscelis hyperythra</i>)
R6	red-diamond rattlesnake (<i>Crotalus ruber</i>)
R7	San Bernardino ringneck snake (<i>Diadophis punctatus modestus</i>)
R8	Southern California legless lizard (<i>Anniella stebbinsi</i>)
R9	western pond turtle (<i>Emys marmorata</i>)
Birds	
B1	bald eagle (<i>Haliaeetus leucocephalus</i>)
B2	Bell's sage sparrow (<i>Artemisiospiza belli belli</i>)
B3	burrowing owl (<i>Athene cucularia</i>)
B4	California horned lark (<i>Eremophila alpestris actia</i>)
B5	coastal California gnatcatcher (<i>Polioptila californica californica</i>)
B6	Cooper's hawk (<i>Accipiter cooperii</i>)
B7	ferruginous hawk (<i>Buteo regalis</i>)
B8	golden eagle (<i>Aquila chrysaetos</i>)
B9	Lawrence's goldfinch (<i>Spinus lawrencei</i>)
B10	least Bell's vireo (<i>Vireo bellii pusillus</i>)
B11	loggerhead shrike (<i>Lanius ludovicianus</i>)
B12	long-eared owl (<i>Asio otus</i>)
B13	southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)
B14	tricolored blackbird (<i>Agelaius tricolor</i>)
B15	western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)
B16	white-faced ibis (<i>Plegadis chihi</i>)
B17	white-tailed kite (<i>Elanus leucurus</i>)
B18	yellow warbler (<i>Setophaga petechia</i>)
B19	yellow-breasted chat (<i>Icteria virens</i>)
Mammals	
M1	American badger (<i>Taxidea taxus</i>)
M2	Los Angeles pocket mouse (<i>Perognathus longimembris brevinasus</i>)
M3	northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)
M4	pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)
M5	San Bernardino kangaroo rat (<i>Dipodomys merriami parvus</i>)
M6	San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)
M7	San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)
M8	southern grasshopper mouse (<i>Onychomys torridus ramona</i>)
M9	Stephens' kangaroo rat (<i>Dipodomys stephensi</i>)
M10	western mastiff bat (<i>Eumops perotis californicus</i>)
M11	western yellow bat (<i>Lasiurus xanthinus</i>)
Amphibians	
A1	western spadefoot (<i>Spea hammondi</i>)

-  10-Mile Buffer
-  5-Mile Buffer
-  Project Site (7.06-acres)

Note: Resource specialists were consulted and readily available commercial data from resource management plans and other relevant documents were reviewed to determine the locations and types of resources that have the potential to exist in the region.



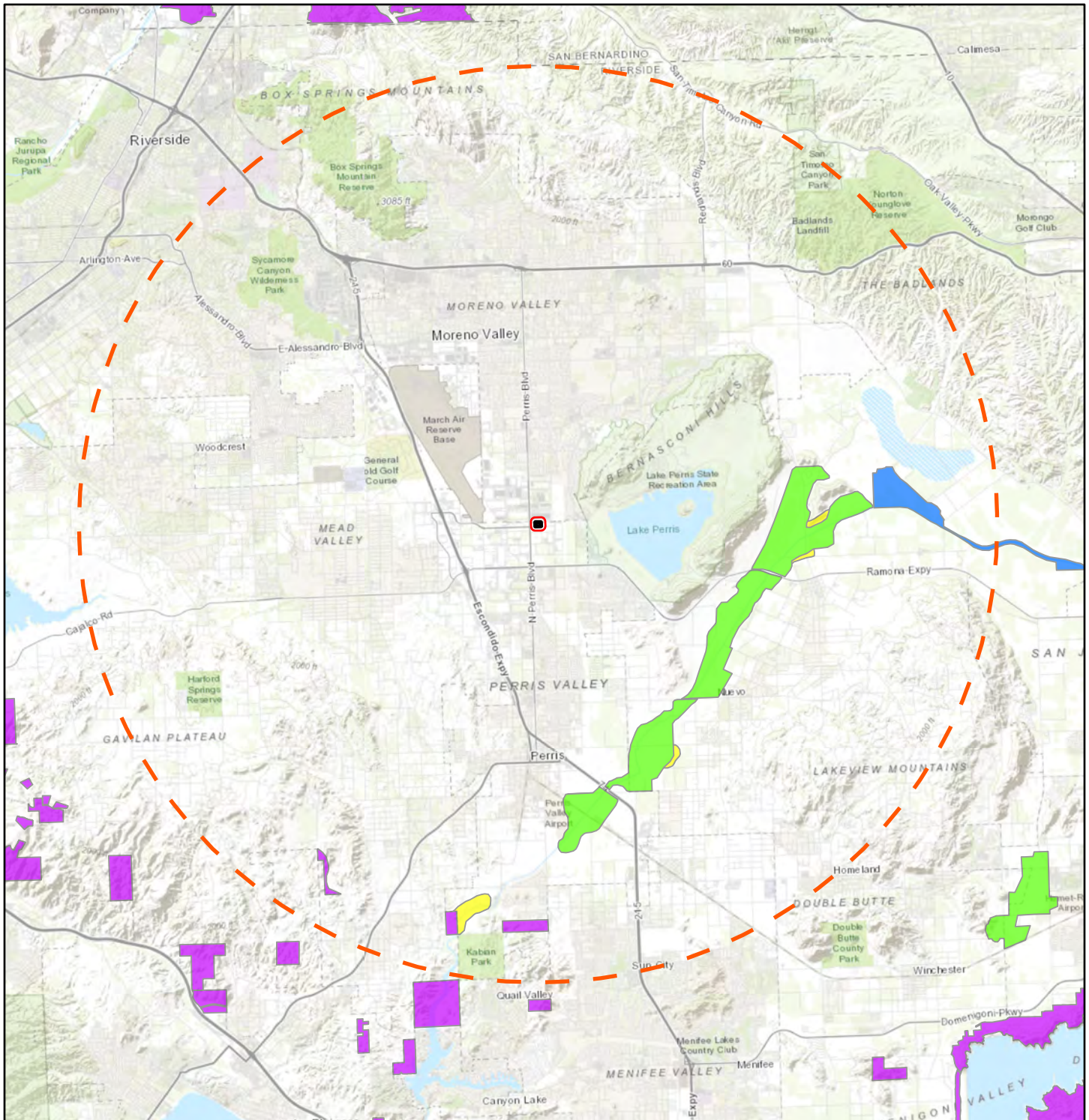
Data Sources:
 -ESRI World Topographic Basemap accessed Nov 2021
 -CNDDDB 6/1/2021
 Map Prepared: 11-5-2021

0 1 2 Miles
 1 inch = 12,458 feet

Prepared by:

 Environmental Engineering and Science

Figure 4. Literature Review



USFWS Critical Habitat Unit

- Survey Area (50.93-acres)
- Project Site (7.06-acres)
- 10-Mile Buffer
- Coastal California gnatcatcher
- San Bernardino Merriam's kangaroo rat
- Spreading navarretia
- Thread-leaved brodiaea

0 1.5 3 Miles
 1 inch = 16,667 feet

Data Sources:
 -ESRI World Topo Map accessed November 2021
 -USFWS Critical Habitat GIS 2021
 Map Prepared: 11-2-2021

Prepared by:

 Environmental Engineering and Science

Figure 5. Critical Habitat

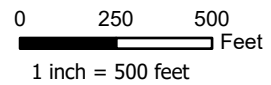


Survey Area (50.93-acres)

Project Site (7.06-acres)

National Wetlands Inventory (NWI)

Riverine



Data Sources:
 -BING aerial basemap accessed October 2021
 -USFWS National Wetlands Institute GIS 2021

Map Prepared: 10-27-2021

Prepared by:
NOREAS
 Environmental Engineering and Science

Figure 6. National Wetlands Inventory

6.0 CONCLUSION AND RECOMMENDATIONS

In 2021, it was determined that greater than 99% of the Project Site was comprised of developed, disturbed and/or non-native habitats. Additionally, the Project is not collocated with any USFWS designated critical habitat, nor were any special status species detected during the 2021 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 was observed within portions of the Project Site. With deference 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. The Burrowing Owl could be important locally with respect to preparation of environmental documents relating to the California Environmental Quality Act (CEQA) - based on CEQA Guidelines §15125 (c), and/or §15380. 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)
- No personnel working within Project limits will handle or relocate flora or fauna.
- 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 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 shall 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 areas 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.

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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: December 07, 2021

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.

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**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
A	Stephens' kangaroo rat (<i>Dipodomys stephensi</i>)	Endangered	Threatened		36	1923-2011
A	Coast horned lizard (<i>Phrynosoma blainvillii</i>)	None	None		3	1929-2006
HP	Burrowing owl (<i>Athene cunicularia</i>)	None	None		17	1980-2017
A	Riverside fairy shrimp (<i>Streptocephalus woottoni</i>)	Endangered	None		1	2009
A	California glossy snake (<i>Arizona elegans occidentalis</i>)	None	None		8	1929-2016
A	Orange-throated whiptail (<i>Aspidoscelis hyperythra</i>)	None	None		11	1918-2005
A	Red-diamond rattlesnake (<i>Crotalus ruber</i>)	None	None		9	1923-2015
A	Least Bell's vireo (<i>Vireo bellii pusillus</i>)	Endangered	Endangered		28	1920-2014
A	Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	None	None		19	1992-2016
A	Los Angeles pocket mouse (<i>Perognathus longimembris brevinasus</i>)	None	None		2	1916-2016
A	Western mastiff bat (<i>Eumops perotis californicus</i>)	None	None		9	1957-1992
A	Western yellow bat (<i>Lasiurus xanthinus</i>)	None	None		31	1981-1992
A	Chaparral sand-verbena (<i>Abronia villosa var. aurita</i>)	None	None	1B.1	7	2004-2014
A	Coulter's goldfields (<i>Lasthenia glabrata ssp. coulteri</i>)	None	None	1B.1	2	2000-2017
A	Davidson's saltscale (<i>Atriplex serenana var. davidsonii</i>)	None	None	1B.2	37	1991-2013
A	Long-spined spineflower (<i>Chorizanthe polygonoides var. longispina</i>)	None	None	1B.2	1	1980-2015
A	Parish's brittlescale (<i>Atriplex parishii</i>)	None	None	1B.1	8	1999
A	San Jacinto Valley crownscale (<i>Atriplex coronata var. notatior</i>)	Endangered	None	1B.1	6	2000-2015
A	Smooth tarplant (<i>Centromadia pungens ssp. laevis</i>)	None	None	1B.1	10	1969-2015
A	Spreading navarretia (<i>Navarretia fossalis</i>)	Threatened	None	1B.1	5	21995-2015
A	Wright's trichocoronis (<i>Trichocoronis wrightii var. wrightii</i>)	None	None	2B.1	7	1937-2011
A	Coastal whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	None	None		2	1993-1999
A	San Bernardino ringneck snake (<i>Diadophis punctatus modestus</i>)	None	None		9	2000
A	Western pond turtle (<i>Emys marmorata</i>)	None	None		5	1987
L	California horned lark (<i>Eremophila alpestris actia</i>)	None	None		11	1992-2015
A	Coastal California gnatcatcher (<i>Polioptila californica californica</i>)	Threatened	None		8	1928-2004
A	Loggerhead shrike (<i>Lanius ludovicianus</i>)	None	None		696	1994
A	Northwestern San Diego pocket mouse (<i>Chaetodipus</i>)	None	None		295	1992-2017

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>fallax fallax</i>)					
A	Pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)	None	None		959	1985
A	San Bernardino kangaroo rat (<i>Dipodomys merriami parvus</i>)	Endangered	Candidate Endangered		3	1908-2015
A	Southern grasshopper mouse (<i>Onychomys torridus ramona</i>)	None	None		112	1908-1938
A	Western spadefoot (<i>Spea hammondi</i>)	None	None		350	1958-2017
A	California screw moss (<i>Tortula californica</i>)	None	None	1B.2	265	2012-2013
A	Chaparral ragwort (<i>Senecio aphanactis</i>)	None	None	2B.2	156	2004
A	Little mouseltail (<i>Myosurus minimus ssp. apus</i>)	None	None	3.1	100	1981
A	Marsh sandwort (<i>Arenaria paludicola</i>)	Endangered	Endangered	1B.1	70	1899
A	Mud nama (<i>Nama stenocarpa</i>)	None	None	2B.2	15	2010
A	Munz's onion (<i>Allium munzii</i>)	Endangered	Threatened	1B.1	23	1897-2012
A	Palmer's grapplinghook (<i>Harpagonella palmeri</i>)	None	None	4.2	11	1986-1990
A	Parry's spineflower (<i>Chorizanthe parryi var. parryi</i>)	None	None	1B.1	175	1917-2012
A	Payson's jewelflower (<i>Caulanthus simulans</i>)	None	None	4.2	81	1982
A	Plummer's mariposa-lily (<i>Calochortus plummerae</i>)	None	None	4.2	69	1989-2003
A	Robinson's pepper-grass (<i>Lepidium virginicum var. robinsonii</i>)	None	None	4.3	20	1952-2004
A	Salt marsh bird's-beak (<i>Chloropyron maritimum ssp. maritimum</i>)	Endangered	Endangered	1B.2	176	1888
A	San Diego ambrosia (<i>Ambrosia pumila</i>)	Endangered	None	1B.1	213	2009
A	Thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	Threatened	Endangered	1B.1	113	2000-2017
A	Woven-spored lichen (<i>Texasporium sancti-jacobi</i>)	None	None	3	50	2002
A	Delhi Sands flower-loving fly (<i>Rhaphiomidas terminatus abdominalis</i>)	Endangered	None		66	1990-2013
A	Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	Endangered	None		2	1945-1998
A	Coast patch-nosed snake (<i>Salvadora hexalepis virgultea</i>)	None	None		31	2016
A	Southern California legless lizard (<i>Anniella stebbinsi</i>)	None	None		30	1967-2018
A	Bald eagle (<i>Haliaeetus leucocephalus</i>)	Delisted	Endangered		4	1975-1981
A	Bell's sage sparrow (<i>Artemisospiza belli belli</i>)	None	None		17	1999-2002
A	Cooper's hawk (<i>Accipiter cooperii</i>)	None	None		131	1983-2001
A	Ferruginous hawk (<i>Buteo regalis</i>)	None	None		53	1989-2005
A	Golden eagle (<i>Aquila chrysaetos</i>)	None	None		165	1974

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	Lawrence's goldfinch (<i>Spinus lawrencei</i>)	None	None		62	2001
A	Long-eared owl (<i>Asio otus</i>)	None	None		89	1983
A	Tricolored blackbird (<i>Agelaius tricolor</i>)	None	Threatened		57	2011-2015
A	Western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	Threatened	Endangered		138	2001
A	White-faced ibis (<i>Plegadis chihi</i>)	None	None		3	1993
A	White-tailed kite (<i>Elanus leucurus</i>)	None	None		10	1983
A	Yellow warbler (<i>Setophaga petechia</i>)	None	None		71	2014
A	Yellow-breasted chat (<i>Icteria virens</i>)	None	None		25	2001
A	American badger (<i>Taxidea taxus</i>)	None	None		6	1908-1990
A	San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	None	None		84	1998-2015
A	San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)	None	None		58	1990

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.

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**APPENDIX B
PHOTOGRAPH LOG**



Photograph 1. Facing North.



Photograph 2. Facing Northwest.



Photograph 3. Facing South.



Photograph 4. Facing East.

APPENDIX C
PLANT SPECIES OBSERVED WITHIN THE STUDY AREA

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Scientific Name	Common Name
Anacardiaceae (Cashew family)	
<i>Schinus molle</i> *	Peruvian pepper
Arecaceae (Palm family)	
<i>Phoenix dactylifera</i> *	Date palm
<i>Washingtonia Robusta</i> *	Mexican fan palm
Asteraceae (Aster family)	
<i>Ambrosia acanthicarpa</i> *	Annual bur-sage
<i>Conyza canadensis</i>	Horseweed
<i>Eragrostis Curvula</i> *	Love grass
<i>Helianthus californicus</i>	Sunflower
<i>Heterotheca grandiflora</i> *	Telegraphweed
<i>Lactuca serriola</i> *	Prickly lettuce
<i>Xanthium strumarium</i>	Cocklebur
Brassicaceae (Mustard family)	
<i>Brassica Tournefortii</i> *	Sahara mustard
<i>Hirschfeldia incana</i> *	Shortpod mustard
<i>Sisymbrium irio</i> *	London rocket
Chenopodiaceae (Goosefoot family)	
<i>Atriplex canescens</i>	Fourwing saltbush
<i>Salsola tragus</i> *	Prickly Russian thistle
Convolvulaceae (bindweed family)	
<i>Convolvulus Arvensis</i> *	Field bindweed
Geraniaceae (Geranium family)	
<i>Erodium cicutarium</i> *	Redstem stork's bill
Fabaceae (Pea family)	
<i>Melilotus indicus</i> *	Sourclover
Malvaceae (Mallow family)	
<i>Malva neglecta</i> *	Cheeseweed
Lamiaceae (Mint family)	
<i>Marrubium Vulgare</i>	Horehound
Myrtaceae (myrtle family)	
<i>Eucalyptus sp.</i>	Eucalyptus
Plantaginaceae (Plantain family)	
<i>Plantago sp.</i>	Narrow leaf plantai
Poaceae (Grass family)	
<i>Bromus diandrus</i> *	Ripgut brome
<i>Bromus madritensis subsp. Rubens</i> *	Red brome
<i>Distichlis Spicata</i>	Salt grass

Scientific Name	Common Name
<i>Echinochloa Crus-galli</i> *	Barnyard grass
<i>Hordeum marinum subsp. Gussoneanum</i> *	Mediterranean barley
<i>Schismus barbatus</i> *	Schismus
Portulacaceae (Purslane family)	
<i>Portulaca oleracea</i>	Common purslane
Solanaceae (Potato family)	
<i>Nicotiana glauca</i> *	Tree tobacco
<i>Solanum elaeagnifolium</i> *	Silverleaf nightshade
Simaroubaceae (Tropical tree family)	
<i>Ailanthus altissima</i>	Tree of heaven
Tamaricaceae (Tamarisk family)	
<i>Tamarix ramosissima</i> *	Saltcedar

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

* = naturalized, non- native plant species.

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APPENDIX D
WILDLIFE SPECIES OBSERVED WITHIN THE STUDY AREA

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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>Sayornis saya</i>	Say's 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

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