Appendix B-1

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis

NOREAS Environmental Engineering and Science

June 2022

Revised March 2023

Western Riverside County
Multiple Species Habitat Conservation Plan
Consistency Analysis

WILSON WAREHOUSE PROJECT

Prepared for:

Lake Creek Industrial
Michael Johnson
1302 Brittany Cross Road
Santa Ana, CA 92705
MJ@lakecreekindustrial.com | 786.200.9681

Prepared by:

NOREAS Inc.
Lenny Malo, MS
Biological & Natural Resources Services
16361 Scientific Way
Irvine, CA 92618-4356
lenny.malo@noreasinc.com | 714.458.5695

April 2023

APNs 300-210-017 and 300-210-025.

Contents

1 EXECUTIVE SUMMARY 1
2 INTRODUCTION 2
2.1 Project Area 2
2.2 Project Description 3
2.3 Covered Roads 3
2.4 Covered Public Access Activities 3
2.5 General Setting 3
3 RESERVE ASSEMBLY ANALYSIS 4
3.1 Public Quasi-Public Lands 5
3.1.1 Public Quasi-Public Lands in Reserve Assembly Analysis 5
3.1.2 Project Impacts to Public Quasi-Public Lands 5
4 VEGETATION MAPPING 5
5 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AREAS AND VERNAL POOLS (SECTION 6.1.2) 7
5.1 Riparian/Riverine 8
5.1.1 Methods 8
5.1.2 Existing Conditions and Results 9
5.1.3 Impacts 9
5.1.4 Mitigation 9
5.2 Vernal Pools 9
5.2.1 Methods 10
5.2.2 Existing Conditions and Results 10
5.2.3 Impacts 11
5.2.4 Mitigation 11
5.3 Fairy Shrimp 11
5.4 Riparian Birds 11
6 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3) 11
7 ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2) 13
7.1 MSHCP Criteria Area Sensitive Plant Species 14
7.2 Burrowing Owl 19
7.2.1 Methods 19
7.2.2 Existing Conditions and Results 20
7.2.3 Impacts 20
7.2.4 Mitigation 20
8 INFORMATION ON OTHER SPECIES 21
8.1 Delhi Sands Flower Loving Fly 21
8.2 Species Not Adequately Conserved 21

9 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (SECTION 6.1.4) 21
10 BEST MANAGEMENT PRACTICES (VOLUME I, APPENDIX C) 21
11 CERTIFICATION 24
12 REFERENCES 25

List of Figures

Figure 1 Regional Location Map
Figure 2 Site Vicinity Map
Figure 3 MSHCP Criteria Cells
Figure 4 MSHCP Cores, Linkages and Conserved Lands
Figure 5 Vegetation Community/Land Cover Types
Figure 6 RCA MSHCP Vegetation 2012
Figure 7 Soils Map
Figure 8 Literature Review
Figure 9 Critical Habitat
Figure 10 National Wetland Inventory

List of Tables

Table 1. Vegetation Community/Land Cover Types 7
Table 2. MSHCP Narrow Endemic Plant Species Assessment 12
Table 3. MSHCP Criteria Area Sensitive Plant Species Assessment 15
Table 4. MSHCP Best Management Practices Applicability (Volume 1, Appendix C) 21

Appendices

Appendix A Site Plan
Appendix B Plant Species Observed Within the Study Area
Appendix C Wildlife Species Observed Within the Study Area
Appendix D Special-Status Species and Their Potential to Occur Within the Project Site
Appendix E Burrowing Owl Survey Report
Appendix F Photographic Log
Appendix G Project GIS Files (provided separately)

1 EXECUTIVE SUMMARY

The proposed Wilson Warehouse Project (hereinafter referred to as the "Project") consists of the construction of an 83,910 square-foot building, landscaping, parking, and drive aisles on an unimproved piece of land. 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. and 300-210-025) (Figures 1 and 2). 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 (Figures 3 and 4).

The Project limits of work only includes 5.0-acres of developed, anthropogenically disturbed, and ruderal land cover types (Figure 5). The study area for the Project extended beyond its 5.0-acre permanent disturbance footprint, and included roughly 46-acres. According to the RCA MSHCP Information Map, Project limits lie partially or completely within predetermined survey areas for the Burrowing Owl (*Athene cunicularia*), narrow endemic and criteria area sensitive plant species. But the Project is not within a survey area for amphibians or mammals.

In 2012 the MSHCP mapped the vegetation within the Project Site as Urban (GISD 2022, Figure 6). In 2022, no Burrowing Owl, no narrow endemic and no criteria area sensitive plant species were observed within the study area. To that end, three vegetation communities/land cover types were detected within the Project Site: Ruderal, Developed/Disturbed and Non-native Grassland. Furthermore, based on the results of the 2022 habitat assessments and field surveys, potential habitat is not present within the study area for MSHCP narrow endemic, or criteria area sensitive plant species.

Additionally, no federal- or state-listed flora or fauna were observed within the study area during the 2022 field surveys. The Project's 5.0-acre permanent disturbance footprint (Project Site) is comprised of developed, disturbed and/or non-native land cover types. The Project is not collocated with any United States Fish and Wildlife Service (USFWS) designated critical habitat (Figure 9), nor were any special status species detected during the 2022 field surveys. No nesting birds, remnant raptor nests, or bat guano have been detected within the Project Site either. The Project's 5.0-acre permanent disturbance footprint has little value as suitable breeding / nesting, and foraging habitat for native species. Furthermore, the Project Site has limited – if any, worth as a low-quality migration corridor or overland dispersal habitat for wildlife, because it is severely movement constrained by the surrounding residential, industrial / commercial developments, and public infrastructure.

The target conservation acreage range for the Mead Valley Area Plan is 4,980 to 6,730 acres - composed of approximately 3,095 acres of existing Public/Quasi-Public Lands and 1,885 - 3,635 acres of Additional Reserve Lands. The City of Perris is located entirely within the Mead Valley

Area Plan. The target acreage range within the City of Perris is 720 - 1,400 acres. The City of Perris target acreage is included within the 1,885 - 3,635-acre target conservation range on Additional Reserve Lands for the entire Mead Valley Area Plan. Furthermore, conservation within the Mead Valley Area Plan is centered around Proposed Constrained Linkage 19, Proposed Core 1, Proposed Extension of Existing Core 4, Proposed Linkage 3, Proposed Linkage 7, and Proposed Noncontiguous Habitat Block 4. The Project's 5.0-acres permanent disturbance footprint includes no lands within or immediately adjacent to MSHCP Proposed Constrained Linkage 19, Proposed Core 1, Proposed Extension of Existing Core 4, Proposed Linkage 3, Proposed Linkage 7, and Proposed Noncontiguous Habitat Block 4, Cell Groups, Criteria Cells or Subunits. As such, the Project is not anticipated to adversely affect any of the MSHCP Mead Valley Area Plan's Planning Species, Biological Issues and Considerations, and Criteria for the aforesaid Subunits.

Nonetheless, Lake Creek Industrial will commit to a pre-construction Burrowing Owl survey that will be conducted prior to initiation of ground disturbance. If Burrowing Owls are observed, a Burrowing Owl Protection and Relocation Plan will be prepared.

2 INTRODUCTION

The purpose of this Consistency Analysis Report (Analysis) is to summarize the biological data for the Wilson Warehouse Project and to document its consistency with the goals and objectives of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). In a general sense, the Project consists of the construction of a warehouse building, landscaping, parking, and drive aisles in the City of Perris, Riverside County, California.

2.1 Project Area

The Project's study area is defined as its proposed physical ground disturbance footprint (Project Site), plus a buffer (Figures 1 and 2). The Project includes Assessor Parcel Numbers (APNs) 300-210-017 and 300-210-025. The Project's "study area" includes all lands to be affected directly and/or indirectly by the Project, and are not merely the immediate lands involved in the action itself. The APNs associated with the Project's "study area" include 300210015, 300210024, 300210027, 300210020, 300210028, 300210019, 300210017, 300210018, 300210009, 300210023, 300210022, 300210025, 300210016, 300210021, 300170012, 300170015, 300170003, 300170004, 300170011, 300170009, 300210008, 300210010, 300170014, 300170013, 300210007, 300210006, 300170010 and 300170016.

The Project Site can be found on the Perris United States Geological Survey (USGS) 7.5-Minute Topographic Quadrangle Map (USGS 1981) - Section 17, of Township 4 South and Range 3 West. The Project Site occurs at an approximate elevation of 1,400 ft. above mean sea level (MSL). Land use in the surrounding vicinity includes commercial, agriculture, residential and industrial endeavors. The lands to be impacted include no MSHCP established Subunits, Cell Groups, Criteria Cells, Public/Quasi-Public Lands, Linkages/Cores, Conserved Lands, or RCA Easements (Figures 3 and 4). The Project's construction limit is 5.0-acres (Figure 2). The study area consists of Ruderal (23.2-acres), Developed/Disturbed (12.7-acres) and Non-native Grassland (9.9 - acres) land cover types. Representative photos of the study area are provided in Appendix A. The

Project includes no off-site features, or staging areas. The Project does not include any proposed temporary impacts.

2.2 Project Description

The Project consists of the construction of a 83,910 square-foot industrial building, landscaping, parking, and drive aisles. Vehicular parking stalls, bicycle parking stalls, truck dock positions, trailer parking stalls within a truck court are included within the Project as well. The Project's construction limit is 5.0-acres. The study area consists of Ruderal (23.2-acres), Developed/Disturbed (12.7-acres) and Non-native Grassland (9.9 - acres) land cover types. The Project includes street improvements including curb, gutter, and pavement to the 47-foot half width right-of-way along Wilson Avenue but does not include any off-site staging areas. The Project does not include any proposed temporary impacts. A construction Site Plan is included within Appendix A. This Project doesn't include regular weed abatement and fuel modification zones, as the entire 5.0-acres disturbance footprint will be built out.

2.3 Covered Roads

The Project Site is located within the City of Perris California, north of Placentia Avenue and west of Wilson Avenue (Figures 1 and 2). Wilson Avenue is a Covered Road – as identified by the RCA. Therefore, MSHCP Covered Operations and Maintenance Activities – may be applicable to Wilson Avenue.

2.4 Covered Public Access Activities

The Project involves no construction or improvements to trails or other public access facility, referenced within MSHCP Section 7.4.2. Therefore, this MSHCP Section is not applicable.

2.5 General Setting

Two soil types occur within the Project Site - based on the U.S. Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS) Soil Survey data sets (Figure 7):

- Ramona sandy loam, 0 to 2 percent slopes; and
- Domino silt loam.

Of the above referenced soil types, none are classified as hydric, or are known to support seasonal wetlands, or special status invertebrates. With that said, it is worth noting that with deference to the USDA-NRCS Soil Survey data, it is predominately collected and developed through the use of historic aerial photographic interpretation - with limited ground truthing. Therefore, the data the USDA-NRCS Soil Survey provides does not always represent precise information about the presence - or absence, of a specific soil or land cover within an exact location in 2022. USDA-NRCS Soil Survey data users are often cautioned that due to the limitation of mapping – primarily through aerial photo interpretation, a percentage of unique soil types may have gone unidentified - or misidentified.

Land use in the surrounding vicinity includes commercial, agriculture, residential and industrial endeavors. In 2012 the MSHCP mapped the vegetation within the Project Site as Urban (GISD

2022, Figure 6). In 2022, three vegetation communities/land cover types were detected within the Project Site: Ruderal, Developed/Disturbed and Non-native Grassland (Figure 5).

The Project's construction limit is 5.0-acres (Figure 2). The study area consists of Ruderal (23.2-acres), Developed/Disturbed (12.7-acres) and Non-native Grassland (9.9 - acres) land cover types. The Project's 5.0-acre permanent disturbance footprint (also referred to as the Project Site within this document) is comprised of ruderal land cover types. The Project Site is not collocated with any USFWS designated critical habitat (Figure 9), nor were any special status species detected during the 2022 field surveys. No nesting birds, no Burrowing Owls, no remnant raptor nests, and no bat guano have been detected within the Project Site either. Special-status species known to occur within several miles of the Project, and their potential for occurrence within it, are detailed within Appendix D and Figure 8.

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*). A complete list of wildlife species detected within and adjacent to the Project Site during the 2022 field surveys are provided in Appendix C.

3 RESERVE ASSEMBLY ANALYSIS

The Project Site is located within the Mead Valley Area Plan. But not within the boundaries of any MSHCP established Subunit, Cell Group, Criteria Cell, Public/Quasi-Public Land, Linkages/Cores, Conserved Lands, or RCA Easements. The target conservation acreage range for the Mead Valley Area Plan is 4,980 to 6,730 acres - composed of approximately 3,095 acres of existing Public/Quasi-Public Lands and 1,885 - 3,635 acres of Additional Reserve Lands. The City of Perris is located entirely within the Mead Valley Area Plan. The target acreage range within the City of Perris is 720 - 1,400 acres. The City of Perris target acreage is included within the 1,885 - 3,635-acre target conservation range on Additional Reserve Lands for the entire Mead Valley Area Plan.

The Project's 5.0-acre permanent disturbance footprint does not impact any of the Mead Valley Area Plan's 4 Subunits. The Project is not anticipated to adversely affect any of the MSHCP Mead Valley Area Plan's Planning Species, Biological Issues and Considerations, and Criteria for the aforesaid Subunits. As stated above, the Project Site includes no land, nor is it connected, or adjacent to any Cell Groups, Criteria Cells, habitat proposed for conservation, locales proposed for additional reserve assembly, cores or linkages within the MSHCP. Furthermore, conservation within the Mead Valley Area Plan is centered around Proposed Constrained Linkage 19, Proposed Core 1, Proposed Extension of Existing Core 4, Proposed Linkage 3, Proposed Linkage 7, and Proposed Noncontiguous Habitat Block 4. The Project Site includes no lands within or immediately adjacent to MSHCP Proposed Constrained Linkage 19, Proposed Core 1, Proposed Extension of Existing Core 4, Proposed Linkage 3, Proposed Linkage 7, and Proposed Noncontiguous Habitat Block 4, Cell Groups or Criteria Cells.

According to the RCA MSHCP Information Map, the Project limits lie partially or completely within predetermined survey areas for the Burrowing Owl, narrow endemic, and criteria area sensitive plant species. But the Project Site is not within a survey area for amphibians or mammals. Therefore, a Burrowing Owl habitat suitability assessment was conducted in accordance with the MSHCP Burrowing Owl survey instructions. Since suitable habitat was present, surveys were performed. Similarly - per the MSHCP, lands that occur within a survey area for narrow endemic, and criteria area sensitive plant species, must have a habitat evaluation for the species. The Project Site includes the following vegetation communities/land cover types: Ruderal, Disturbed/Developed and Non-native Grassland. No special status species were observed within the Project Site during the 2022 field survey events. Furthermore, the Project is not collocated with any USFWS designated critical habitat (Figure 9).

Based on the results of the 2022 habitat assessments and field surveys, potential habitat is not present within the study area for MSHCP narrow endemic or criteria area sensitive plant species. According to the MSHCP guidelines, focused surveys are not required if suitable habitat is not present - even if the Project is located within a predetermined MSHCP Survey Area (MSHCP 2004). In 2012 the MSHCP mapped the vegetation within Project limits as Urban Lands (GISD 2022, and Figure 6). During the 2022 field surveys, no Burrowing Owls, narrow endemic or criteria area sensitive plant species were observed within, or adjacent to Project limits.

3.1 Public Quasi-Public Lands

The majority of the cities in western Riverside County, have contributed open space/land to help establish the MSHCP Conservation Area. These lands are described in the MSHCP as Public/Quasi-Public (PQP) Lands.

3.1.1 Public Quasi-Public Lands in Reserve Assembly Analysis

P/QP Lands are a subset of MSHCP Conservation Area lands that are known to be in public/private ownership and expected to be managed for open space value and/or in a manner that contributes to the Conservation of Covered Species (including lands contained in existing reserves). The Project's 5.0-acre permanent disturbance footprint is not within, nor is it immediately adjacent to - PQP lands (Figure 4).

3.1.2 Project Impacts to Public Quasi-Public Lands

The Project's 5.0-acre permanent disturbance footprint foot print is located >3,000 feet from any known PQP lands. The Project will not directly impact any PQP lands because its disturbance footprint is not located with PQP Lands.

4 VEGETATION MAPPING

On 17 and 25 May and 02 June 2022, pedestrian-based field surveys were performed by NOREAS Inc. (NOREAS) to define general and dominant land cover types, vegetation types, plant community sizes, habitat types, and species present within communities. Type descriptions were based on observed dominant cover and vegetation composition; and were derived from the criteria and definitions of widely accepted land classification systems (Holland 1986; and Sawyer et al. 2009). Plants were identified in the field to the lowest taxonomic level sufficient to

determine whether the species detected 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) and those detailed in Sections 2.1.3 and 6.1.2 of the MSHCP. This method of floristic survey was conducted to safeguard that special-status plant species were not inadvertently overlooked because they were not targeted during surveys.

Three vegetation communities/land cover types were observed within the study area: Ruderal, Developed/Disturbed and Non-native Grassland (Table 1 and Figure 5). Cover types are described in detail 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., 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 shrubs and trees in low numbers and a negligible number of scattered native forbs such as fiddleneck (*Amsinckia menziesii*).

Table 1. Vegetation Community/Land Cover Types

Vegetation Community/Land Cover Type	Study Area Acres	Project Site Acres	Permanent Impact Acres	Permanent Impact Acres Inside a Subunit, Cell Group, Criteria Cell, PQP Lands, Linkages/Cores, Conserved Lands, or RCA Conservation Easements	Permanent Impact Acres Outside a Subunit, Cell Group, Criteria Cell, PQP Lands, Linkages/Cores, Conserved Lands, or RCA Conservation Easements.
Disturbed /Developed	12.7	0.05	0.05	0	0.05
Ruderal	18.2	4.9	4.9	0	4.9
Non-Native Grassland	9.9	0.05	0.05	0	0.05
Total	**40.8**	**5.0**	**5.0**	0	**5.0**

In general terms, the plants observed in the study area included a range of native and non-native species common to disturbed habitats, etc. Commonly-occurring species included: ripgut brome, Sahara mustard, and Schismus, among others. Please note that in 2012, the MSHCP mapped the vegetation within the Project Site as Urban Lands (GISD 2021; Figure 6). A comprehensive list of plant species observed during the 2022 surveys is presented in Appendix B.

5 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AREAS AND VERNAL POOLS (SECTION 6.1.2)

According to Section 6.1.2 of the MSHCP:

> "**Riparian/Riverine Areas** are lands which contain Habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year."
>
> "**Vernal pools** are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits

> into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records."
>
> "**Fairy Shrimp**. For Riverside, vernal pool and Santa Rosa fairy shrimp, mapping of stock ponds, ephemeral pools and other features shall also be undertaken as determined appropriate by a qualified biologist.
>
> "With the exception of wetlands created for the purpose of providing wetlands Habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions."

5.1 Riparian/Riverine

As defined under Section 6.1.2 of the MSHCP, Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools, riparian/riverine areas are areas dominated by trees, shrubs, persistent emergent plants, or emergent mosses and lichens which occur close to or are dependent upon nearby freshwater, or areas with freshwater flowing during all or a portion of the year. Conservation of these areas is intended to protect habitat that is essential to several listed or special-status water-dependent fish, amphibian, avian, and plant species. This assessment is independent from considerations given to Waters of the United States (WoUS) and Waters of the State (WoS), under the Clean Water Act (CWA), the California Porter-Cologne Water Quality Control Act, and California Department of Fish and Wildlife (CDFW) jurisdictional streambed under the California Fish and Game Code (FGC).

5.1.1 Methods

The Project Site was evaluated via field surveys on May 25, 2022 for the presence of riverine/riparian and vernal pool areas, and jurisdictional waters (i.e., WoUS as regulated by the United States Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB), and/or streambed and associated riparian habitat as regulated by the CDFW. Aerial photography was reviewed prior to conducting the field investigation. The aerials were used to locate and inspect potential natural drainage features, ponded areas, or water bodies that may be considered riparian/riverine habitat and/or fall under the jurisdiction of the USACE, RWQCB, or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed - are expected to exhibit evidence of flow, are considered potential riparian/riverine habitat and are also subject to State and Federal regulatory authorities.

The methods used to delineate the non-wetland WoUS at the Ordinary High Water Mark (OHWM) in variable, ephemeral, intermittent, or perennial non-wetland waters followed guidance described in A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States (Lichvar and McColley 2008) and the Updated Datasheet for the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States ("Updated Datasheet", Curtis and Lichvar 2010).

Evaluation of California Fish and Game Code (FGC) Section 1600 Streambed Waters followed guidance in the Mapping Episodic Stream Activity (MESA) protocols [MESA Field Guide], pursuant to which CDFW claims jurisdiction beyond traditional stream banks and the outer edge of riparian. Under MESA, the term stream is defined broadly to include "a body of water that flows perennially or episodically and that is defined by the area in which water currently flows, or has flowed, over a given course during the historic regime [i.e., 'circa 1800 to the present'], and here the width of its course can reasonably be identified by physical or biological indicators."

The methods used to determine any riparian/riverine or vernal pool areas were based on the above techniques as well as soils evaluations and vegetation classifications. This is because an area may be characterized as riparian based on its vegetative composition, but not meet the criteria of being federal or state jurisdictional water.

5.1.2 Existing Conditions and Results

According to the USGS and the USFWS National Wetland Inventory: there are no current or historical drainages on, or adjacent to, or even near the Project Site. There was also no evidence of current or historical drainages / water conveyance features observed during the field evaluations of the study area in 2022 (Figure10). No hydric vegetation, hydric soils, signs of surface flow, and/or wetland hydrology were present in, adjacent to, or near any portion of the Project Site. Therefore, no riparian/riverine areas occur within Project limits.

5.1.3 Impacts

There is no impact to riparian/riverine resources because no evidence of any soils, plants or other features that meet the definition of 6.1.2 of the MSHCP were visible within the study area.

5.1.4 Mitigation

There is no mitigation for riparian/riverine resources because there is no impact to riparian/riverine resources within the Project Site.

5.2 Vernal Pools

Vernal pools are seasonally inundated, ponded areas that only form in regions where specialized soil and climatic conditions exist. During fall and winter rains typical of Mediterranean climates, water collects in shallow depressions where downward percolation of water is prevented by the presence of a hard pan or clay pan layer (duripan) below the soil surface. Later in the spring when rains decrease and the weather warms, the water evaporates, and the pools generally disappear by May. The shallow depressions remain relatively dry until late fall and early winter with the advent of greater precipitation and cooler temperatures.

Vernal pools provide unusual "flood and drought" habitat conditions to which certain plant and wildlife species have specifically adapted - as well as, invertebrate species such as fairy shrimp. One of the factors for determining the suitability of the habitat for fairy shrimp would be demonstrable evidence of seasonal ponding in an area of topographic depression that is not subject to flowing waters. These astatic pools are typically characterized as vernal pools. More

specifically, vernal pools are seasonal wetlands that occur in depression areas without a continual source of water. They have wetland indicators of all 3 parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season.

The determination that an area exhibits vernal pool characteristics and the definition of the watershed supporting vernal pool hydrology is made on a case-by-case basis. Such determinations consider the length of time the area exhibits upland and wetland characteristics, and the way the area fits into the overall ecological system as a wetland. The seasonal hydrology of vernal pools provides for a unique environment, which supports plants and invertebrates specifically adapted to a regime of winter inundation, followed by an extended period when the pool soils are dry. The MSHCP lists two general classes of soils known to be associated with special-status plant species; clay soils and Traver-Domino Willow association soils. Without the appropriate soils to create the impermeable restrictive layer, none of the special-status species associated with vernal pools can occur.

5.2.1 Methods

Methods included a review of recent and historic aerial photographs (2000-2022) of the Project Site and its immediate vicinity, a review of soils data, and 100 percent visual coverage pedestrian evaluation of the study area. The team looked for signs of clayey soils, ponding, cracking, mottling, etc.

5.2.2 Existing Conditions and Results

A review of recent and historic aerial photographs of the study area and its immediate vicinity did not provide visual evidence of an astatic or vernal pool conditions – on, or in the vicinity of the Project Site. Two soil types occur within the Project Site based on U.S. Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS) Soil Survey data sets (Figure 7):

- Ramona sandy loam, 0 to 2 percent slopes; and
- Domino silt loam.

Of the above referenced soil types, none are the appropriate soils to support vernal pools, nor are they known to support seasonal wetlands, or special status invertebrates in Western Riverside County. No ponding was observed within the study area and the hydrologic regime associated with the Project Site does not support vernal pools, or astatic ponds. From the review of historic aerial photographs and observations during the field investigations, it is concluded no vernal pools or suitable fairy shrimp habitat occur within the Project's permanent disturbance footprint. Further, no special status plant species associated with vernal pools were observed during the field visits either.

5.2.3 Impacts

There are no impacts to vernal pools because none occur within the Project Site, and the soil types within the study area do not support the potential for vernal pools.

5.2.4 Mitigation

No mitigation is required because no vernal pools exist within the Project Site.

5.3 Fairy Shrimp

Fairy shrimp can be found in non-vernal pool features such as stock ponds, ephemeral pools, road ruts, human-made depressions, or other depressions that may pond water. No habitat features suitable for fairy shrimp exist within the Project Site. Therefore, evaluations for the presence of fairy shrimp were not warranted - or required. No further discussion on fairy shrimp is made in this report.

5.4 Riparian Birds

Riparian Birds covered under the MSHCP such as the Least Bell's vireo (*Vireo bellii pusillus*) [LBVI], Southwestern willow flycatcher (*Empidonax trallii extimus*) [SWWF] and Yellow-billed cuckoo (*Coccyzus americanus*) [YBCU] are found only in well-developed riparian habitat. No habitat features suitable for any riparian birds exist within the Project Site. Therefore, evaluations for the presence of riparian birds were not warranted - or required. No further discussion on riparian birds is made in this report.

6 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3)

The Project lies within a predetermined survey area for the following MSHCP Narrow Endemic Plant Species:

- San Diego ambrosia (*Ambrosia pumila*);
- Spreading navarretia (*Navarretia fossalis*);
- California Orcutt grass (*Orcuttia californica*); and
- Wright's trichocoronis (*Trichocoronis wrightii var. wrightii*).

The MSHCP states that in general, habitat suitability assessments may be undertaken year-round, with few exceptions. Based on the results of a habitat assessment conducted on May 25, 2022, potential habitat is not present within the Project Site for the aforementioned MSHCP Narrow Endemic Plant Species (Table 2). According to the MSHCP guidelines, focused surveys are not required for MSHCP Narrow Endemic Plant Species since suitable habitat is not present within the Project Site, even though the Project is located within a predetermined MSHCP Narrow Endemic Plant Species Survey Area (MSHCP 2004). Therefore, no further discussion is made in this document with deference to MSHCP Narrow Endemic Plant Species.

Table 2. MSHCP Narrow Endemic Plant Species Assessment

Species Name (*Scientific Name*)	Habitat Description	Habitat Assessment Results
San Diego ambrosia (*Ambrosia pumila*)	San Diego ambrosia is known from Baja California, Mexico, and San Diego and Riverside counties in the United States. It blooms May to September. San Diego ambrosia occurs primarily on upper terraces of rivers and drainages as well as in open grasslands, openings in coastal sage scrub, and occasionally in areas adjacent to vernal pools.	Habitat Not Present: Potential to Occur – None This perennial species was not detected within the Project Site and is not expected to be present. No *Ambrosia* species were observed onsite during Spring 2022 rare plant assessments. This species is perennial and would have been detected during field efforts, if present. Furthermore, this species occurs in vernal pools (disturbed) which are absent from the Project Site. Given the severely disturbed nature of the Project Site, no habitat occurs onsite for this species.
Spreading navarretia (*Navarretia fossalis*)	Spreading navarretia is a member of the phlox family, and is found in vernal pools, chenopod scrub, edge of marshes, and playas on saline-alkali soils. It occasionally grows in ditches and depressions associated with degraded habitat or old stock ponds (Consortium 2012). Spreading navarretia is a small prostrate to occasionally erect annual. Spreading navarretia blooms April to June.	Habitat Not Present: Potential to Occur – None The species is not expected to occur within the Project Site based on a lack of suitable habitat and the highly disturbed and previously developed conditions documented onsite. The species was not detected during Spring of 2022 rare plant assessments. No habitat (e.g., vernal pools and freshwater marsh) for this species occurs within the Project Site. No *Navarretia* species were observed onsite during field surveys. Given the severely disturbed nature of the site, no habitat occurs within the Project Site for this species and therefore no potential for its occurrence.

Species Name (*Scientific Name*)	Habitat Description	Habitat Assessment Results
California Orcutt grass *(Orcuttia californica)*	California Orcutt grass is a small, unique grass that occurs primarily in vernal pool habitats. It is known from Orange (recently reported occurrence), Los Angeles, Riverside, Ventura, and San Diego Counties, and continues south into Baja California, Mexico. California Orcutt grass blooms April to August. In Riverside County, this species is found in southern basaltic claypan vernal pools at the Santa Rosa Plateau.	Habitat Not Present: Potential to Occur – None The species is not expected to occur within the Project Site based on a lack of suitable habitat and the highly disturbed and previously developed conditions documented onsite. The species was not detected during Spring of 2022 rare plant assessments. No habitat (e.g., vernal pools) for this species occurs within the Project Site. No Orcuttia species were observed onsite during surveys. Given the severely disturbed nature of the site, no habitat occurs within the Project Site for this species and therefore no potential for its occurrence.
Wright's trichocoronis *(Trichocoronis wrightii var. wrightii)*	The historic known range of Wright's trichocoronis includes the Great Valley of central California, western Riverside County, and south Texas and adjacent northeast Mexico. This plant grows in meadows and seeps, marshes, riparian scrub, and vernal pools. Wright's trichocoronis blooms May to September.	Habitat Not Present: Potential to Occur – None The species is not expected to occur within the Project Site based on a lack of suitable habitat and the highly disturbed and previously developed conditions documented onsite. The species was not detected during Spring of 2022 rare plant assessments. No habitat (e.g., riparian, meadows, marsh, and vernal pools) for this species occurs within the Project Site. No Trichoronis species were observed onsite during surveys. Given the severely disturbed nature of the site, no habitat occurs within the Project Site for this species and therefore no potential for its occurrence.

7 ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)

The Project Site is not mapped in a Criteria Survey Area for mammals or amphibians. It is however, mapped in a Criteria Survey Area for plants and Burrowing Owl. Surveys must be conducted within suitable habitat for these species according to accepted protocols. Under the MSHCP, Burrowing Owl is considered an adequately conserved covered species that still requires focused surveys in certain areas as designated in Figure 6-4 of the MSHCP.

7.1 MSHCP Criteria Area Sensitive Plant Species

The Project lies within a predetermined survey area for the following MSHCP Criteria Area Plant Species:

- San Jacinto Valley crownscale (*Atriplex coronata var. natatior*);
- Parish's brittlebush (*Atriplex parishii*);
- Davidson's saltscale (*Atriplex serenana var. davidsonii*);
- Thread-leaved brodiaea (*Brodiaea filifolia*);
- Smooth tarplant (*Centromadia pungens ssp. Laevis*);
- Round-leaved filaree (*Erodium macrophyllum*);
- Coulter goldfields (*Lasthenia glabrata ssp. Couteri*);
- Little mousetail (*Myosurus minimus*); and
- Mud nama (*Nama stenocarpum*).

The MSHCP states that in general, habitat suitability assessments may be undertaken year-round, with few exceptions. Based on the results of a habitat assessment conducted on May 25, 2022, potential habitat is not present within the Project Site for the aforementioned MSHCP Criteria Area Sensitive Plant Species (Table 3). According to the MSHCP guidelines, focused surveys are not required for MSHCP Criteria Area Plant Species since suitable habitat is not present within the Project Site, even though the Project is located within a predetermined MSHCP Criteria Area Plant Species Survey Area (MSHCP 2004). Therefore, no further discussion is made in this document with deference to MSHCP Criteria Area Plant Species.

Table 3. MSHCP Criteria Area Sensitive Plant Species Assessment

Species Name (*Scientific Name*)	Habitat Description	Habitat Assessment Results
San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*)	The San Jacinto Valley crownscale occurs primarily in floodplains that support alkali scrub, alkali playas, vernal pools, and occasionally alkali grasslands (Bramlet 1993).	Habitat Not Present: Potential to Occur – None The species is not expected to occur within the Project Site based on a lack of suitable habitat and the highly disturbed and previously developed conditions documented onsite. The species was not detected during Spring of 2022 rare plant assessments. No habitat (e.g., alkaline scrub, playa, vernal pools, and alkaline grasslands) for this species occurs within the Project Site. Although historically this habitat may have occurred onsite (alkaline-saline soils), it has long since been removed and regularly disked. No *Atriplex* species were observed within the Project Site during Spring 2022 rare plant assessments. Given the severely disturbed nature of the site, no habitat occurs for this species within the Project Site and therefore no potential for occurrence.
Parish's brittlebush (*Atriplex parishii*)	Parish's brittlescale is a small prostrate to decumbent annual, white scaly, and is often much less than eight inches in length. It blooms May to October. This species occurs on alkali or saline flats, alkali meadows, and in or along the margins of vernal pools or playa depressions.	Habitat Not Present: Potential to Occur – None The species is not expected to occur within the Project Site based on a lack of suitable habitat and the highly disturbed and previously developed conditions documented onsite. The species was not detected during Spring of 2022 rare plant assessments. No habitat (e.g., alkaline flats, playa, vernal pools, and alkaline meadows) for this species occurs within the Project Site. Although historically this habitat may have occurred onsite (alkaline-saline soils) it has long since been removed and regularly disked. No *Atriplex* species were observed within the Project Site during Spring 2022 rare plant assessments. Given the severely disturbed nature of the site, no habitat occurs within the Project Site for this species and therefore no potential for occurrence.

Species Name (*Scientific Name*)	Habitat Description	Habitat Assessment Results
Davidson's saltscale *(Atriplex serenana var. davidsonii)*	Davidson's saltscale is a decumbent to ascending annual that is sparsely scaly. It blooms April to October. It grows on coastal bluffs and alkaline alluvial terraces, and on alkali or saline flats in interior areas such as western Riverside County.	Habitat Not Present: Potential to Occur – None The species is not expected to occur within the Project Site based on a lack of suitable habitat and the highly disturbed and previously developed conditions documented onsite. The species was not detected during Spring of 2022 rare plant assessments. No habitat (e.g., alkaline-saline flats, or terraces) for this species occurs within the Project Site Although historically this habitat may have occurred onsite (alkaline-saline soils) it has long since been removed and regularly disked. No *Atriplex* species were observed within the Project Site during Spring rare plant assessments. Given the severely disturbed nature of the site, no habitat occurs within the Project Site for this species and therefore no potential for occurrence.
Thread-leaved brodiaea *(Brodiaea filifolia)*	Thread-leaved brodiaea is a geophyte, which produces leaves and flower stalks that sprout from corms (underground bulb-like storage stems), it blooms March to June, and typically occurs on gentle hillsides, valleys, and floodplains in semi-alkaline flats of riparian areas, vernal pools, mesic southern needlegrass grassland, mixed native-annual grassland, and alkali grassland plant communities in association with clay, clay loam, or alkaline silty-clay soils.	Habitat Not Present: Potential to Occur – None The species is not expected to occur within the Project Site based on a lack of suitable habitat and the highly disturbed and previously developed conditions documented onsite. The species was not detected during Spring of 2022 rare plant assessments. No Brodiaea species were observed within the Project Site. This species is perennial and would have been detected during survey efforts, if present, onsite. Furthermore, the constant disking that occurs within the Project Site would remove this species (perennial bulb) if present and therefore no potential for its occurrence.

Species Name (*Scientific Name*)	Habitat Description	Habitat Assessment Results
Smooth Tarplant *(Centromadia pungens ssp. laevis)*	Smooth tarplant is an annual member of the sunflower family (Asteraceae) that occurs in vernal pools, alkali playas and scrub, alkali grasslands, riparian areas, along watercourses and disturbed sites. It blooms April to September.	Habitat Not Present: Potential to Occur – None Smooth tarplant was not detected within the Project Site. The species was not detected during Spring of 2022 rare plant assessments. No *Centormadia* species were observed onsite during surveys. This species would have been detected during survey efforts, if present, within the Project Site.
Round-leaved filaree *(Erodium macrophyllum)*	Habitats include open areas in cismontane woodland and valley and foothill grasslands, which are often associated with heavy clay soils below 3,600 feet elevation.	Habitat Not Present: Potential to Occur – None The species is not expected to occur within the Project Site based on a lack of suitable habitat and the highly disturbed and previously developed conditions documented onsite. The species was not detected during Spring of 2022 rare plant assessments. Given the disturbed nature of the site, no habitat occurs within the Project Site for this species.

Species Name (*Scientific Name*)	Habitat Description	Habitat Assessment Results
Coulter's goldfields *(Lasthenia glabrata ssp. coulteri)*	Coulter's goldfields is associated with low-lying alkali and saline habitats along the coast and inland valleys. The majority of the populations are associated with coastal salt marsh. In Riverside County, Coulter's goldfields primarily grow in highly alkaline, silty clays associated with the Traver-Domino-Willows soils, and usually in the wet areas in the alkali vernal plain community.	Habitat Not Present: Potential to Occur – None The species is not expected to occur within the Project Site based on a lack of suitable habitat and the highly disturbed and previously developed conditions documented onsite. The species was not detected during Spring of 2022 rare plant assessments. No habitat (e.g., alkaline-saline wetlands) for this species occurs within the Project Site. Although historically this habitat may have occurred onsite (alkaline-saline soils) it has long since been removed and regularly disked. No *Lasthenia* species were observed within the Project Site. Given the severely disturbed nature of the site, no habitat occurs within the Project Site for this species and therefore no potential for its occurrence.
Little mousetail *(Myosurus minimus ssp. apus)*	Little mousetail is widespread in California. It occurs in alkaline vernal pools, and vernal alkali plains and grasslands, and blooms March to June.	Habitat Not Present: Potential to Occur – None The species is not expected to occur within the Project Site based on a lack of suitable habitat and the highly disturbed and previously developed conditions documented onsite. The species was not detected during Spring of 2022 rare plant assessments. No habitat (e.g., alkaline wetlands) for this species occurs within the Project Site. Although historically this habitat may have occurred onsite (alkaline-saline soils) it has long since been removed and regularly disked. No Myosurus species were observed within the Project Site. Given the severely disturbed nature of the site, no habitat occurs within the Project Site for this species and therefore no potential for its occurrence.

Species Name (*Scientific Name*)	Habitat Description	Habitat Assessment Results
Mud nama (*Nama stenocarpum*)	Mud nama grows on muddy embankments of marshes and swamps, lake margins, riverbank, meadow, playa, and vernal pools. In western Riverside County, it is known only from the north shore of Mystic Lake (Roberts et al. 2004).	Habitat Not Present: Potential to Occur – None The species is not expected to occur within the Project Site based on a lack of suitable habitat and the highly disturbed and previously developed conditions documented onsite. The species was not detected during Spring of 2022 rare plant assessments. No habitat (e.g., riparian, lake margins and streambanks) for this species occurs within the Project Site. No *Nama* species were observed onsite during surveys. Given the severely disturbed nature of the site, no habitat occurs within the Project Site for this species and therefore no potential for its occurrence.

7.2 Burrowing Owl

The Project Site is within a mapped survey area for Burrowing Owl, in accordance with MSHCP Figure 6-4, and a recent review of the RCA MSHCP Information GIS map. The Burrowing Owl is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing Owls use a wide variety of arid and semi-arid environments with level to gently sloping areas characterized by open vegetation and bare ground. The western Burrowing Owl, which occurs throughout the western United States including California, rarely digs its own burrows and is instead dependent upon the presence of burrowing mammals (i.e., California ground squirrels [*Otospermophilus beecheyi*], coyotes, and badgers [*Taxidea taxus*]) whose burrows are often used for roosting and nesting.

The presence or absence of colonial mammal burrows is often a major factor that limits the presence or absence of Burrowing Owls. Where mammal burrows are scarce, Burrowing Owls have been found occupying manmade cavities, such as buried and non-functioning drainpipes, stand-pipes, and dry culverts. They also require low growth or open vegetation allowing line-of-sight observation of the surrounding habitat to forage and watch for predators. In California, the Burrowing Owl breeding season extends from the beginning of February through the end of August. Under the MSHCP, Burrowing Owl is considered an adequately conserved covered species that still requires focused surveys in certain areas as designated in Figure 6-4 of the MSHCP. The survey for Burrowing Owl requires a systematic survey of areas that provide suitable habitat - plus an approximately 500 feet zone of influence on all sides of suitable habitat, where applicable.

7.2.1 Methods

A Burrowing Owl habitat suitability assessment and burrow survey was conducted on May 17, 2022 in accordance with the March 29, 2006 Western Riverside County MSHCP Burrowing Owl survey instructions. Since suitable habitat was detected for Burrowing Owls within the study

area, therefore four (4) additional surveys were performed. Targeted owl surveys were conducted on 17 and 24 May and 02 and 09 June of 2022. Surveys were performed from approximately 1 hour before sunrise to 2 hours after sunrise, and from approximately 2 hours before sunset to 1 hours after sunset - when weather conditions were conducive to observing owls outside of burrows

Natural and non-natural substrates were examined for potential burrow sites. Potential burrows encountered were examined for shape, size, molted feathers, whitewash, cast pellets and/or prey remains. Disturbance characteristics and other animal sign encountered within the study area were recorded. A hand-held, global positioning system (GPS) unit with sub meter accuracy was used to survey transects that were prepared within a Geographic Information System prior to the start of field surveys, to identify study area boundaries, and for other pertinent information. Representative photographs of the study area were taken, and recent aerial photographs were evaluated for Project Site and surrounding area. Detailed field survey methods are provided in Appendix E.

7.2.2 Existing Conditions and Results

Habitat in the vicinity of the Project consists of non-native grasses, developed, and disturbed land cover types. No Burrowing Owls were detected nesting, foraging, or dispersing during pedestrian-based field surveys in 2022. Numerous low quality potential burrows were observed within the study area. The burrows detected lacked any evidence of owl tracks, molted feathers, cast pellets, prey remains, egg shell fragments, owl white wash, nest burrow decoration materials, or other items. Detailed field survey results are provided in Appendix E. Burrowing Owls are absent from the Project Site

7.2.3 Impacts

No impacts can be identified, in that no Burrowing Owl or Burrowing Owl sign was observed within the Project Site.

7.2.4 Mitigation

To safeguard there will be no impact to Burrowing Owl, a pre-construction survey is warranted. The suggested mitigation is as follows:

> "Prior to issuance of a grading permit, the applicant shall perform a preconstruction survey that shall be conducted within 30 days prior to ground disturbance to avoid direct take of Burrowing Owls. If the results of the survey indicate that no Burrowing Owls are present on-site, then the project may move forward with grading, upon Planning Department approval. If Burrowing Owls are found to be present or nesting on-site during the preconstruction survey, then the following recommendations must be adhered to: Exclusion and relocation activities may not occur during the breeding season, which is defined as March 1 through August 31, with the following exception: From March 1 through March 15 and from August 1 through August 31 exclusion and relocation activities may take place if it is proven to the Lead Agency and/or appropriate agencies (if any) that

egg laying or chick rearing is not taking place. This determination must be made by a qualified biologist."

8 INFORMATION ON OTHER SPECIES

8.1 Delhi Sands Flower Loving Fly

The Project Site does not fall within the Delhi soils mapped within the MSHCP baseline data.

8.2 Species Not Adequately Conserved

MSHCP Table 9-3 identifies 28 species where requirements must be met for those to be considered not adequately conserved. None of the species listed in the MSHCP Table 9-3 occur on or near the Project Site. Therefore, there is no further action required.

9 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (SECTION 6.1.4)

The MSHCP Section 6.1.4 Guidelines are intended to address indirect effects associated with locating Development in proximity to the MSHCP Conservation Area, where applicable. The Project permanent impact area is not in proximity to an established Cell Group, Criteria Cell, PQP Land, Linkage/Core, Conserved Land, or RCA Conservation Easement, therefore, the MSHCP guidelines pertaining to Urban/Wildlands Interface for the management of edge factors such as lighting, urban runoff, toxics, and domestic predators do not apply.

10 BEST MANAGEMENT PRACTICES (VOLUME I, APPENDIX C)

This section of the report is designed to describe and comment as to the necessity of implementation of the BMPs identified in Volume 1, Appendix C. The BMPs and their applicability to the Project is identified in Table 4.

Table 4. MSHCP Best Management Practices Applicability (Volume 1, Appendix C)

BMP	Applicable Yes or No	Comment
No. 1 – A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for Project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the Project, and the access routes to and Project boundaries within which the Project activities must be accomplished.	No	There are no special status species within or near the Project Site

BMP	Applicable Yes or No	Comment
No. 2 – Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.	Yes	The Project will include grading and paving.
No. 3 – The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via preexisting access routes to the greatest extent possible.	Yes	The Project Site is < 5.0-acres, and is accessible from Wilson Avenue.
No. 4 – The upstream and downstream limits of Projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.	No	There are no streambed resources on or near the Project Site
No. 5 – Project should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.	No	There are no streambed resources on or near the Project Site
No. 6 – Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.	No	There are no riparian or streambed resources on or near the Project Site
No. 7 – When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.	No	There are no streambed resources on or near the Project Site
No. 8 – Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be in such a manner as	No	There are no riparian or streambed resources on or near the Project Site

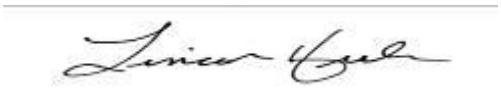
BMP	Applicable Yes or No	Comment
to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS, and CDFG, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.		
No. 9 – Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.	No	There are no streambed resources on or near the Project Site
No. 10 – The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the Project Site	No (But available as needed)	The Project Site consists of Ruderal, Developed/Disturbed and Non-native Grassland cover types.
No. 11 – The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.	No	Project includes no temporary impacts, and its Project Site consists of Ruderal, Developed/Disturbed and Nonnative Grassland cover types.
No. 12 – Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.	Yes	The Project Site removes Ruderal, Developed/Disturbed and Non-native Grassland cover types from Riverside County.
No. 13 – To avoid attracting predators of the species of concern, the Project Site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).	Yes	Standard Measure

BMP	Applicable Yes or No	Comment
No. 14 – Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed Project Site and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.	Yes	Standard Measure
No. 15 – The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/ enhancement area for compliance with project approval conditions including these BMPs.	Yes	Standard Measure

11 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: April 10, 2023

SIGNED: 

12 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 (CNDDB). 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.

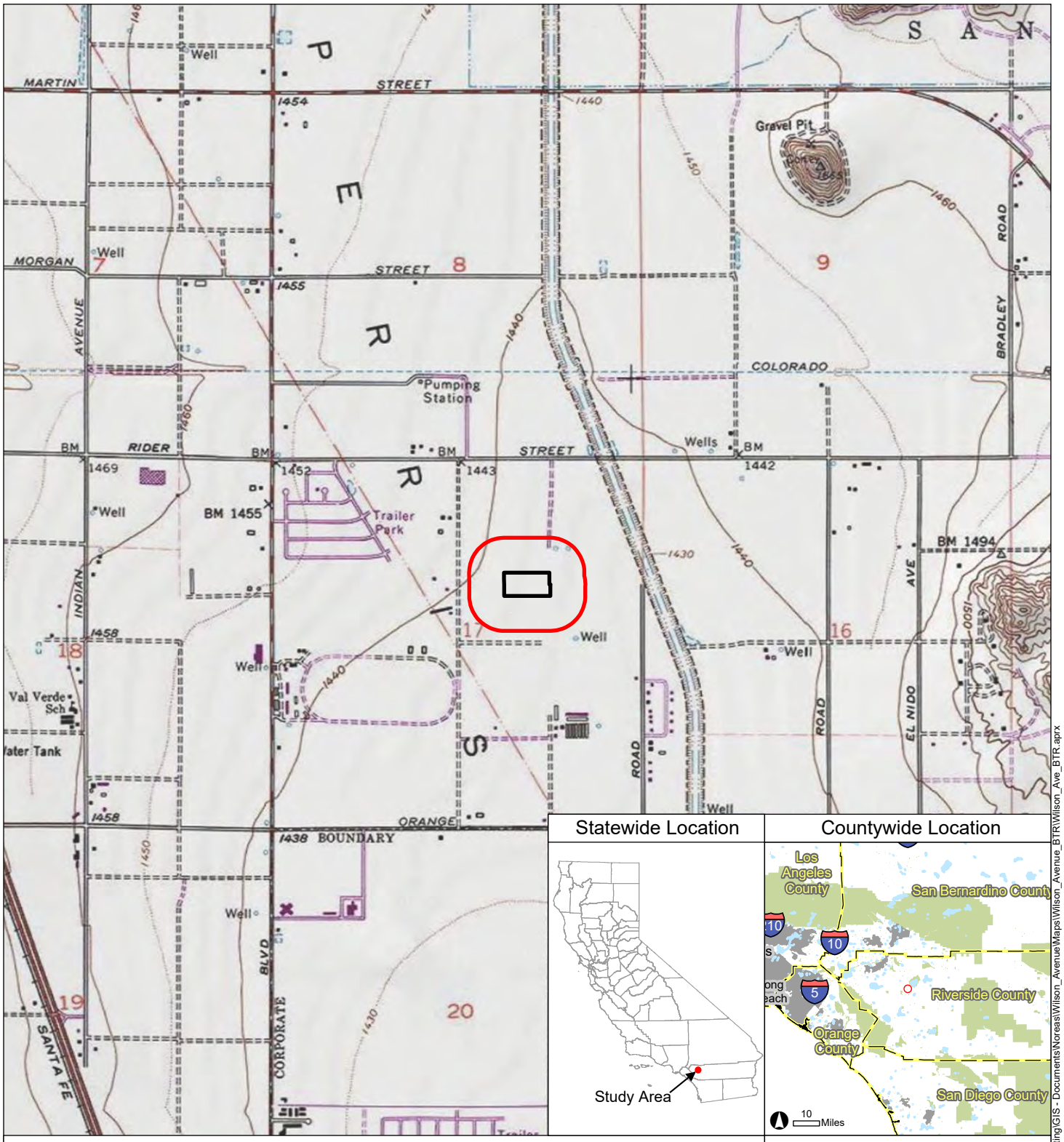
Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. New York, NY: Houghton Mifflin.

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.

FIGURES



Study Area

Project Site

County Boundary (inset)

Urban Area (inset)

Interstate or State Highway (inset)

Water Body (inset)

Park or National Forest (inset)

0 1,000 2,000 Feet

1 inch = 2,000 feet

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

C:\Users\DavidDuncan\Bargas Environmental Consulting\GIS - Documents\Noreas\Wilson_Avenue\Maps\Wilson_Avenue_BTR\Wilson_Ave_BTR.aprx

Figure 1. Regional Location

Study Area (45.8 ac)

Project Site (5.0 ac)

0 250 500 Feet

1 inch = 500 feet

Data Sources:
- Bing Maps Hybrid accessed Jul 2022

Map Prepared: 7-29-22

Prepared by:

NOREAS
Environmental Engineering and Science

C:\Users\CoralFenech\OneDrive - Bargas Environmental Consulting\Documents\Noreas\Wilson_Avenue\Maps\Wilson_Avenue_BTR\Wilson_Ave_BTR.aprx

Figure 2. Site Vicinity

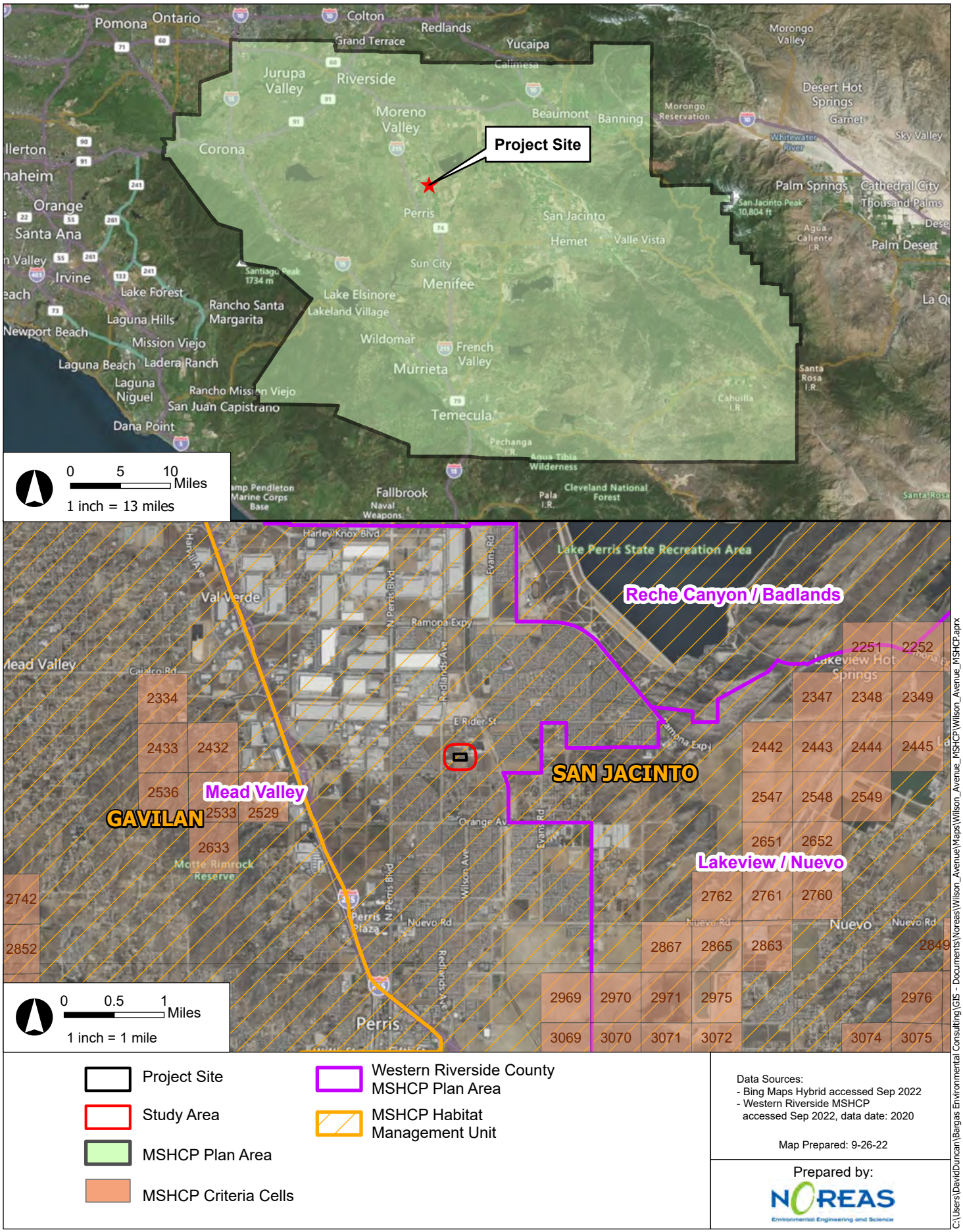


Figure 3. MSHCP Criteria Cells

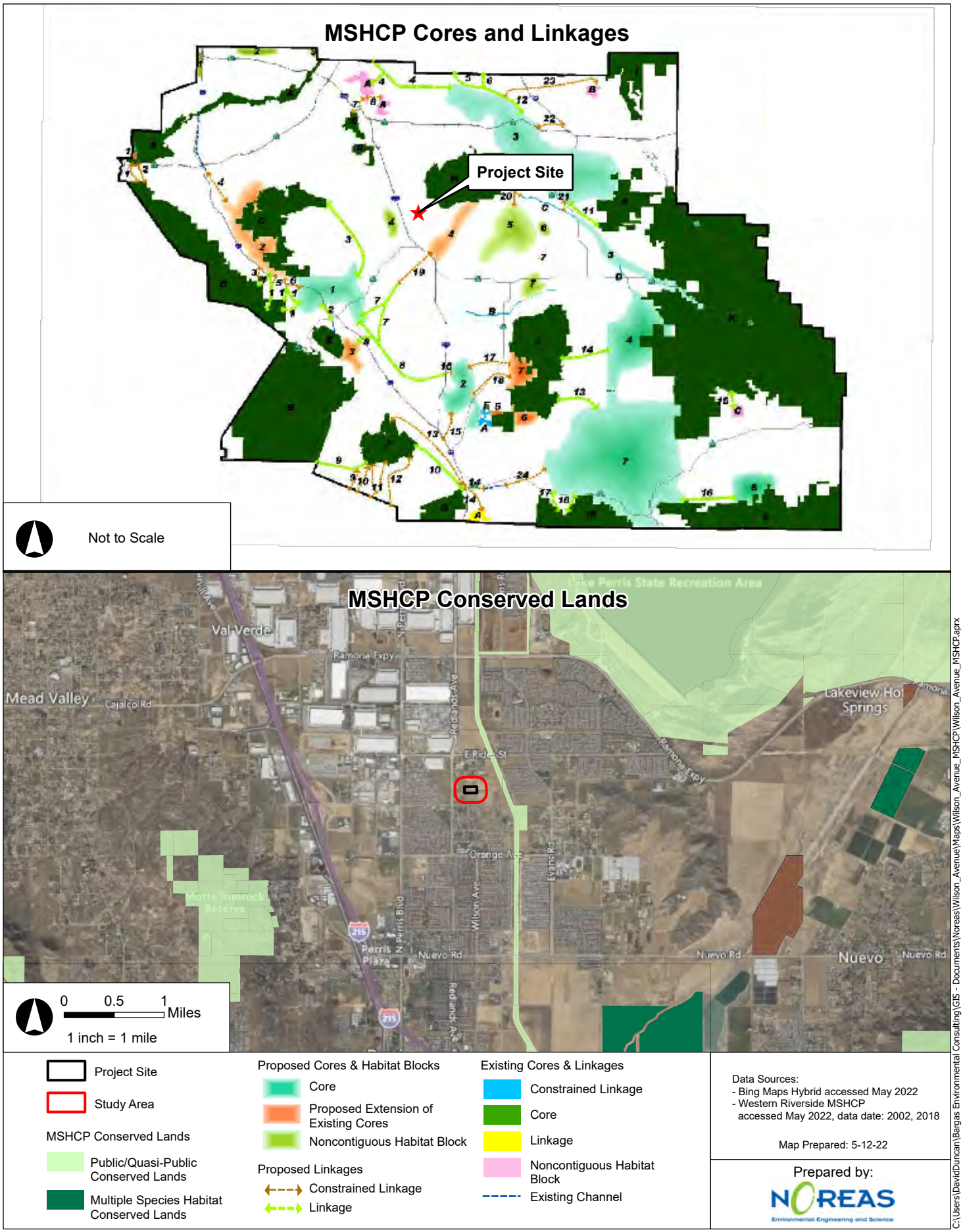
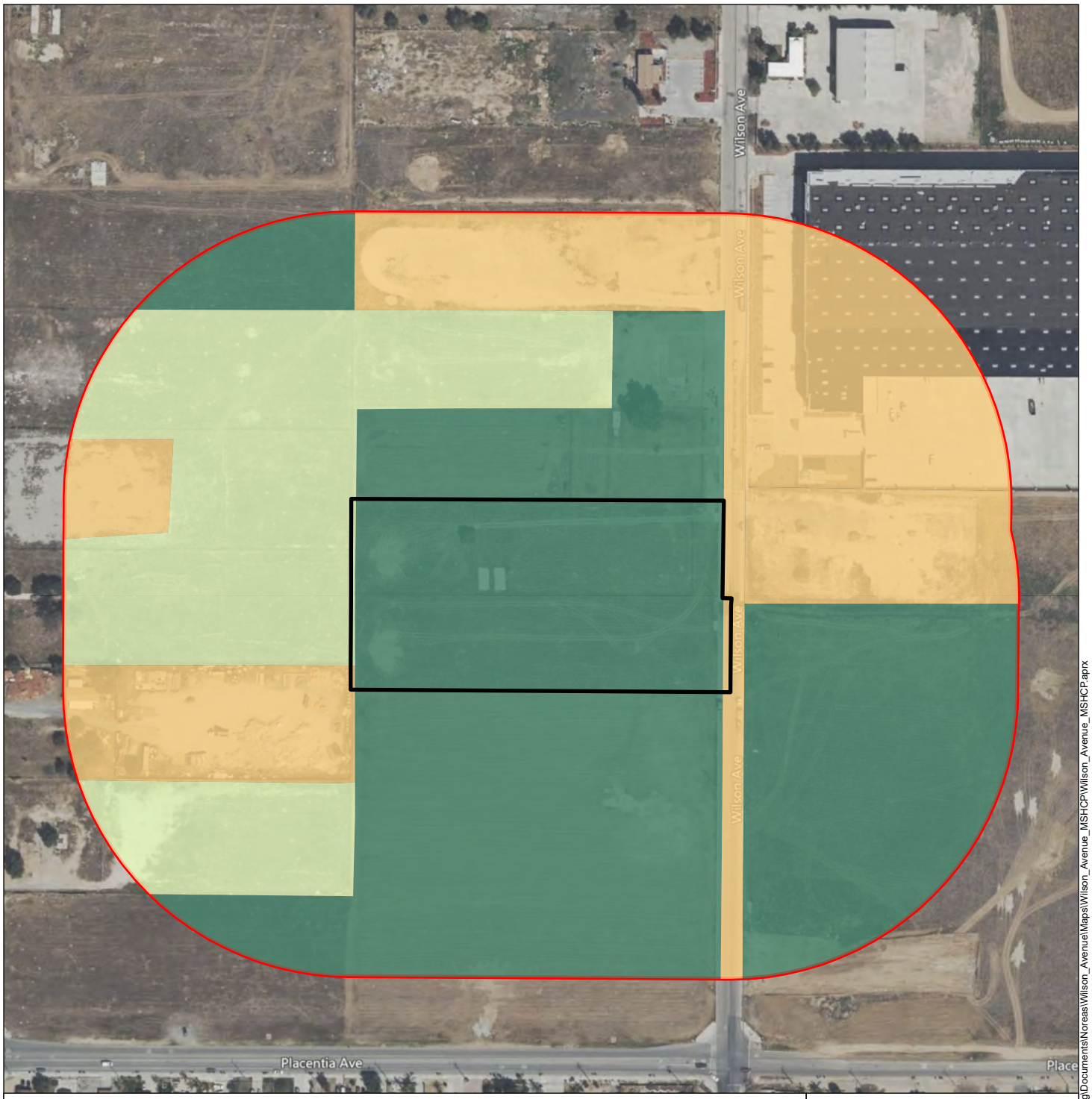


Figure 4. Cores, Linkages, and Conserved Lands



Project Site
Study Area

Vegetation Communities
Developed/Disturbed (12.7 ac)
Non-native Grassland (9.9 ac)
Ruderal (23.2 ac)

0 125 250 Feet
1 inch = 250 feet

Data Sources:
-Bing Maps Hybrid accessed Sep 2022

Map Prepared: 9-21-22

Prepared by:
NOREAS
Environmental Engineering and Science

C:\Users\CoralFenech\OneDrive - Bargas Environmental Consulting\Documents\Noreas\Wilson_Avenue\Maps\Wilson_Avenue_MSHCP\Wilson_Avenue_MSHCP.aprx

Figure 5. Vegetation Communities and Land Cover Types

Project Site

Study Area

RCA MSHCP Vegetation 2012

Cropland, Orchard - Vineyard

Urban

0 150 300 Feet

1 inch = 300 feet

Data Sources:
- Bing Maps Hybrid accessed May 2022
- Western Riverside Co Regional Conservation Authority accessed May 2022

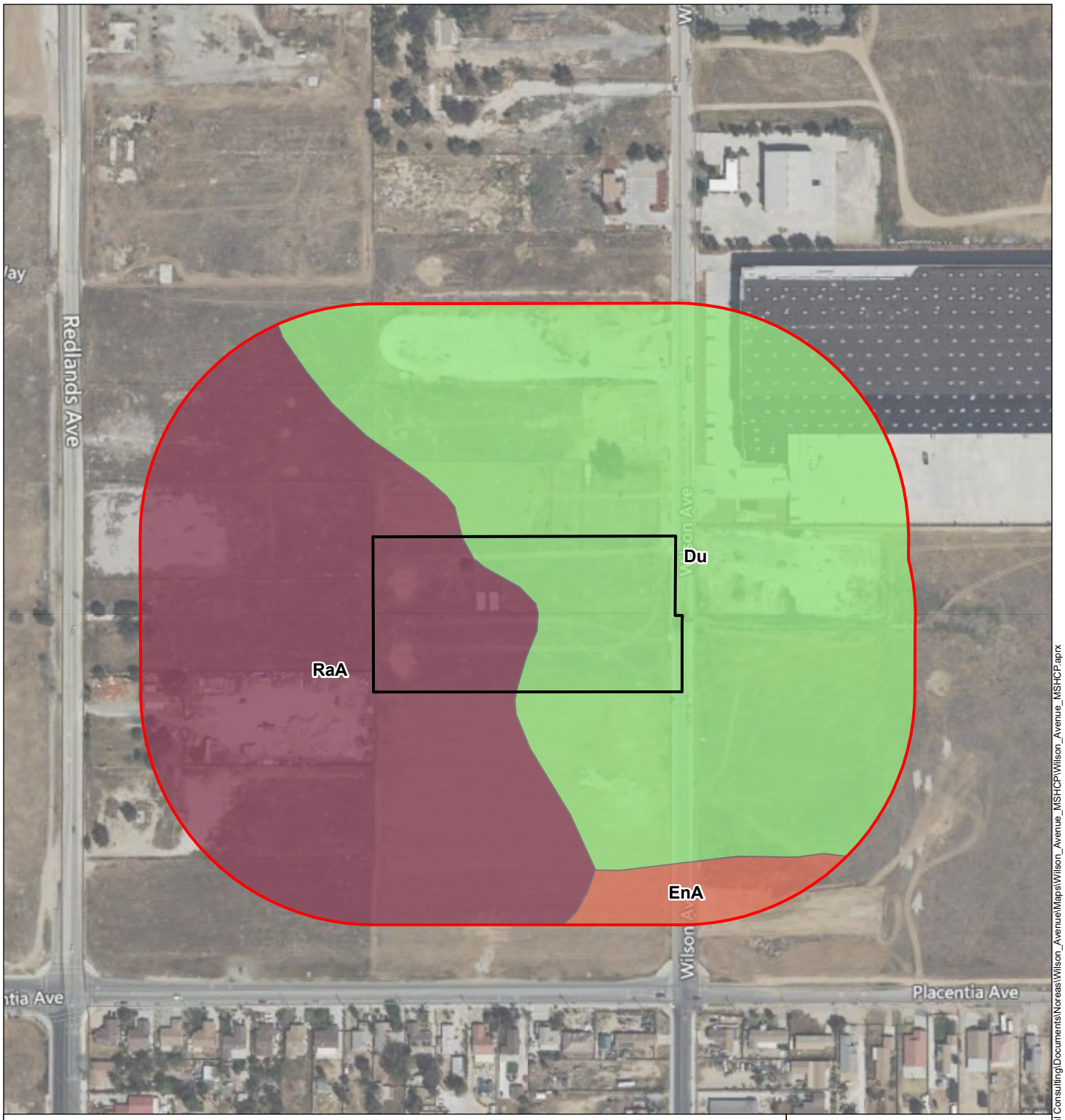
Map Prepared: 5-13-22

Prepared by:

NOREAS Environmental Engineering and Science

C:\Users\DavidDuncan\Bargas Environmental Consulting\GIS - Documents\Noreas\Wilson_Avenue\Maps\Wilson_Avenue_MSHCP\Wilson_Avenue_MSHCP.aprx

Figure 6. RCA MSHCP Vegetation 2012



Project Site

Study Area

Soil Types

Du - Domino silt loam

EnA - Exeter sandy loam, 0 to 2 percent slopes

RaA - Ramona sandy loam, 0 to 2 percent slopes, MLRA 19

0 150 300 Feet

1 inch = 300 feet

Data Sources:
- Bing Maps Hybrid accessed Aug 2022
- NRCS Web Soil Survey accessed Aug 2022

Map Prepared: 8-1-22

Prepared by:

NOREAS Environmental Engineering and Science

C:\Users\CoralFenech\OneDrive - Bargas Environmental Consulting\Documents\Noreas\Wilson_Avenue\Maps\Wilson_Avenue_MSHCP\Wilson_Avenue_MSHCP.aprx

Figure 7. Soils Map

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 mousetail	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 mariposa-lily	Calochortus plummerae
P15	Robinson's pepper-grass	Lepidium virginicum var. robinsonii
P16	San Diego ambrosia	Ambrosia pumila
P17	San Jacinto Valley crownscale	Atriplex coronata var. notatior
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 navarretia	Navarretia 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 socalchemmis spider	Socalchemmis icenoglei
I3	quino checkerspot butterfly	Euphydryas editha quino
I4	Riverside fairy shrimp	Streptocephalus wootoni
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	Athene cunicularia
B4	California horned lark	Eremophila alpestris actia
B5	coastal California gnatcatcher	Polioptila 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 stejnegeri
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 hammondii	

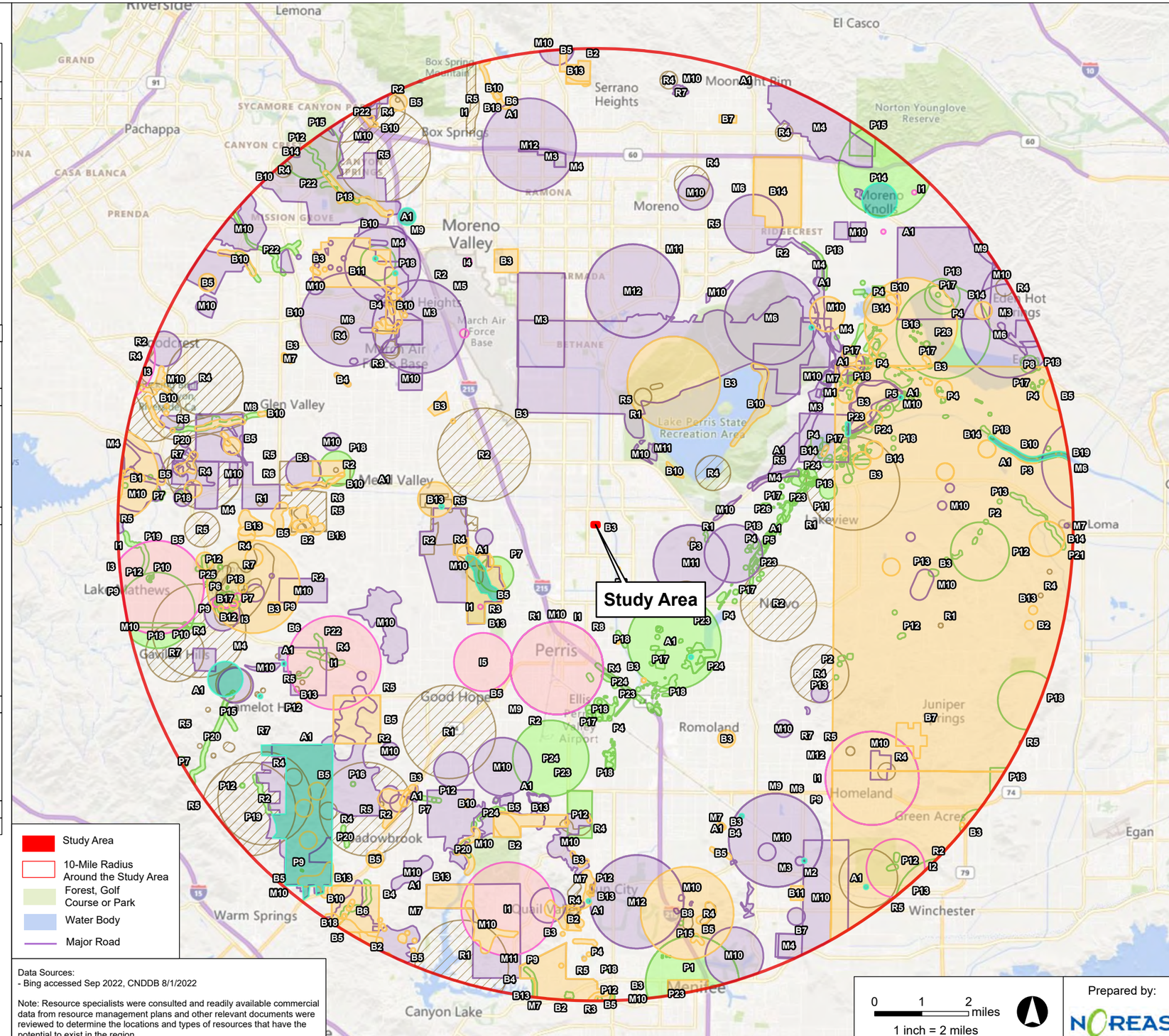
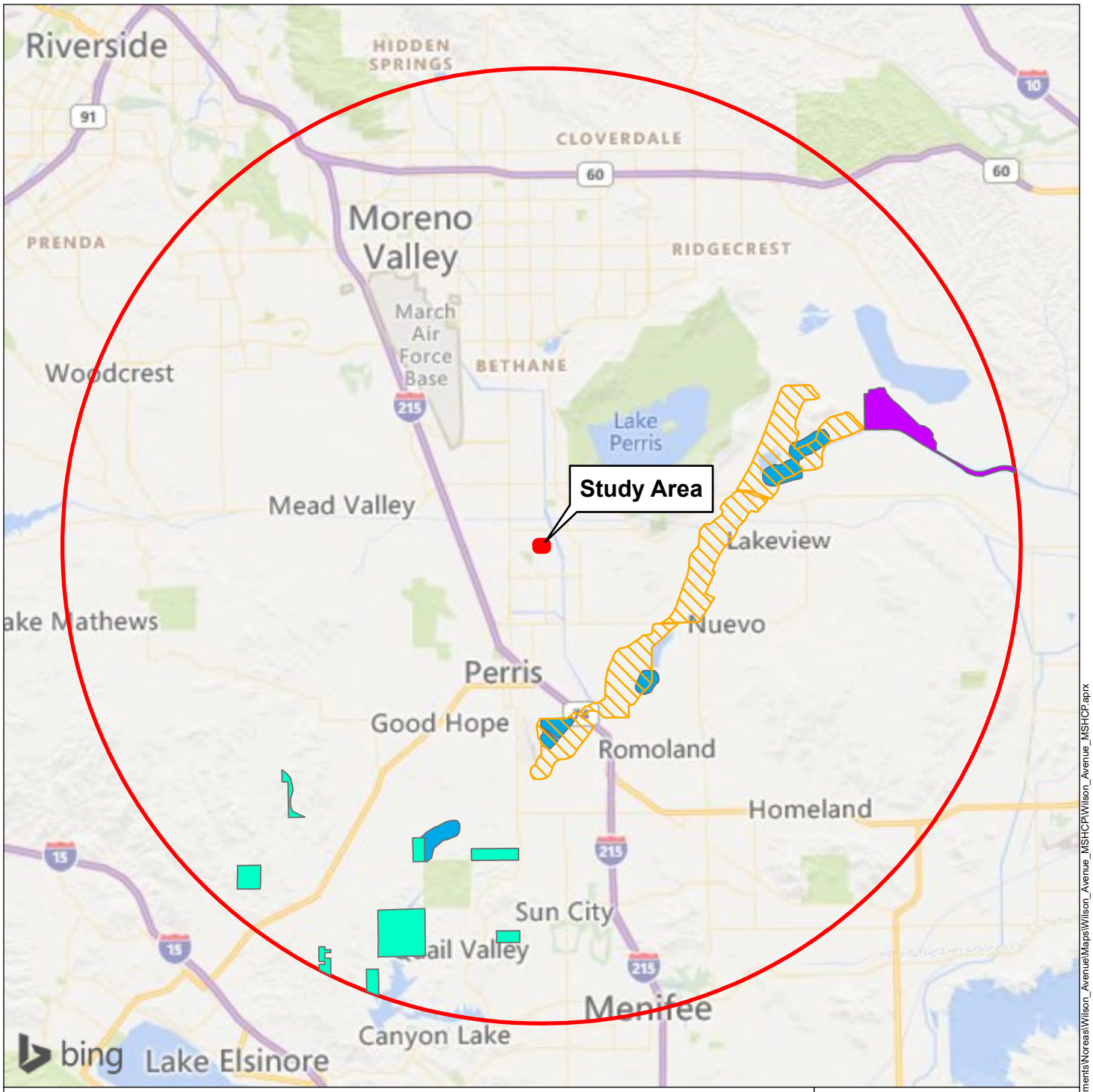


Figure 8. Literature Review



Study Area

10-Mile Radius Around the Study Area

Freeway

Major Road

Forest, Golf Course or Park

Water Body

Critcal Habitat

Coastal California gnatcatcher

San Bernardino Merriam's kangaroo rat

Spreading navarretia

Thread-leaved brodiaea

0 1.5 3 Miles

1 inch = 3 miles

Data Sources:
- Bing accessed Sep 2022
- US Fish and Wildlife Service Critical Habitat data date: Dec 2021

Map Prepared: 9-26-22

Prepared by:

NOREAS Environmental Engineering and Science

C:\Users\DavidDuncan\Bargas Environmental Consulting\GIS - Documents\Noreas\Wilson_Avenue\Maps\Wilson_Avenue_MSHCP\Wilson_Avenue_MSHCP.aprx

Figure 9. 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 Aug 2022
- US Fish and Wildlife Service National Wetland Inventory geodatabase data date: Dec 2020

Map Prepared: 8-1-22

Prepared by:

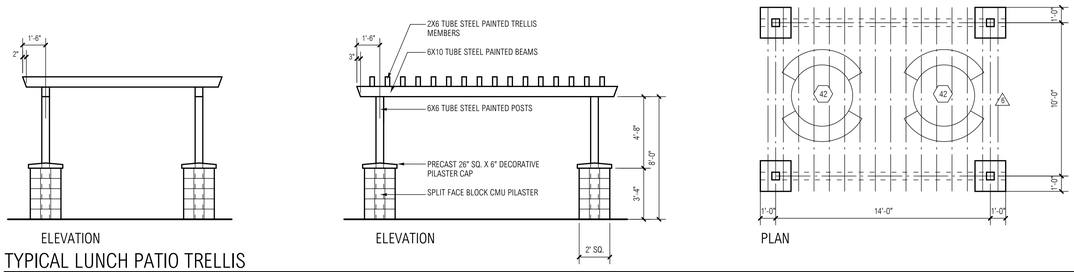
NOREAS Environmental Engineering and Science

C:\Users\CoralFenech\OneDrive - Bargas Environmental Consulting\Documents\Noreas\Wilson_Avenue\Maps\Wilson_Avenue_MSHCP\Wilson_Avenue_MSHCP.aprx

Figure 10. National Wetland Inventory

APPENDICES

Appendix A Site Plan



TYPICAL LUNCH PATIO TRELLIS

SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. THE PROPOSED PROJECT SHALL COMPLY WITH THE PROVISIONS OF THE COUNTY RIVERSIDE, CITY OF PERRIS PLANNING PLAN

2. A LANDSCAPING PLAN SHALL BE SUBMITTED TO THE PLANNING DEPARTMENT FOR APPROVAL PRIOR TO ISSUANCE OF BUILDING PERMITS AND SHALL BE IMPLEMENTED PRIOR TO OCCUPANCY.

3. THE PROJECT DOES NOT PROPOSE ANY TENANT SIGNAGE AT THIS TIME.

4. THERE ARE NO PROTECTED PLANTS ON SITE.

5. ALL ROOF DRAINS AT STREET FRONTAGES SHALL BE IN THE INTERIOR OF THE BUILDING ENVELOPE.

6. ALL LANDSCAPE SHALL BE BOUND BY A 6" HIGH CONCRETE CURB.

7. A LIGHT PLAN SHALL BE SUBMITTED SHOWING CONFORMANCE WITH MINIMUM FOOTCANDLE LEVELS AND MARCH AIR BASE STANDARDS. FIXTURES SHALL BE SHIELDED HIGH PRESSURE SODIUM.

8. A SIGN PROGRAM SHALL BE DEVELOPED IN ACCORDANCE WITH MUNICIPAL CODE 19.75.190 FOR APPROVAL BY THE PLANNING DIVISION. THE SIGN PROGRAM SHALL BE INCLUDED AS PART OF THE CC&R'S.

9. FUTURE TENANT OFFICE BUILD-OUTS TO INCLUDE INDOOR EMPLOYEE AMENITY AREAS PER CITY GUIDELINES.

10. PROJECT WILL BE DESIGNED WITH LEED IN MIND, BUT WILL NOT REQUIRED CERTIFICATION.

SUBSTAINABILITY FEATURES

11. PROVIDE LIGHT COLORED ROOFING OVER THE OFFICE AREAS.

12. BUILDING WILL BE DESIGN TO ACHIEVE LEED POTENTIAL CERTIFICATION.

13. PROVIDE UP TO (2) ELECTRIC VEHICLE CHARGING FACILITIES

14. PROVIDE "TURN-OFF ENGINE" SIGNS WITHIN THE TRUCK COURT.

15. FORKLIFTS WITHIN THE BUILDING SHALL BE ELECTRIC OR COMPRESSED NATURAL GAS-POWERED.

SITE LEGEND:

- ON-SITE LANDSCAPED AREA
- OFF-SITE LANDSCAPED AREA
- DECORATIVE AUTO / TRUCK DRIVEWAYS
- SITE PROPERTY LINES
- CITY CURB AND GUTTER LINES
- STREET CENTERLINES
- ON-SITE CURB LINES
- ON-SITE PARKING AND TRAILER STRIPPING

PROJECT DATA

SITE AREA:	
GROSS SITE AREA	207,202 SF / 4.75 AC
STREET DEDICATION:	986 SF / 0.02 AC
NET SITE AREA:	206,216 SF / 4.73 AC
BUILDING AREA:	
FOOTPRINT	79,410 SF
FIRE PUMP HOUSE	00 SF
MEZZANINE	4,500 SF
GUARD HOUSE	00 SF
TOTAL	83,910 SF
TOTAL INCLUDED PLANNED OFFICE AREA	8,000 SF
PERRIS LOT COVERAGE: (50% MAX)	40.69 %
AUTO PARKING REQUIRED:	
1-20,000 SF (1/1000 SF)	20 STALLS
20,000 SF AND ABOVE (1/2,000 SF)	32 STALLS
TOTAL	52 STALLS
AUTO PARKING PROVIDED	
ACCESSIBLE STALLS	4 STALLS
STANDARD STALLS	49 STALLS
TOTAL PROVIDED	53 STALLS
REQUIRED BICYCLE PARKING (5% OF REQUIRED AUTO PARKING)	3 BIKE LOCATIONS
TRUCK DOCK POSITIONS	13 DOCKS
GRADE DOORS PROVIDED	1 DOOR
LANDSCAPE AREA PROVIDED ON DEVELOPED SITE (REQUIRED 12% MIN.)	24,793 SF / 12.02 %

ASSESSOR'S PARCEL NUMBERS

APN # 300-210-017, 300-210-025

APPLICATION TYPE

DEVELOPMENT PLN REVIEW 00-00-0000
ZONING: "GI" GENERAL INDUSTRIAL - PVCC SP - PERRIS VALLEY COMMERCE CENTER
PERMITTED LAND USE: WAREHOUSE, OFFICE AS PERMITTED

PROJECT DESCRIPTION

NEW INDUSTRIAL WAREHOUSE BUILDING WITH AUTO AND TRAILER PARKING AREAS.
PROVIDING A FUTURE GUARD SHACK LOCATION ON THE SOUTH-EAST SIDE.

LAND OWNER

LAKE CREEK INDUSTRIAL LLC
1302 BRITTANY CROSS ROAD
SANTA ANA, CA 92705
786-200-9681
CONTACT: MICHAEL JOHNSON

APPLICANT

LAKE CREEK INDUSTRIAL LLC
1302 BRITTANY CROSS ROAD
SANTA ANA, CA 92705
786-200-9681
CONTACT: MICHAEL JOHNSON

PLAN PREPARER

RGA, OFFICE OF ARCHITECTURAL DESIGN, INC.
15231 ALTON PARKWAY, SUITE 100
IRVINE, CA 92618
CONTACT: MIKE GILL

UTILITIES & SERVICES

SEE CIVIL DRAWINGS

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF PERRIS, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

PARCEL 3, AS SHOWN BY PARCEL MAP 12169 ON FILE IN BOOK 63, PAGE 26 OF PARCEL MAPS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA

KEYNOTES (000)

1. PAINTED CONCRETE TILT-UP WAREHOUSE / OFFICE / MANUFACTURING FACILITY.

2. SHADED AREA: PROPOSED IRRIGATED LANDSCAPING PER CC&R GUIDELINES WITH MIN 6" CONCRETE CURBS AT ALL PERIMETERS.

3. PAINTED CONCRETE TRASH ENCLOSURE. SCREEN WALLS SHALL BE MIN. 6'-0" HIGH WITH CANOPY TOP. SEE SHEET A2-1P FOR ELEVATIONS AND SECTIONS

4. TYPICAL STANDARD PARKING STALL MIN. 9' X 19' - STRIPE PER CITY STANDARDS.

5. TRUCK TRAILER PARKING

6. NEW 12"-0" CONCRETE TILT-UP SCREEN WALLS AT TRUCK YARD. SEE PLAN FOR MINIMUM HEIGHTS AS MEASURED FROM INSIDE THE TRUCK YARD.

7. ROLLING 8'-0" HIGH WROUGHT IRON FENCE INTO THE TRUCK COURT.

8. TRANSFORMER PAD LOCATION.

9. ACCESSIBLE PRIMARY ENTRANCE TO THE BUILDING WITH BIKE RACKS.

10. 8'-0" HIGH TUBE STEEL FENCE, PAINTED BLACK.

11. CONCRETE COVERED LUNCH PATIO WITH LANDSCAPE FURNITURE, SEE SHEET A1-1P

12. CALGREEN REQUIRED BIKE RACKS, SEE TABULATIONS FOR NUMBER OF BIKE RACKS

13. DECORATIVE PAVING AT ENTRY DRIVEWAY.

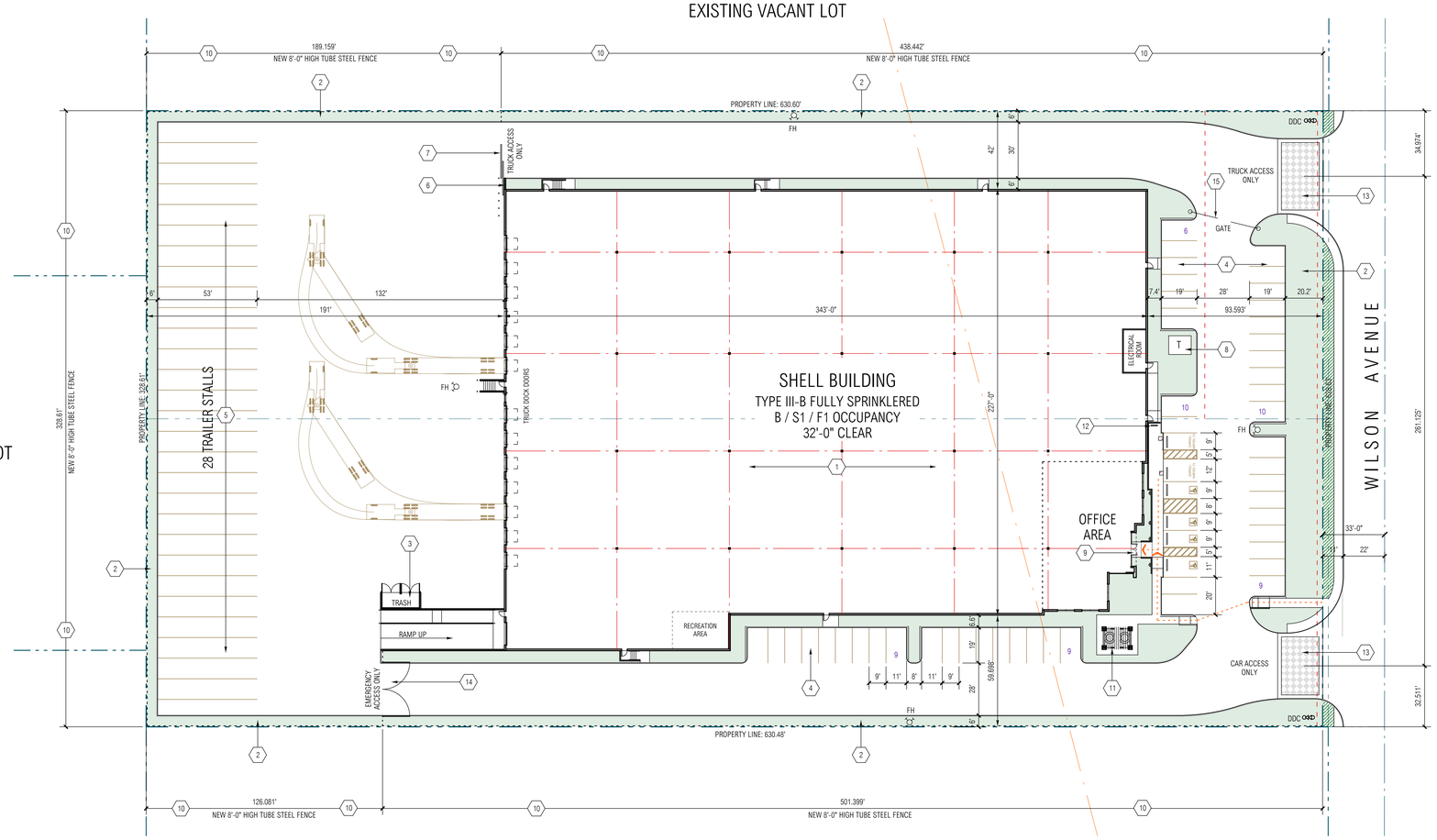
14. 8'-0" TUBE STEEL SWING GATE WITH KNOX LOCK FOR EMERGENCY TRUCKS ONLY.

15. 3'-0" HIGH X DRIVEWAY WIDTH LOCKED CRASH GATE WITH KNOX LOCK.

VICINITY MAP

LAND USE: EXISTING VACANT LOT

LAND USE:
EXISTING VACANT LOT



LAND USE:
EXISTING VACANT LOT

SITE PLAN

SCALE: 1" = 30'-0"

RGA
Office of Architectural Design
15231 Alton Parkway, Suite 100
Irvine, CA 92618
T 949-341-0920
FX 949-341-0922

CONSULTANT

PROFESSIONAL SEALS

WILSON AVENUE II DEVELOPMENT

0000 WILSON AVENUE
CITY OF PERRIS, CA

LAKE CREEK INDUSTRIAL LLC
1302 BRITTANY CROSS ROAD
SANTA ANA, CA 92705
OWNER PHONE: 786-200-9681
OWNER: MICHAEL JOHNSON
EMAIL: mj@lakecreekindustrial.com

MARK	DATE	DESCRIPTION
CD		
BID		
PC		
DD		
SD		

RGA PROJECT NO:	11000.00
OWNER PROJECT NO:	00000.00
CAD FILE NAME:	11000-00-A1-1
DRAWN BY:	CF
CHK'D BY:	DR

COPYRIGHT
RGA, OFFICE OF ARCHITECTURAL DESIGN

SHEET TITLE

SHEET TITLE

SHEET: A1-1

Appendix B Plant Species Observed Within the Study Area

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

Scientific Name	***Common Name***
*Datura stramonium**	Jimsonweed

Nomenclature follows the Jepson Manual, Second Edition (Baldwin et al 2011).
* = naturalized, non- native plant species.

Appendix C Wildlife Species Observed Within the Study Area

Scientific name	Common name
Reptiles	
Sceloporus occidentalis	Western fence lizard
Birds	
Buteo jamaicensis	Red-Tailed Hawk
Carduelis psaltria	Lesser goldfinch
Charadrius vociferus	Killdeer
Sayornis nigrican	Black phoebe
Euphagus cyanocephalus	Brewer's blackbird
Sturnus vulgaris	European starling
Corvus corax	Common Raven
Carpodacus mexicanus	House Finch
Zenaida macroura	Mourning Dove
Columba livia	Rock Pigeon
Mammals	
Otospermophilus beecheyi	California ground squirrel

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

Potential for occurrence	Common name (Scientific name)	Federal listing status	State listing status	CNPS list	Number of records within 10 miles	Year(s) sighted
A	Northwestern San Diego pocket mouse *(Chaetodipus fallax fallax)*	None	None	-	13	1992-2017
A	Los Angeles pocket mouse *(Perognathus longimembris brevinasus)*	None	None	-	8	1940-2016
A	Wright's trichocoronis *(Trichocoronis wrightii var. wrightii)*	None	None	2B.1	4	1937-2011
A	Davidson's saltscale *(Atriplex serenana var. davidsonii)*	None	None	1B.2	7	1991-2013
A	Western yellow bat *(Lasiurus xanthinus)*	None	None	-	4	1981-1992
A	Pocketed free-tailed bat *(Nyctinomops femorosaccus)*	None	None	-	1	1985
A	San Bernardino kangaroo rat *(Dipodomys merriami parvus)*	Endangered	Candidate Endangered	-	6	1908-1957
A	Riverside fairy shrimp *(Streptocephalus woottoni)*	Endangered	None	-	2	2009
A	Tricolored blackbird *(Agelaius tricolor)*	None	Threatened	-	13	2011-2015
A	San Bernardino ringneck snake *(Diadophis punctatus modestus)*	None	None	-	1	2000
A	American badger *(Taxidea taxus)*	None	None	-	2	1990
A	Parry's spineflower *(Chorizanthe parryi var. parryi)*	None	None	1B.1	13	1936-2012
A	Payson's jewelflower *(Caulanthus simulans)*	None	None	4.2	7	1902-1982
A	San Diego black-tailed jackrabbit *(Lepus californicus bennettii)*	None	None	-	8	1998-2015
A	Bell's sage sparrow *(Artemisiospiza belli belli)*	None	None	-	7	1998-2002
A	California screw moss *(Tortula californica)*	None	None	1B.2	2	2012-2013
A	Loggerhead shrike *(Lanius ludovicianus)*	None	None	-	2	1994-2007
A	Southern Sycamore Alder Riparian Woodland *(Southern Sycamore Alder Riparian Woodland)*	None	None	-	6	1980-1985
A	Southern California legless lizard *(Anniella stebbinsi)*	None	None	-	13	1967-2018
A	Cooper's hawk *(Accipiter cooperii)*	None	None	-	3	1983-2001
A	Munz's onion *(Allium munzii)*	Endangered	Threatened	1B.1	6	1897-2016
A	White-faced ibis *(Plegadis chihi)*	None	None	-	1	1993
A	Southern Cottonwood Willow Riparian Forest *(Southern Cottonwood Willow Riparian Forest)*	None	None	-	5	1980
A	San Diego ambrosia *(Ambrosia pumila)*	Endangered	None	1B.1	1	2009
A	Golden eagle *(Aquila chrysaetos)*	None	None	-	1	1974
A	Long-eared owl *(Asio otus)*	None	None	-	2	1983

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 Diego desert woodrat *(Neotoma lepida intermedia)*	None	None	-	1	1999
A	Ferruginous hawk *(Buteo regalis)*	None	None	-	3	1989-2008
A	Quino checkerspot butterfly *(Euphydryas editha quino)*	Endangered	None	-	4	1945 - 1998
A	Palmer's grapplinghook *(Harpagonella palmeri)*	None	None	4.2	3	1986-1990
A	Little mousetail *(Myosurus minimus ssp. apus)*	None	None	3.1	1	1981
A	White-tailed kite *(Elanus leucurus)*	None	None	-	1	1983
A	Round-leaved filaree (*California macrophylla*)	None	None	2.2	2	1987
A	Southern Coast Live Oak Riparian Forest *(Southern Coast Live Oak Riparian Forest)*	None	None	-	3	1980
A	Woven-spored lichen *(Texosporium sancti-jacobi)*	None	None	3	1	2002
A	Dulzura pocket mouse *(Chaetodipus californicus femoralis)*	None	None	-	1	1993
A	Robinson's pepper-grass *(Lepidium virginicum var. robinsonii)*	None	None	4.3	4	1962-2008
A	Yellow warbler *(Setophaga petechia)*	None	None	-	1	2014
A	Plummer's mariposa-lily *(Calochortus plummerae)*	None	None	4.2	1	1989
A	Southern Riparian Scrub *(Southern Riparian Scrub)*	None	None	-	1	1980
A	California Orcutt grass *(Orcuttia californica)*	Endangered	Endangered	1B.1	1	1941
A	Icenogle's socalchemmis spider *(Socalchemmis icenoglei)*	None	None	-	1	1997
A	Lawrence's goldfinch *(Spinus lawrencei)*	None	None	-	1	2001
A	Western yellow-billed cuckoo *(Coccyzus americanus occidentalis)*	Threatened	Endangered	-	1	2001
A	Yellow-breasted chat *(Icteria virens)*	None	None	-	2	2001-2015
A	Bald eagle *(Haliaeetus leucocephalus)*	Delisted	Endangered	-	4	1975-1981
A	Mud nama *(Nama stenocarpa)*	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's permanent disturbance footprint, or historically has been documented within the Project Site

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

.

Appendix E Burrowing Owl Survey Report

WILSON WAREHOUSE PROJECT

September 2022

BURROWING OWL SURVEY

Perris United States Geological Survey
7.5-MinuteTopographic Quadrangle Map

Prepared By

16361 Scientific Way, Irvine, CA 92618
(949) 467-9100

TABLE OF CONTENTS

Section **Page**

1.0 SUMMARY / INTRODUCTION 1-1

2.0 BURROWING OWL BACKGROUND 2-1

3.0 METHODS 3-1

4.0 BURROWING OWL SURVEY RESULTS 4-1

5.0 RECOMMENDED MEASURES TO AVOID AND MINIMIZED IMPACTS TO NESTING BIRDS 5-1

6.0 REFERENCES 6-1

FIGURES

Figure 1 Regional Location 1-2

Figure 2 Site Vicinity 1-3

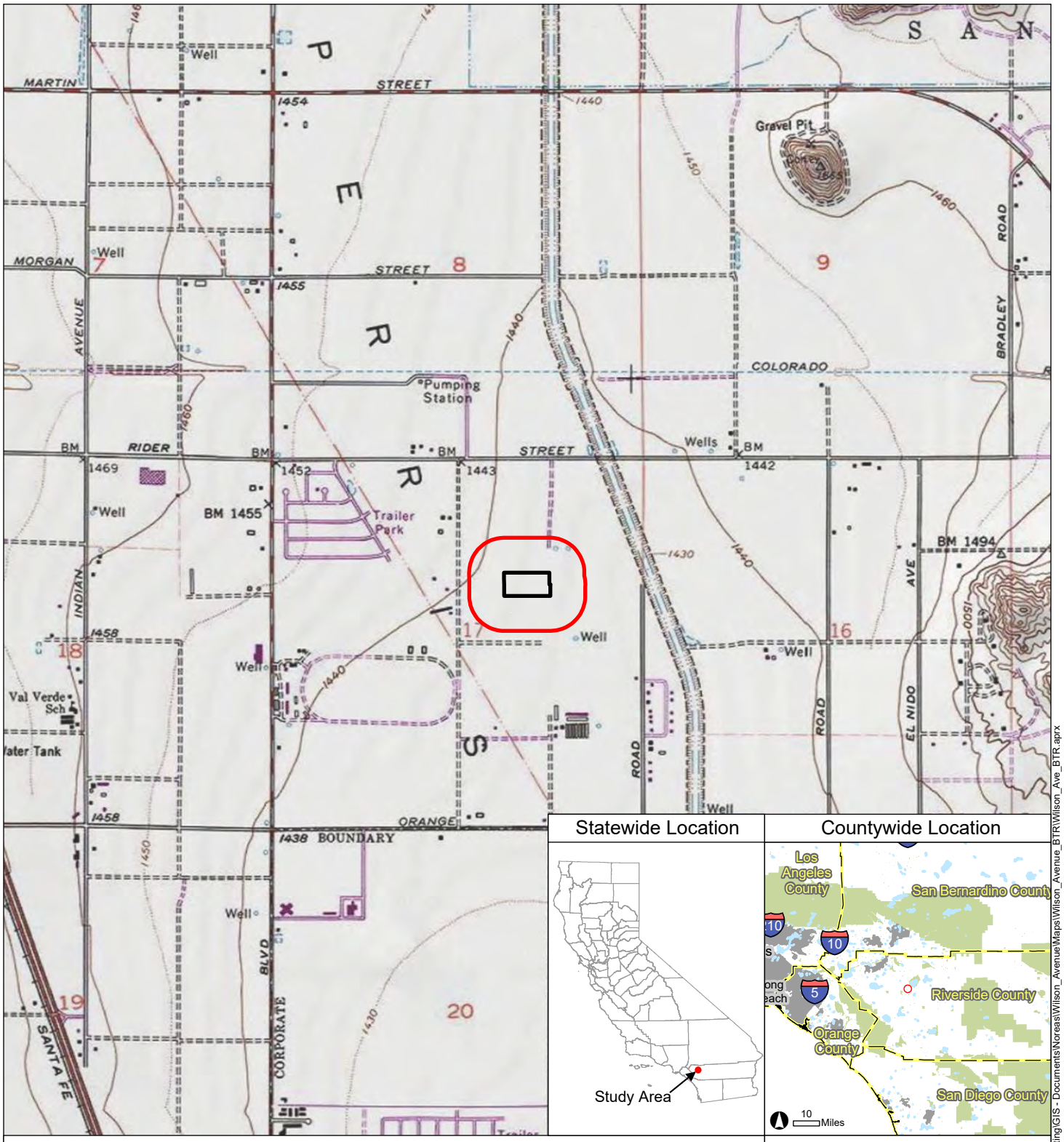
Figure 3 Results 4-5

1.0 SUMMARY / INTRODUCTION

Lake Creek Industrial ((LCI) is proposing to develop the Wilson Warehouse Project (hereafter referred to as the Project). The Project is located north of Placentia Avenue and west of Wilson Avenue, in Riverside California (Assessor's Parcel Number [APN] 300-210-017, -025). This report provides the methods, assumptions, and results of focused surveys for Burrowing Owl (*Athene cunicularia*). The Project is located within Township 04 South and Range 03 West - Section 17, of the Perris United States Geological Survey 7.5-Minute Topographic Quadrangle Map (USGS 1988).

The Project occurs at an approximate elevation of 1,440 ft. above mean sea level (msl). Land use in the vicinity of the Project includes commercial, agriculture, residential and industrial endeavors. For the purposes of this report, the "study area" includes the Project's proposed ground disturbance footprint (Project Site), plus a 500-foot buffer where practical (Figures 1 and 2). The Project Site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), Mead Valley Area Plan. According to the Regional Conservation Authority (RCA) MSHCP Information Map, Project limits are within a Burrowing Owl study area. Agricultural and other commercial development activities were historically operated within Project limits. There is also evidence of recent disking, and trash from illegal dumping throughout the Project Site.

No Burrowing Owls were detected nesting, foraging, or dispersing within the study area during the 2022 surveys. Numerous low quality potential burrows and burrow complexes were detected (Figure 3). The burrows observed lacked evidence of owl sign (i.e., tracks, molted feathers, cast pellets, prey remains, egg shell fragments, owl white wash, and nest burrow decoration materials). The lack of Burrowing Owls within the study area is likely a result of the depauperate landscape, and the presence of owl predators. Although the Project has potential to impact lands that could be utilized by Burrowing Owls as habitat, surveys for the species are negative. Therefore, there is no presumption that the Project would result in the loss of individual Burrowing Owls, or that it would adversely affect local or regional populations of them.



Study Area

Project Site

County Boundary (inset)

Urban Area (inset)

Interstate or State Highway (inset)

Water Body (inset)

Park or National Forest (inset)

0 1,000 2,000 Feet

1 inch = 2,000 feet

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

C:\Users\DavidDuncan\Bargas Environmental Consulting\GIS - Documents\Noreas\Wilson_Avenue\Maps\Wilson_Avenue_BTR\Wilson_Ave_BTR.aprx

Figure 1. Regional Location

Study Area (45.80 acres)

Project Site (5.02 acres)

0 250 500 Feet

1 inch = 500 feet

Data Sources:
- Bing Maps Hybrid accessed May 2022

Map Prepared: 5-12-22

Prepared by:

NOREAS
Environmental Engineering and Science

C:\Users\AndrewMyers\Bargas Environmental Consulting\GIS - Documents\Noreas\Wilson_Avenue\Maps\Wilson_Avenue_BTR\Wilson_Ave_BTR.aprx

Figure 2. Site Vicinity

2.0 BURROWING OWL BACKGROUND

The Burrowing Owl has been designated by the California Department of Fish and Wildlife (CDFW) as a species of special concern. "State Species of Special Concern" status applies to animals not listed for protection under the federal Endangered Species Act or the California Endangered Species Act. The designation denotes that a species is declining at a rate that could result in State listing or that a species has historically occurred in low numbers and known threats to their persistence currently exist. The designation is intended to result in "special consideration" for these animals during the environmental review and discretionary permitting processes. In addition, the designation is also intended to focus research and management attention on poorly-known, potentially at-risk species by stimulating the collection of additional information on their biology, distribution, and status.

Burrowing Owls prefer open, dry annual or perennial grasslands, agricultural and rangelands, deserts, and scrublands characterized by low-growing vegetation. Burrowing Owls also prefer areas inhabited by small mammals as they predominately depend on mammal burrows (particularly ground squirrels) for subterranean nesting. Owls can be found at elevations ranging from 200 ft. below sea level to 9,000 ft. above (CDFG 1995). Burrowing Owls commonly perch on fence posts or on mounds outside their burrows. Northern populations of Burrowing Owls are usually migratory, while more southern populations may move short distances or not at all (Haug et al. 1993, Botelho 1996). Little is known about the winter ranges of migratory populations, although migratory Burrowing Owls are believed to mix with resident populations in California during the winter months (Coulombe 1971, Haug et al. 1993).

Burrowing Owls tend to be resident where food sources are stable and available year-round (Rosenberg et al. 1998). Typically, they disperse or migrate south in areas when food becomes seasonally scarce. Burrowing Owls tend to be opportunistic feeders. Large arthropods, mainly beetles and grasshoppers, comprise a substantial portion of their diet (Rosenberg et al. 1998). Small mammals, especially mice, rats, gophers, and ground squirrels, are also important food items. Other prey animals include reptiles and amphibians, scorpions, young cottontail rabbits, bats, and birds such as sparrows and Horned Larks. Consumption of insects increases during the breeding season. Burrowing Owls hover while hunting; after catching their prey they return to perches on fence posts or the ground. Burrowing Owls are primarily active at dusk and dawn, but, if necessary, will hunt at any time of day (CBOC 1993, CDFG 1995; Rosenberg et al. 1998).

The breeding season for Burrowing Owls is March to late August; the season tends to last later in the northern part of the range (CBOC 1993, CDFG 1995, Klute et al. 2003). Clutch size (number of birds hatched at the same time) ranges from 1 to 12 and averages about 7 (Ehrlich 1988). The incubation period is 28–30 days (Ehrlich 1988). The female performs all the incubation and brooding (sitting on eggs to hatch them by the warmth of the body) and is believed to remain continually in the burrow while the male does all the hunting (Rosenberg et al. 1998). The young fledge (take their first flight out of the nest) at 44 days but remain near the burrow and join the adults in foraging flights at dusk (Ehrlich 1988). The maximum life span recorded for a banded bird in the wild is approximately 8.5 years (Rosenberg et al. 1998).

In resident populations, nest site fidelity is common, with many adults nesting each year in their previous year's burrow; young from the previous year often establish nest sites near (<900 ft) their natal sites (Trulio 1997,Rosenberg et al. 1998). Burrowing Owls in migratory populations also often nest in the same burrow, particularly if the previous year's breeding was successful (Belthoff and King 1997). Other birds in the same population may move to burrows near their previous year's burrow. The species is

threatened primarily by loss, degradation, and fragmentation of habitat, although they do readily inhabit anthropogenic landscapes such as agricultural fields, golf courses, and airport grasslands (Korfanta et al. 2005).

3.0 METHODS

Prior to beginning field surveys, resource specialists were consulted and available information from resource management plans and relevant documents were reviewed to determine the locations and types of resources that have the potential to exist within and adjacent to the study area. Resources were evaluated within several miles of the Project. The materials reviewed included, but were not limited to, the following:

- U.S. Fish and Wildlife Service (USFWS) Critical Habitat Mapper and File Data (USFWS 2022a);
- USFWS Carlsbad Field Office Species List for Riverside County (USFWS 2022b);
- California Natural Diversity Database maintained by the CDFW (CDFW 2022);
- 1993 California Burrowing Owl Consortium (CBOC)Burrowing Owl Survey Protocol and Mitigation Guidelines;
- 2021 California Department of Fish and Game (CDFG) Staff Report on Burrowing Owl Mitigation;
- Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP 2003); and
- Aerial Photographs (Microsoft Corporation 2022).

A Burrowing Owl habitat suitability assessment and burrow survey was conducted on May 17, 2022 in accordance with the *March 29, 2006 Western Riverside County MSHCP Burrowing Owl Survey Instructions*. Natural and non-natural substrates were examined for potential burrow sites. All potential burrows encountered were examined for shape, size, molted feathers, whitewash, cast pellets and/or prey remains. Disturbance characteristics and all other animal sign encountered within the study area were documented to the greatest extent practical.

Since suitable habitat was detected for Burrowing Owls within the study area, four (4) additional surveys were performed (details are presented within *TABLE NO. 1 - SUMMARY OF SURVEY CONDITIONS FOR SURVEYS*). A hand-held, global positioning system (GPS) unit with sub meter accuracy was used to survey predetermined transects that were prepared within a Geographic Information System prior to the start of owl surveys (Figure 3). Survey transects were spaced at appropriate intervals to allow for complete visual coverage of the Project Site and study area. Where necessary, transect spacing was reduced or expanded in the field - to account for differences in terrain, vegetation density, visibility and access (i.e., private property) considerations. Where access was limited, observations were made from the nearest appropriate vantage points by means of public rights-of-way with the use of binoculars and spotting scopes. The presence of a species was based on direct observations of individual(s), sign, and/or vocalization. Avian scientific nomenclature and common names follows Sibley (2000).

Field surveys were conducted when weather conditions were conducive to observing birds. Surveys were not performed during rain, extreme temperatures, high winds (> 25 miles per hour), or dense fog. Where access was limited, observations were made from the nearest appropriate vantage points with the use of binoculars and spotting scopes. Targeted owl surveys were conducted on 17 and24 May, 02 and 09 June 2022. Surveys were performed from approximately 1 hour before sunrise to 2 hours after sunrise, and from approximately 2 hours before sunset to 1 hours after sunset - when weather conditions were conducive to observing owls outside of burrows.

4.0 BURROWING OWL SURVEY RESULTS

The majority of the study area consists of heavily disturbed ruderal vegetation with no substantial native stands of vegetation. Agricultural, commercial development, and residential activities were historically operated within Project limits. There is also evidence of recent disking, and trash from illegal dumping throughout the Project Site.

No Burrowing Owls were detected nesting, foraging, or dispersing within the study area during the 2022 surveys. Nonetheless, potential burrows and burrow complexes – albeit low quality, were detected (Figure 3). The burrows observed lacked evidence of owl tracks, molted feathers, cast pellets, prey remains, egg shell fragments, owl white wash, or nest burrow decoration materials. The presence of several burrows and burrow complexes >11 cm in diameter (height and width), and >150 cm in depth warranted recording and reporting; even though the aforementioned burrows lacked owl sign or owls. Survey conditions during the field events are presented in Table No. 1.

TABLE NO. 1 - SUMMARY OF SURVEY CONDITIONS FOR SURVEYS

Survey Dates	Surveyors	Survey Type	Time[1] Start/End	Temperature °Fahrenheit Start/End	Wind Speed (MPH)	Start/End Cloud Cover (%)	Date of last precipitation prior to survey
5/17/22	Dale Powell/Lincoln Hulse	Burrow Survey and Crepuscular BUOW	1430-2100	68/75	0-05	Clear/Clear	04/22/22
5/24/22	Dale Powell/Lincoln Hulse	Crepuscular BUOW	1645-2115	78/89	0-10	Clear/Clear	04/22/22
6/02/22	Dale Powell	Crepuscular BUOW	1700-2045	71/92	0-05	Clear/Clear	04/22/22
6/09/22	Dale Powell/Lincoln Hulse	Crepuscular BUOW	0500-1020	63/84	0-05	Clear/Clear	04/22/22
BUOW = Burrowing Owl **MPH = Miles Per Hour**							

The lack of Burrowing Owls within the study area is likely a result of the depauperate landscape, and the presence of owl predators (e.g., Red-Tailed Hawk [*Buteo jamaicensis*] and Cooper's hawk [*Accipiter cooperii*]). Although the Project has potential to impact lands that could be utilized by Burrowing Owls as habitat, surveys for the species are negative. Therefore, there is no presumption that the Project would result in the loss of individual Burrowing Owls, or that it would adversely affect local or regional populations of them.

Representative photographs of the study area are provided below, and wildlife detected during the surveys are provided within Table No. 2.

[1] While targeted owl surveys were limited to approximately 1 hour before sunrise to 2 hours after sunrise and 2 hours before sunset to 1 hour after sunset; the start and end times presented within this table details all time spent within the study area on any given day - which include setup, reporting and demobilization activities.

	Photograph 1. Facing West.
	Photograph 2. Facing East.

	Photograph 3. Facing North.
	Photograph 4. Facing East.

TABLE NO. 2 – WILDLIFE DETECTED DURING FIELD SURVEYS

Scientific Name	Common Name
Birds	
Agelaius phoeniceus	Red-winged blackbird
Accipiter cooperii	Cooper's hawk
Buteo jamaicensis	Red-Tailed hawk
Cathartes aura	Turkey vulture
Corvus corax	Common Raven
Corvus brachyrhynchos	American crow
Sturnus vulgaris	European Starling
Carpodacus mexicanus	House Finch
Columba livia	Rock Pigeon
Euphagus cyanocephalus	Brewer's Blackbird
Falco sparverius	American kestrel
Mimus polyglottos	Northern mockingbird
Passer domesticus	House Sparrow
Sayornis nigricans	Black phoebe
Quiscalus quiscula	Common Grackle
Zenaida macroura	Mourning Dove
Tyrannus vociferans	Cassin's Kingbird
Mammals	
Otospermophilus beecheyi	California ground squirrel
Reptiles	
Uta stansburiana	Common Side-blotched Lizard

Project Site (5-acres)

Survey Area (46-acres)

Burrowing Owl Survey Transects

Potential Burrow

0 150 300 Feet

1 inch = 300 feet

Data Sources:
-Bing Maps Hybrid accessed Jul 2022

Map Prepared: 7-28-22

Prepared by:

NOREAS
Environmental Engineering and Science

\Bargas Environmental Consulting\GIS - Documents\Noreas\Harley_Knox_Industrial_Project_MSHCP\Maps\Harley_Knox_BUOW.aprx

Figure 3. Burrowing Owl Potential Burrows

5.0 RECOMMENDED MEASURES TO AVOID AND MINIMIZED IMPACTS TO NESTING BIRDS

The following measures are recommended as a means of avoiding and minimizing adverse impacts to nesting birds that have the potential to occur within the Project Site and on adjacent lands:

- Due to the presence of potentially suitable habitat, a 30-day pre-construction survey for Burrowing Owls is warranted prior to initial ground-disturbing activities (including vegetation clearing, clearing and grubbing, tree removal, site watering, equipment staging, grading, etc.). This is an MSHCP requirement, as it safeguards that no owls have colonized the Project Site in the days - or weeks, preceding the ground-disturbing activities.
    - If Burrowing Owls have colonized the Project Site prior to the initiation of ground-disturbing activities, the Project shall immediately inform the Regional Conservation Authority (RCA) and the appropriate wildlife agencies, to coordinate further regarding the need for a Project specific Burrowing Owl Protection and/or Relocation Plan.
    - If ground-disturbing activities occur, but the Project Site is left undisturbed for more than 30 days, a pre-construction survey will again be warranted to safeguard that Burrowing Owls have not colonized the Project Site since it was last disturbed. If Burrowing Owl is found, the same coordination described above will be necessary
- 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-activity survey for nesting birds would be warranted 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.
- Limits of grading and construction activities shall be clearly delineated with temporary construction staking, flagging, or similar materials.
- To avoid attracting predators and nuisance species, the Project Site shall be clear of debris, where possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from 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. 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.

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: Sept 27, 2022

SIGNED: _____
Lincoln Hulse

6.0 REFERENCES

Belthoff, J. R., and R. A. King. 1997. Between-year movements and nest burrow use by burrowing owls in southwestern Idaho. Technical Report No. 97-3. Idaho Bureau of Land Management.

Botelho, E. S. 1996. Behavioral ecology and parental care of breeding western burrowing owls (*Speotyto cunicularia hupugaea*) in southern New Mexico, USA. Dissertation, New Mexico State University, Las Cruces.

California Burrowing Owl Consortium (CBOC). 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. San Francisco CA

California Department of Fish and Game (CDFG). 1995. Staff Report on Burrowing Owl Mitigation. Sacramento CA

_____. 2012. Staff Report on Burrowing Owl Mitigation. Sacramento CA

California Department of Fish and Wildlife (CDFW). 2022. RareFind California Department of Fish and Game Natural Diversity Database (CNDDB) Fontana and Devore USGS 7.5-Minute Quadrangles. Sacramento, CA: California Department of Fish and Game, Biogeographic Data Branch.

Coulombe, H. N. 1971. Behavior and population ecology of the burrowing owl, *Speotyto cunicularia*, in the Imperial Valley of California. Condor 73:162–176.

County of Riverside. 2003. Final Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Riverside, CA: County of Riverside.

County of Riverside. 2006. Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan Area (E.P. Department, ed), p. 4. Riverside, CA: County of Riverside.

Ehrlich, P. R. 1988. The Birders Handbook: Natural History of North American Birds. Simon and Schuster Inc. New York

Haug, E. A., B. A. Millsap, and M. S. Martell. 1993. The burrowing owl (*Speotyto cunicularia*). In A. Poole and F. Gill (eds.), The Birds of North America, No. 61. Philadelphia, PA: The Academy of Natural Sciences and Washington, DC: The American Ornithologists' Union.

Klute, D. S., L. W. Ayers, M. T. Green, W. H. Howe, S. L. Jones, J. A. Shaffer, S. R. Sheffield, and T. S. Zimmerman. 2003. Status Assessment and Conservation Plan for the Western Burrowing Owl in the United States. U.S. Department of Interior, Fish and Wildlife Service, Biological Technical Publication FWS/BTP-R6001-2003, Washington, D.C.

Korfanta, N.M., D.B. McDonald, and T.C. Glenn. 2005. Burrowing owl (*Athene cunicularia*) population genetics: A comparison of North American forms and migratory habits. *Auk* 122(2): 464-478.

Microsoft Corporation. 2022. Bing Maps Aerial Imagery. Redmond, WA.

Rosenberg, D. K., J. Gervaia, H. Ober, and D. DeSante. 1998. An adaptive management plan for the burrowing owl population at Naval Air Station Lemoore, Lemoore, California.

Sibley, D.A. 2000. The Sibley Guide to Birds. Random House Press, New York, New York. 201 pp.

Trulio, L. 1997. Burrowing owl demography and habitat use at two urban sites in Santa Clara County, California. Journal of Raptor Research 9:84–89.

United States Fish and Wildlife Service (USFWS). 2022. Critical Habitat Portal. USFWS

United States Geological Service (USGS). 1988. 7.5-Minute Quadrangle Perris, California.

Appendix F Photographic Log

	Photograph 1. Facing West.
	Photograph 2. Facing South.

	Photograph 3. Facing East.
	Photograph 4. Facing North.

Appendix G Project GIS Files (provided separately)