

## **APPENDIX 9.3**

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### **BIOLOGICAL RESOURCES REPORTS**

## **APPENDIX 9.3.1**

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HABITAT ASSESSMENT AND WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT  
CONSERVATION PLAN UPDATE



June 11, 2021

**CORE 5 INDUSTRIAL PARTNERS**

Contact: Jon Kelly  
300 Spectrum Center Drive, Suite 880  
Irvine, California 92618

**SUBJECT: Habitat Assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Update for the Motte-Rancon Distribution Center Project (now referred to as the Menifee Commerce Center) Located in the City of Menifee, Riverside County, California**

The memorandum is intended to supplement the Habitat Assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis dated October 2018 for the Motte-Rancon Distribution Center Project, now referred to as the Menifee Commerce Center, within Assessor Parcel Numbers (APN) 331-110-027, -035, -041, 331-140-010, and -025 located in the City of Menifee, Riverside County, California. Additionally, this memorandum includes the analysis of APN 331-140-021 on the northeast corner of the project site and APN 331-140-018 on the southeast corner of the project site that are contiguous with the project area previously analyzed, and offsite street improvement areas.

The updated field investigation was conducted by ELMT biologists Travis J. McGill on November 10, 2020 and May 21, 2021 to reconfirm existing site conditions previously analyzed in the 2018 Habitat Assessment and Western Riverside County MSHCP Consistency Analysis.

**Project Location**

The project site is generally located east of Interstate 215, south of State Route 74, west of State Route 79, and north of Salt Creek, in the City of Murrieta, Riverside County, California. The project site is depicted on the Romoland quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series in Section 15 of Township 5 South, Range 3 West. Specifically, the project site is located south of Ethanac Road and north of McLaughlin Road, and bordered by Trumble Road on its western boundary and Dawson Road within APNs 331-110-027, -035, -041, 331-140-010, -18, -021, and -025 (Exhibit 1, *Project Site*). The project site is separated into two properties (eastern property and western property) by Sherman Road.

The possible offsite street improvement areas associated with project development are located along the following streets (refer to Attachment B, *Off-Site Street Improvement Areas*):

**Ethanac Road**

- Widen Ethanac Rd to 4 lanes from I-215 eastward to Sherman Rd with left and right turn pockets at intersections.

- Ethanac Rd from Sherman Rd will make a transition to a 2 lane road. The 2 lane road could be reconstructed all the way to Antelope Rd. Existing road to receive new pavement. Potentially left and right turn pockets at Dawson.
- I provided dimensions on attached aerial of potential impacted land area along Ethanac Rd.

#### Sherman Road

- From SR-74 to Sherman Rd potential right and/ or left turn pockets at Ethanac Rd and Sherman intersection expanding Sherman Road to accommodate turn pockets. On west side of Sherman Rd., I show a white dashed line depicting area of impact. Assume 30 ft of vacant land could be disturbed to construct improvements along Sherman Rd north of Ethanac Rd
- From Ethanac Rd to McLaughlin (past project frontage), Sherman Rd will be a 4 lane 78 ft wide ROW to flood channel. From flood control channel to McLaughlin Rd, Sherman Rd will be 2 lane with shoulders stopping at McLaughlin. See the area on attachment for location of dirt roads.

#### Dawson Road

- Dawson Rd is dirt road from Ethanac Rd to McLaughlin (past project frontage). Ultimate ROW is 4 lanes plus sidewalk (78 ft width) to flood control channel. Road south of flood channel to McLaughlin will be 2 lane road with shoulders

#### Trumble Road

- A portion of Trumble Rd is currently dirt. Project will be required to construct a min of 2 lanes from flood channel to existing paved road further north on Trumble Rd.

#### McLaughlin Road

- New 2 lane road with shoulders from Dawson Rd to Trumble Rd. McLaughlin Rd from Trumble to Encanto Rd is already paved.

#### Encanto Road

- Existing paved road

#### Off-Site Intersection Improvement

- State Route-74 and Bonnie Road near the end of the southbound exit ramp of Interstate 215.

#### Site Conditions

Site conditions described in the 2018 report have not changed. The project site consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances associated with agricultural activities. These disturbances have eliminated the natural plant communities that once occurred on the project site which has resulted in a majority of the project site being dominated by non-native vegetation and heavily compacted soils.

Due to existing land uses (i.e., agricultural activities, disking, and weed abatement activities), no native

plant communities or natural communities of special concern were observed on or adjacent to the proposed project site. Two (2) plant communities were observed within the boundaries of the project site during the updated field investigation: fallow agricultural land and eucalyptus stand (Exhibit 2, *Vegetation*). In addition, the project site contains land cover types that would be classified as disturbed and developed. These communities are described in further detail in the 2018 report.

APN 331-140-021 on northeast corner of the project site, supports fallow agricultural land, contiguous with the fallow agricultural land that encompasses the majority of the site. APN 331-140-018 on the southeast corner of the project site supports an existing rural residential development that is completely fenced and supports disturbed and developed areas.

The offsite street improvement areas are generally located along the periphery of existing paved street right-of-way or within existing unpaved dirt roads. These areas where the off-site street improvements will occur are located in heavily disturbed areas that do not support native plant communities and are generally devoid of vegetation.

### **Jurisdictional Areas**

The National Wetlands Inventory maps does not depict any wetland resources on or immediately bordering the project site or street improvement areas. Additionally, no blueline streams, ponded areas, pits, or water features have been documented on the topographic maps for the project site or street improvement areas.

During the updated field investigation, an ephemeral swale continues to be observed along the northern boundary of the project site before dissipating onsite. The swale only receives water, from direct precipitation and from storm flows from the adjacent residential/commercial development northeast of the project site. The stormwater overflows are not expected to flow during most storm events. As noted in the 2018 report, this swale was first observed in 2005 when a concrete pad was constructed adjacent to the northeast corner of the project site.

A review of historic aerials and survey results determined that swale on-site was artificially created, wholly within the uplands, as a result of the installed of the concrete pad adjacent to the northeast corner of the project site. Historic aerial photographs suggest that the project site was undeveloped, flat, and used for agricultural purposes, and lacked any evidence of a natural drainage feature or pattern prior to the installation of the offsite concrete pad. The swale did not replace an existing blueline stream. Further, the swale does not support any riparian vegetation or suitable habitat for riparian wildlife species, as vegetation with the swale is consistent with the surrounding disturbed area. Further, the swale is isolated, as it begins on the northeast corner of the project site and terminates on the northwest corner of the site, with no connectivity to downstream waters.

Based on the information above, normal stormflows within the swale are expected to dissipate/infiltrate quickly on-site with stormwater only reaching the northwest corner of the site during large storm events. Further, the swale does not exhibit a surface hydrologic connection to any downstream waters since it is confined to the project site. Therefore, the swale would not qualify as jurisdictional by the Corps, Regional Board, or CDFW and regulatory approvals will not be required. Further, the swale is not expected to qualify as riparian/riverine habitat under the MSHCP and Determination of Biologically Equivalent or Superior Preservation (DBESP) analysis would not be required to address the replacement of any lost functions and

values of habitats in regards to MSHCP listed species.

### **Special-Status Biological Resources**

An updated query of the California Natural Diversity Database (CNDDDB) Rarefind 5 and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California was conducted in the Romoland and Perris USGS 7.5-minute quadrangles to determine if any special-status species not identified in the 2018 report needed to be analyzed. No new special-status species were identified in the updated database query. The analysis presented in the 2018 report remains valid.

### **MSHCP Consistency Analysis**

The project site and off-site street improvement areas are located in the Harvest Valley/Winchester Area Plan of the MSHCP but is not located within any Criteria Cells or MSHCP Conservation Areas. Additionally, the project site and off-site street improvement areas are located only within the designated survey area for burrowing owl (*Athene cuinicularia*) as depicted in Figures 6-4 within Sections 6.3.2 of the MSHCP. The MSHCP Consistency analysis presented in the 2018 report remains valid.

### **Conclusion**

The project site and off-site street improvement areas consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances associated with agricultural activities and surrounding development. These disturbances have eliminated the natural plant communities that once occurred on the project site and off-site street improvement areas and resulted in a majority of the project site and off-site street improvement areas being dominated by non-native vegetation and heavily compacted soils.

Based on the proposed project footprint, and with the implementation of a pre-construction burrowing owl and nesting bird clearance survey, none of the special-status species known to occur in the general vicinity of the project site and off-site street improvement areas will be directly or indirectly impacted from implementation of the proposed project. Therefore, it was determined that this project will have “no effect” on federally, State, or MSHCP listed species known to occur in the general vicinity of the project site or street improvement areas. Additionally, the project will have “no effect” on designated Critical Habitats.

### **Recommendations**

No recommendations in addition to those given in the original report are needed.

Please do not hesitate to contact Tom McGill at (951) 285-6014 or [tmcgill@elmtconsulting.com](mailto:tmcgill@elmtconsulting.com) or Travis McGill at (909) 816-1646 or [travismcgill@elmtconsulting.com](mailto:travismcgill@elmtconsulting.com) should you have any questions.

Sincerely,



Thomas J. McGill, Ph.D.  
Managing Director



Travis J. McGill  
Director

Attachments:

- A. *Project Exhibits*
- B. *Offsite Street Improvement Areas*
- C. *Habitat Assessment and Western Riverside County Multiple Species (MSHCP) Consistency Analysis – 2018 ELMT Consulting*

## **Attachment A**

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Project Exhibits



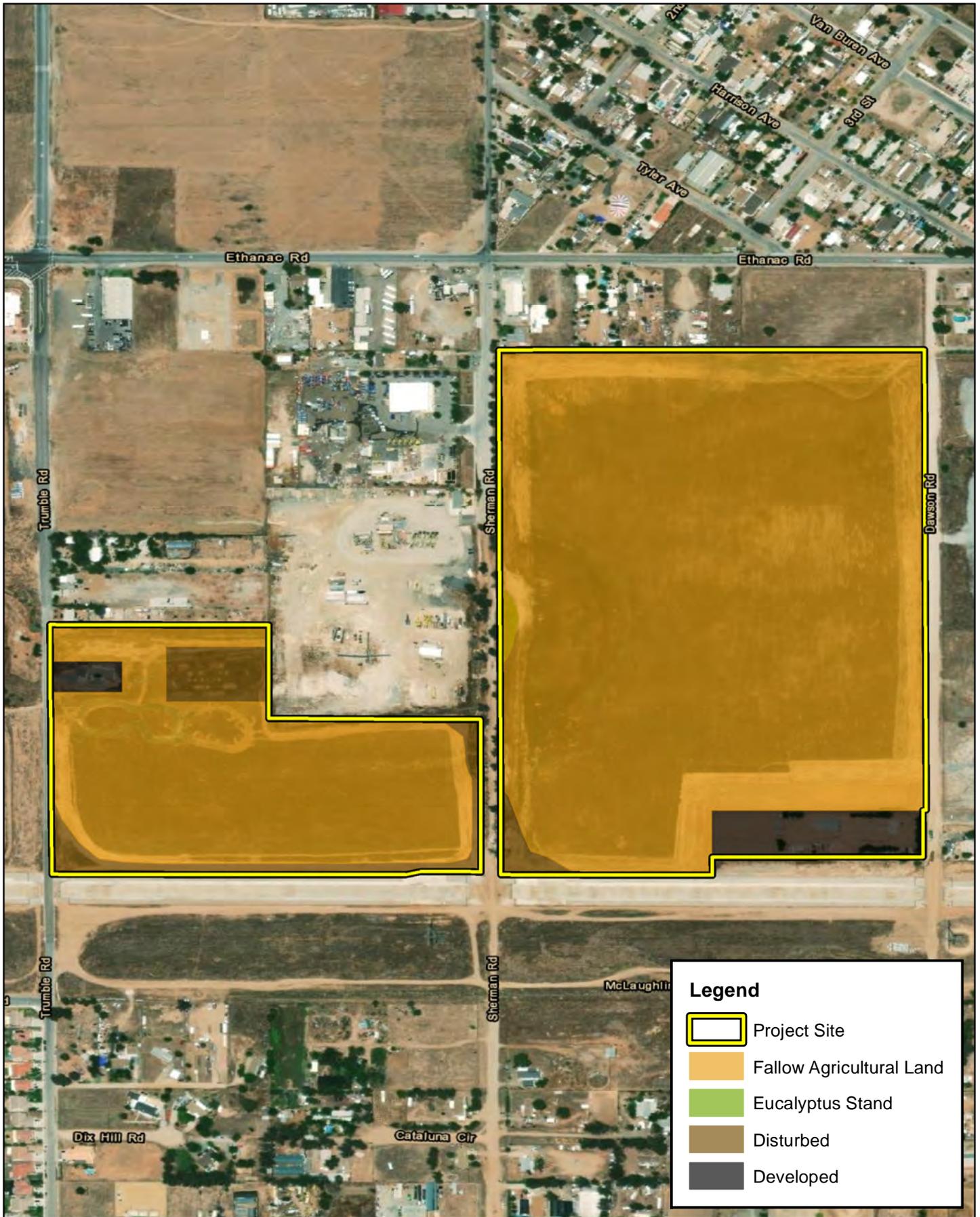
**Legend**

- Project Site
- Assessor Parcels

MENIFEE COMMERCE CENTER  
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS UPDATE  
**Project Site**



Source: ESRI Aerial Imagery, Riverside County



**Legend**

- Project Site
- Fallow Agricultural Land
- Eucalyptus Stand
- Disturbed
- Developed

MENIFEE COMMERCE CENTER  
 HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS UPDATE



Source: ESRI Aerial Imagery, Riverside County

**Vegetation**

## **Attachment A**

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Off-Site Street Improvement Areas



1	Case Rd / Bonnie Dr @ I-215 SB	AM	Direct	- provide second SB through lane
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I-215 On/Off Ramp

Bonnie Drive

SR-74

250'

215

Google Earth

N

200 ft

## **Attachment C**

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Habitat Assessment and MSHCP Consistency Analysis – 2018 ELMT Consulting

# **MOTTE RANCON - DISTRIBUTION CENTER BUILDINGS PROJECT**

CITY OF MENIFEE, RIVERSIDE COUNTY, CALIFORNIA

**Habitat Assessment and Western Riverside County Multiple Species Habitat  
Conservation Plan Consistency Analysis**

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Prepared For:

**MTC-1**

**c/o Mike Naggar and Associates, Inc.**

445 S. D Street

Perris, California 92570

Contact: *Michael Naggar*

Prepared By:

**ELMT Consulting, Inc.**

2201 N. Grand Avenue #10098

Santa Ana, California 92711

Contact: *Travis J. McGill*

714.714.5050

October 2018

JN 18\_1051

# MOTTE RANCON - DISTRIBUTION CENTER BUILDINGS PROJECT

CITY OF MENIFEE, RIVERSIDE COUNTY, CALIFORNIA

## Habitat Assessment and Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis

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The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.



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Travis J. McGill  
Director/Biologist



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Thomas J. McGill, Ph.D.  
Managing Director

October 2018

# Executive Summary

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This report contains the findings of ELMT Consulting's Habitat Assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis for Motte Rancon – Distribution Center (MR-DC) Industrial Buildings Project (project) located in the City of Menifee, Riverside County, California. The project site is located in the Harvest Valley/Winchester Area Plan of the MSHCP but is not located within any Criteria Cells or MSHCP Conservation Areas. Further, a review of the Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map determined that the project site is only located within the designated survey area for burrowing owl (*Athene cunicularia*).

The project site primarily consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances from agricultural activities and surrounding development. These disturbances have eliminated the natural plant communities that once occurred on the project site which has resulted in a majority of the project site being dominated by non-native vegetation and heavily compacted soils.

No special-status plant species were observed on-site during the field survey. On-site disturbances have reduced, if not eliminated, the ability of the project site to provide suitable habitat for special-status plant species. Based on habitat requirements for specific special-status plant species and the availability and quality of habitat needed by each species, it was determined that the project site does not provide suitable habitat for any of the special-status plant species that were determined to have the potential to occur in the vicinity of the project site.

No special-status wildlife species were observed on-site during the habitat assessment. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the proposed project site has a low potential to provide suitable habitat for Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter straitus*), great egret (*Ardea alba*), great blue heron (*Ardea herodias*), northern harrier (*Circus cyaneus*), snowy egret (*Egretta thula*), white-tailed kite (*Elanus leucurus*), long-billed curlew (*Numenius americanus*), black-crowned night heron (*Nycticorax nycticorax*), and white-faced ibis (*Plegadis chihi*); and a moderate potential to provide suitable habitat for burrowing owl, California horned lark (*Eremophila alpestris actia*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*). Further it was determined that the project site does not provide suitable habitat for any of the other special-status wildlife species known to occur in the area since the project site has been heavily disturbed from on-site disturbances and existing development. In order to ensure impacts to the aforementioned species do not occur from site development, a pre-construction nesting bird clearance survey shall be conducted within three (3) days prior to ground disturbance. With implementation of a pre-construction nesting bird clearance survey, impacts to the aforementioned species will be less than significant and no mitigation will be required.

A focused burrowing owl survey was conducted during the 2018 breeding season. The focused surveys were conducted on April 24, May 18 and 30, and June 10, 2018 by Searl Biological Services. No burrowing owls or sign (pellets, feathers, castings, or white wash) were observed on the project site during the focused surveys. Out of an abundance of caution, and to ensure burrowing owl remain absent from the project site,

a pre-construction burrowing owl clearance survey shall be conducted 30-day prior to any ground disturbing activities in accordance with the 2006 Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area.

In October of 2005 a concrete pad was installed immediately east of the northeast corner of the eastern property. Due to the installation of the concrete pad, storm water from the adjacent residential/commercial developments northeast of the project site was conveyed along the northern boundary of the concrete pad (east of the project site) and outlets onto the northeast corner of the project site. The storm flows onto the project site are not expected to flow during most storm events. There are no existing blue-line streams traversing the project site, and water flows from the offsite feature do not leave the project site. Based on the information above, the on-site feature dissipates/infiltrates on-site and does not present a surface hydrologic connection to any downstream waters. No jurisdictional drainage features, riparian/riverine areas, or vernal pools were observed within the project site during the field survey. Therefore, regulatory approvals from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, or California Department of Fish and Wildlife, or a Determination of Biologically Equivalent or Superior Preservation analysis under the MSHCP will not be required.

Nesting birds are protected pursuant to the Migratory Bird Treaty Act and California Fish and Game Code (Sections 3503, 3503.3, 3511, and 3513 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). If construction occurs between February 1<sup>st</sup> and August 31<sup>st</sup>, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a 300-foot buffer around the active nest. For listed and raptor species, this buffer should be expanded to 500 feet. A biological monitor should be present to delineate the boundaries of the buffer area and monitor the active nest to ensure that nesting behavior is not adversely affected by construction activities. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

The project is not listed as a planned “Covered Activity” under the published MSHCP but is still considered to be a current Covered Activity under Section 7.1, *Covered Activities Outside Criteria Area*, of the MSHCP. Pursuant to this section, public and private development, including the construction of buildings, structures, infrastructure and all alterations of the land, that are carried out by Permittees that are outside of Criteria Areas and Public/Quasi-Public Lands are permitted under the MSHCP, subject to consistency with the policies that apply outside the Criteria Area. With completion of recommendations provided in Section 5 of this report and payment of the MSHCP Local Development Mitigation Fee, development of the project site is fully consistent with the MSHCP.

# Table of Contents

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<b>Section 1</b>	<b>Introduction.....</b>	<b>1</b>
1.1	Project Location.....	1
1.2	Project Description .....	1
<b>Section 2</b>	<b>Methodology .....</b>	<b>5</b>
2.1	Western Riverside County MSHCP Consistency Analysis .....	5
2.1.1	Riparian/Riverine Areas and Vernal Pools .....	5
2.1.2	Narrow Endemic Plant Species.....	6
2.1.3	Additional Survey Needs and Procedures.....	6
2.1.4	Additional Survey Needs and Procedures.....	6
2.1.5	Urban/Wildlands Interface Guidelines .....	6
2.2	Literature Review .....	6
2.3	Field Investigation .....	7
2.4	Soil Series Assessment .....	8
2.5	Plant Communities.....	8
2.6	Plants.....	8
2.7	Wildlife .....	8
2.8	Jurisdictional Drainages and Wetlands.....	8
2.9	Stephens' Kangaroo Rat Habitat Conservation Plan .....	9
<b>Section 3</b>	<b>Existing Conditions.....</b>	<b>10</b>
3.1	Local Climate.....	10
3.2	Topography and Soils .....	10
3.3	Surrounding Land Uses .....	10
<b>Section 4</b>	<b>Discussion .....</b>	<b>12</b>
4.1	Site Conditions.....	12
4.2	Vegetation.....	12
4.2.1	Fallow Agricultural Land.....	12
4.2.2	Eucalyptus Stand.....	12
4.2.3	Disturbed.....	12
4.2.4	Developed .....	14
4.3	Wildlife .....	14
4.3.1	Fish .....	14
4.3.2	Amphibians.....	14

4.3.3	Reptiles .....	14
4.3.4	Birds.....	14
4.3.5	Mammals .....	15
4.4	Nesting Birds .....	15
4.5	Wildlife Corridors and Linkages .....	15
4.6	State and Federal Jurisdictional Areas .....	16
4.7	Special-Status Biological Resources.....	17
4.7.1	Special-Status Plants.....	17
4.7.2	Special-Status Wildlife .....	17
4.7.3	Special-Status Plant Communities.....	18
4.8	Critical Habitat.....	18
<b>Section 5</b>	<b>MSHCP Consistency Analysis .....</b>	<b>20</b>
5.1	Riparian/Riverine Areas and Vernal Pools .....	20
5.1.1	Riparian/Riverine Areas .....	20
5.1.2	Vernal Pools.....	20
5.2	Narrow Endemic Plant Species.....	22
5.3	Additional Survey Needs and Procedures.....	23
5.3.1	Burrowing Owl .....	23
5.4	Additional MSHCP Considerations .....	23
5.4.1	Nesting Birds .....	23
<b>Section 6</b>	<b>Conclusion .....</b>	<b>25</b>
<b>Section 7</b>	<b>References.....</b>	<b>27</b>

**EXHIBITS**

Exhibit 1: Regional Vicinity ..... 2  
Exhibit 2: Site Vicinity ..... 3  
Exhibit 3: Project Site ..... 4  
Exhibit 4: Soils ..... 11  
Exhibit 5: Vegetation ..... 13  
Exhibit 6: Critical Habitat ..... 19  
Exhibit 7: MSHCP Conservation Areas ..... 21

**APPENDIX**

Appendix A Site Photographs  
Appendix B Potentially Occurring Special-Status Biological Resources  
Appendix C MR-DC Western Riverside County MSHCP Burrowing Owl Assessment (2018)  
Appendix D Regulations

# Section 1 Introduction

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This report contains the findings of ELMT Consulting’s (ELMT) Habitat Assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis for Motte Rancon – Distribution Center (MR-DC) Industrial Buildings Project (project) located in the City of Menifee, Riverside County, California. The habitat assessment was conducted by ELMT biologist Travis J. McGill on May 23, 2018 to document baseline conditions and assess the potential for special-status<sup>1</sup> plant and wildlife species to occur on the project site that could pose a constraint to implementation of the proposed project.

The report provides an in-depth assessment of the suitability of the on-site habitat to support burrowing owl (*Athene cunicularia*), as well as several other special-status plant and wildlife species identified by the California Department of Fish and Wildlife’s (CDFW) California Natural Diversity Database (CNDDDB), MSHCP and other electronic databases as potentially occurring in the vicinity of the project site.

## 1.1 PROJECT LOCATION

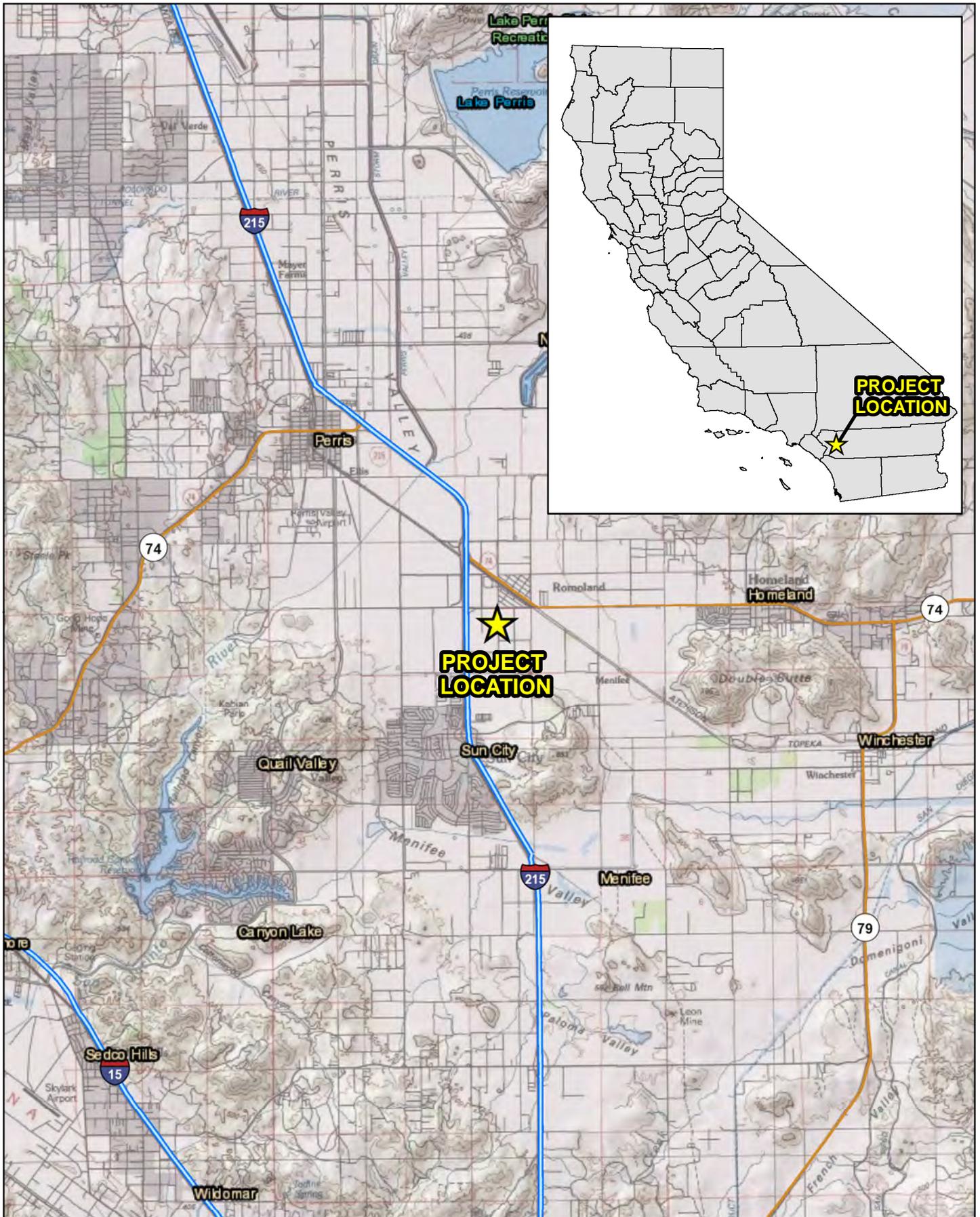
The project site is generally located east of Interstate 215, south of State Route 74, west of State Route 79, and north of Salt Creek, in the City of Murrieta, Riverside County, California (Exhibit 1, *Regional Vicinity*). The project site is depicted on the Romoland quadrangle of the United States Geological Survey’s (USGS) 7.5-minute topographic map series in Section 15 of Township 5 South, Range 3 West (Exhibit 2, *Site Vicinity*). Specifically, the project site is located south of Ethanac Road and north of McLaughlin Road, and bordered by Trumble Road on its western boundary and Dawson Road within Assessor Parcel Numbers 331-110-027, -035, -041, 331-140-010, and -025 (Exhibit 3, *Project Site*). The project site is separated into two properties (eastern property and western property) by Sherman Road.

## 1.2 PROJECT DESCRIPTION

The Project consists of the grading, construction, and operation of two industrial warehouses and office space within two buildings (Building 1 and 2) encompassing approximately 71.70 acres. Specifically, Building 1 will consist of approximately 442,260,000 square feet of warehouse space, and Building 2 will consist of approximately 1,038,240 square feet of warehouse space. The development will also include the required ratio of parking stalls and landscaped areas. Access to Building 1 will be provided by a driveway off of Trumble Road and a driveway off of Sherman Road. Access to Building 2 will be provided by two proposed driveways off Sherman Road.

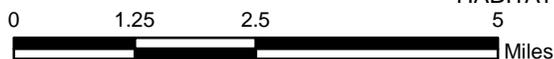
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<sup>1</sup> As used in this report, “special-status” refers to plant and wildlife species that are federally, State, and MSHCP listed, proposed, or candidates; plant species that have been designated with a California Native Plant Society Rare Plant Rank; wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species; and specially protected natural vegetation communities as designated by the CDFW.

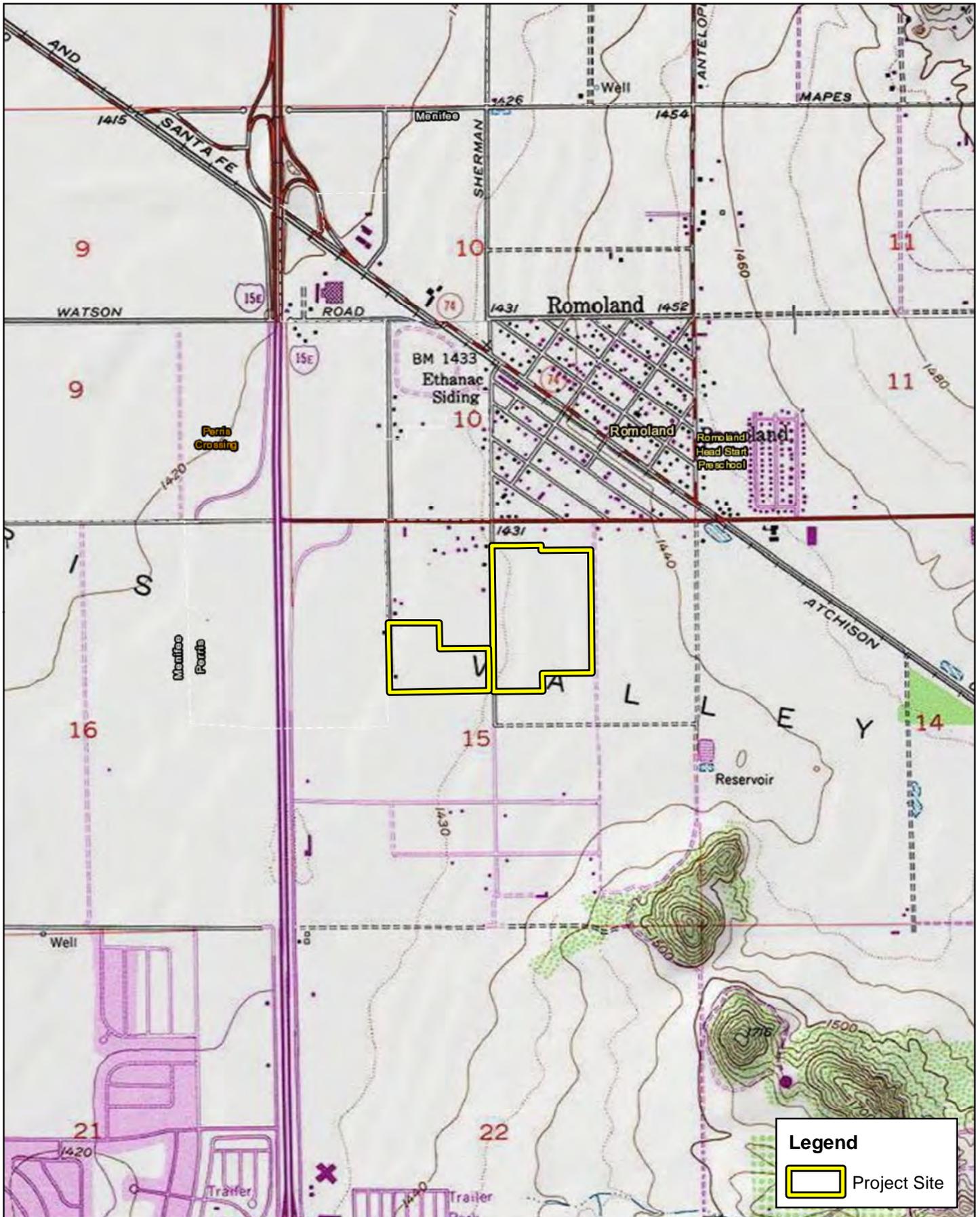


MR-DC INDUSTRIAL BUILDINGS PROJECT  
 HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

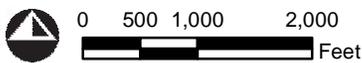
## Regional Vicinity



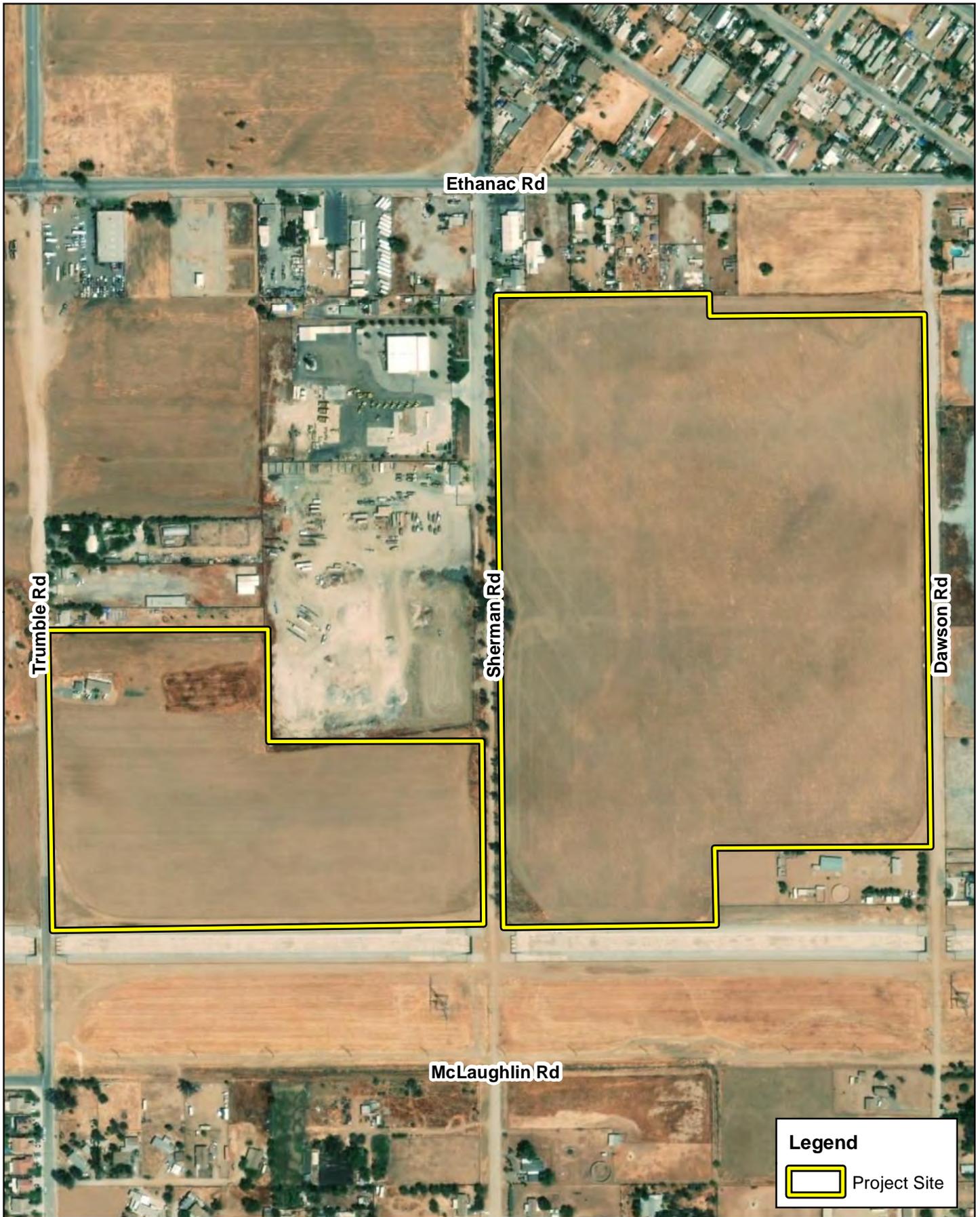
Source: USA Topographic Map



MR-DC INDUSTRIAL BUILDINGS PROJECT  
 HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS  
**Site Vicinity**



Source: USA Topographic Map, Riverside County



Ethanac Rd

Trumble Rd

Sherman Rd

Dawson Rd

McLaughlin Rd

**Legend**

 Project Site



## Section 2 Methodology

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A literature review and records search were conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site. In addition to the literature review, a general habitat assessment or field investigation of the project site was conducted. The field investigation was conducted to document existing conditions within the project site and assess the potential for special-status biological resources to occur.

### 2.1 WESTERN RIVERSIDE COUNTY MSHCP CONSISTENCY ANALYSIS

The project site is located in the City of Menifee (City) within the Harvest Valley/Winchester Area Plan of the MSHCP. The City is a permittee under the MSHCP and, while the project is not specifically identified as a Covered Activity under Section 7.1 of the MSHCP, public and private development that is outside of Criteria Areas and Public/Quasi-Public (P/QP) Lands is permitted under the MSHCP, subject to consistency with MSHCP policies that apply to areas outside of Criteria Areas. As such, to achieve coverage, the project must be consistent with the following policies of the MSHCP:

- The policies for the protection of species associated with riparian/riverine areas and vernal pools as set forth in Section 6.1.2 of the MSHCP;
- The policies for the protection of narrow endemic plant species as set forth in Section 6.1.3 of the MSHCP;
- Vegetation mapping requirements as set forth in Section 6.3.1 of the MSHCP;
- The requirements for conducting additional surveys as set forth in Section 6.3.2 of the MSHCP; and
- Fuels management guidelines as set forth in Section 6.4 of the MSHCP.

The project site was reviewed to determine consistency with the MSHCP. Geographic Information System (GIS) software was utilized to map the project site in relation to MSHCP areas including criteria cells (core habitat and wildlife movement corridors) and areas proposed for conservation.

#### 2.1.1 Riparian/Riverine Areas and Vernal Pools

The MSHCP requires that an assessment be completed if impacts to riparian/riverine areas and vernal pools will occur as a result of implementation of the proposed project. According to the MSHCP, the documentation for the assessment shall include mapping and a description of the functions and values of the mapped areas with respect to the species listed in Section 6.1.2 of the MSHCP, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*.

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 United States Army Corps of Engineers

(Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to State and federal regulatory authorities.

### **2.1.2 Narrow Endemic Plant Species**

Section 6.1.3 of the MSHCP, *Protection of Narrow Endemic Plant Species*, states that the MSHCP database does not provide sufficient detail to determine the extent of the presence/distribution of Narrow Endemic Plant Species within the MSHCP Plan Area. Additional surveys may be needed to gather information to determine the presence/absence of these species to ensure that appropriate conservation of these species occurs. Based on the Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map query and review of the MSHCP, it was determined that the project site is not located within the designated survey area for Narrow Endemic Plant Species as depicted in Figure 6-1 within Section 6.3.2 of the MSHCP.

### **2.1.3 Additional Survey Needs and Procedures**

Section 6.3.2 of the MSHCP, *Additional Survey Needs and Procedures*, states that additional surveys may be needed for certain species in order to achieve coverage for these species. Based on the RCA MSHCP Information Map query and review of the MSHCP, it was determined that the project site is located within the designated survey area for burrowing owl as depicted in Figure 6-4 within Section 6.3.2 of the MSHCP.

### **2.1.4 Additional Survey Needs and Procedures**

Section 6.4 of the MSHCP, *Fuels Management*, focuses on hazard reduction for humans and their property. It requires fuels management practices to be compatible with public safety as well as the conservation of biological resources. A project must comply with MSHCP fuels management requirements in order to be in compliance.

### **2.1.5 Urban/Wildlands Interface Guidelines**

Section 6.1.4 of the MSHCP, *Guidelines Pertaining to Urban/Wildlands Interface*, is intended to address indirect effects associated with development in proximity to MSHCP Conservation Areas. The Urban/Wildlife Interface Guidelines are intended to ensure that indirect project-related impacts to the MSHCP Conservation Area, including drainage, toxics, lighting, noise, invasive plant species, barriers, and grading/land development, are avoided or minimized. The project site is not located within or adjacent to any conservation areas, any Criteria Cells, conservation areas, cores, or linkages identified within the MSHCP. Therefore, the Urban/Wildlands Interface Guidelines do not apply to this project.

## **2.2 LITERATURE REVIEW**

The first step in determining if a project is consistent with the above listed sections of the MSHCP is to conduct a literature review and records search for special-status biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and

wildlife species and their proximity to the project site were determined through a query of the CNDDDB Rarefind 5, the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, and the United States Fish and Wildlife Service (USFWS) species listings, and species covered within the MSHCP and associated technical documents.

Literature detailing biological resources previously observed in the vicinity of the project site and historical land uses were reviewed to understand the extent of disturbances to the habitats on-site. Standard field guides and texts on special-status and non-special-status biological resources were reviewed for habitat requirements, as well as the following resources:

- Google Earth Pro historic aerial imagery (1996-2018);
- 2006 Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area;
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soil Survey;
- USFWS Critical Habitat designations for Threatened and Endangered Species;
- Stephens' Kangaroo Rat Habitat Conservation Plan; and
- RCA MSHCP Information Map.

The literature review provided a baseline from which to inventory the biological resources potentially occurring on the project site. The CNDDDB database was used, in conjunction with ArcGIS software, to locate the nearest recorded occurrences of special-status species and determine the distance from the project site.

## 2.3 FIELD INVESTIGATION

ELMT biologist Travis J. McGill evaluated the extent and conditions of the plant communities found within the boundaries of the project site on May 23, 2018. Plant communities identified on aerial photographs during the literature review were verified in the field by walking meandering transects through the on-site plant communities and along boundaries between plant communities. The plant communities were evaluated for their potential to support special-status plant and wildlife species. In addition, field staff identified any natural corridors and linkages that may support the movement of wildlife through the area.

Special attention was given to special-status habitats and/or undeveloped areas, which have higher potentials to support special-status plant and wildlife species. Areas providing suitable habitat for burrowing owl were closely surveyed for signs of presence during the field survey. Methods to detect the presence of burrowing owls included direct observation, aural detection, and signs of presence including pellets, white wash, feathers, or prey remains.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests,

and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site plant communities, and presence of potential jurisdictional drainage and/or wetland features were noted.

## **2.4 SOIL SERIES ASSESSMENT**

On-site and adjoining soils were researched prior to the field survey using the USDA NRCS Soil Survey for Western Riverside Area, California. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes that the project site has undergone.

## **2.5 PLANT COMMUNITIES**

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were delineated on an aerial photograph, classified in accordance with those described in the MSHCP, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community in acres.

## **2.6 PLANTS**

Common plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less familiar plants were photographed in the field and identified in the laboratory using taxonomic guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

## **2.7 WILDLIFE**

Wildlife species detected during field surveys by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides were used to assist with identification of wildlife species during the survey included The Sibley Field Guide to the Birds of Western North America (Sibley 2003), A Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species are fairly well standardized, scientific names are provided immediately following common names in this report (first reference only).

## **2.8 JURISDICTIONAL DRAINAGES AND WETLANDS**

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may be considered riparian/riverine habitat and/or fall under the jurisdiction of the Corps, Regional Board, or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory jurisdiction.

## 2.9 STEPHENS' KANGAROO RAT HABITAT CONSERVATION PLAN

Separate from the consistency review against the policies of the MSHCP, Riverside County established a boundary in 1996 for protecting the Stephens' kangaroo rat (*Dipodomys stephensi*), a federally endangered and state threatened species. The Stephens' kangaroo rat is protected under the Stephens' Kangaroo Rat Habitat Conservation Plan (County Ordinance No. 663.10; SKR HCP). As described in the MSHCP Implementation Agreement, a Section 10(a) Permit, and California Fish and Game Code Section 2081 Management Authorization were issued to the Riverside County Habitat Conservation Agency (RCHCA) for the Long-Term SKR HCP and was approved by the USFWS and CDFW in August 1990 (RCHCA 1996). Relevant terms of the SKR HCP have been incorporated into the MSHCP and its Implementation Agreement. The SKR HCP will continue to be implemented as a separate HCP; however, to provide the greatest conservation for the largest number of Covered Species, the Core Reserves established by the SKR HCP are managed as part of the MSHCP Conservation Area consistent with the SKR HCP. Actions shall not be taken as part of the implementation of the SKR HCP that will significantly affect other Covered Species. Take of Stephens' kangaroo rat outside of the boundaries but within the MSHCP area is authorized under the MSHCP and the associated permits.

The project site is located within the Mitigation Fee Area of the SKR HCP. Therefore, the applicant will be required to pay the SKR HCP Mitigation Fee prior to development of the project site.

## **Section 3 Existing Conditions**

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### **3.1 LOCAL CLIMATE**

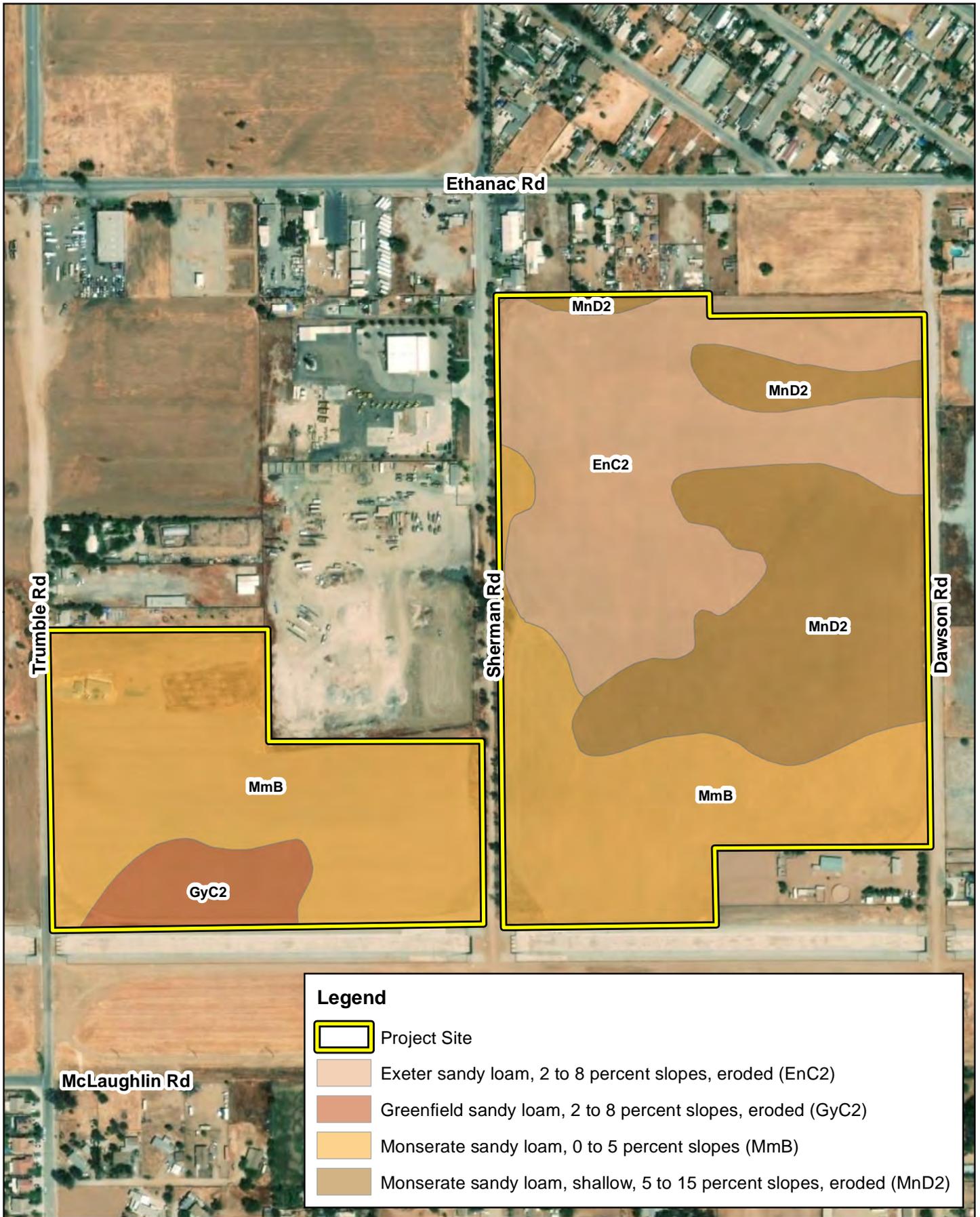
Riverside County features a somewhat cooler version of a Mediterranean climate, or semi-arid climate, with warm, sunny, dry summers and cool, rainy, mild winters. Relative to other areas in Southern California, winters are colder with frost and with chilly to cold morning temperatures common. Climatological data obtained for the City of Norco indicates the annual precipitation averages 12.0 inches per year. Almost all of the precipitation in the form of rain occurs in the months between November and March, with hardly any occurring between the months of April and October. The wettest month is February, with a monthly average total precipitation of 2.88 inches, and the driest months are June and July, both with monthly average total precipitation of 0.02 inches. The average maximum and minimum temperatures are 93 and 40 degrees Fahrenheit (° F) respectively with August (monthly average high 93° F) being the hottest months and December (monthly average low 40° F) being the coldest. The temperature during the site visit was in the mid-70s ° F with cloudy skies and calm winds.

### **3.2 TOPOGRAPHY AND SOILS**

The project site is relatively flat with no areas of significant topographic relief at an elevation of approximately 1,435 feet above mean sea level. According to the USDA NRCS Soil Resource Report, the project site is underlain by the following soil units: Exeter sandy loam (2 to 8 percent slopes, eroded), Greenfield sandy loam (2 to 8 percent slopes, eroded), Monserate sandy loam (0 to 5 percent slopes), and Monserate sandy loam, shallow (5 to 15 percent slopes, eroded). Refer to Exhibit 4, *Soils*. Soils on-site have been mechanically disturbed and heavily compacted from historic land uses (i.e., agricultural activities).

### **3.3 SURROUNDING LAND USES**

The project site is located in an area that has undergone a transformation from agricultural land uses to residential and commercial developments. The eastern property is bordered by residential developments and vacant/undeveloped parcels on its northern boundary, vacant/undeveloped parcels on its eastern boundary, a residential development and flood control channel on its southern boundary, and commercial and vacant parcels on its western boundary. The western property is bordered by commercial and residential developments on its northern boundary, vacant/undeveloped parcels on its western and eastern boundaries, and a flood control channel on its southern boundary.



MR-DC INDUSTRIAL BUILDINGS PROJECT  
 HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS



Source: ESRI Aerial, NRCS Soil Survey Geographic Database, Riverside County

**Soils**

## Section 4 Discussion

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### 4.1 SITE CONDITIONS

The project site consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances associated with agricultural activities. These disturbances have eliminated the natural plant communities that once occurred on the project site which has resulted in a majority of the project site being dominated by non-native vegetation and heavily compacted soils.

### 4.2 VEGETATION

Due to existing land uses (i.e., agricultural activities, disking, and weed abatement activities), no native plant communities or natural communities of special concern were observed on or adjacent to the proposed project site. Two (2) plant communities were observed within the boundaries of the project site during the habitat assessment: fallow agricultural land and eucalyptus stand (Exhibit 5, *Vegetation*). In addition, the project site contains land cover types that would be classified as disturbed and developed. These communities are described in further detail below.

#### 4.2.1 Fallow Agricultural Land

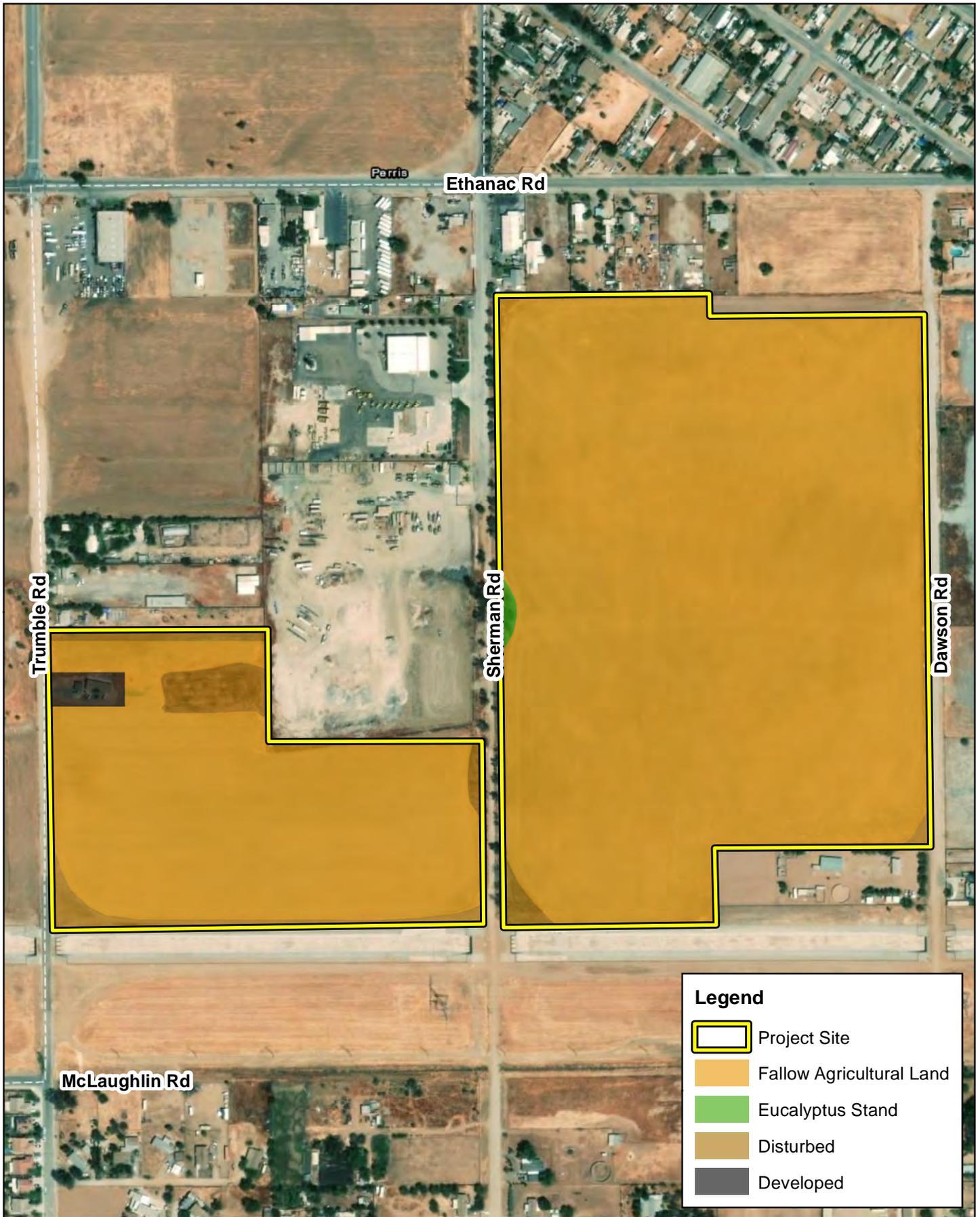
The majority of the project site supports vacant/undeveloped land that has historically been used for agricultural purposes as observed by the presence of oats (*Avena ssp.*). Common plant species observed throughout this plant community included stinknet (*Oncosiphon piluliferum*), pigweed (*Chenopodium album*), London rocket (*Sisymbrium irio*), short-podded mustard (*Hirschfeldia incana*), mouse barley (*Hordeum murinum*), cheeseweed (*Malva parviflora*), ripgut (*Bromus diandrus*), Russian thistle (*Salsola tragus*), Shepard's purse (*Capsella bursa-pastoris*), and Chinese parsley (*Heliotropium curassavicum*).

#### 4.2.2 Eucalyptus Stand

In the middle of the eastern property of the project site a small stand of eucalyptus trees (*Euclayptus ssp.*) were observed along Sherman Road. A row of eucalyptus trees, although primarily located outside of the project boundaries, extends along Sherman Road on the western boundary of the eastern property and the eastern boundary of the western property.

#### 4.2.3 Disturbed

Disturbed areas on the project site are areas that consist of highly compacted/disturbed soils that no longer support a native plant community and are primarily composed of ruderal/non-native weedy plant species. Plant species observed within the disturbed land cover type were similar to the plant species observed within the fallow agriculture land, but the disturbed areas are located in areas not recently used for agriculture land uses on the perimeter of the project site. The northern strip on the western property was an area not routinely maintained for weed abatement, the central polygon on the northwestern portion of the western property is used as a bicycle track, and the southern strip on the southern boundary of the western property was sparsely vegetated due to vehicular traffic.

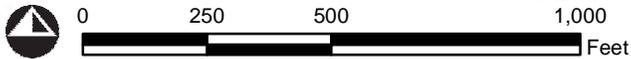


**Legend**

- Project Site
- Fallow Agricultural Land
- Eucalyptus Stand
- Disturbed
- Developed

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 HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

# Vegetation



Source: ESRI Aerial, Riverside County

#### 4.2.4 Developed

Developed areas generally encompass all building/structures, parks, and paved, impervious surfaces. A residential development is located in the northwestern portion of the western property within the project footprint that was labeled as developed.

### 4.3 WILDLIFE

Plant communities provide foraging habitat, nesting and denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed during the field survey or that are expected to occur within the project site. The discussion is to be used as a general reference and is limited by the season, time of day, and weather condition in which the field survey was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation.

#### 4.3.1 Fish

The MSHCP does not identify any covered or special-status fish species as potentially occurring on the project site. Further, no fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on or within the vicinity of the project site. Therefore, no fish are expected to occur and are presumed absent from the project site.

#### 4.3.2 Amphibians

The MSHCP does not identify any covered or special-status amphibian species as potentially occurring on the project site. Further, no amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species were observed on or within the vicinity of the project site. Therefore, no amphibians are expected to occur on the project site and are presumed absent.

#### 4.3.3 Reptiles

The MSHCP does not identify any covered or special-status reptilian species as potentially occurring on the project site. The project site provides a limited amount of habitat for a few reptile species adapted to a high degree of human disturbance associated with the on-site agricultural activities and surrounding development. No reptiles were observed on-site. Common reptilian species expected to occur on-site include Great Basin fence lizard (*Sceloporus occidentalis longipes*) common side-blotched lizard (*Uta stansburiana elegans*), gopher snake (*Pituophis catenifer*), and southern alligator lizard (*Elgaria multicarinata*). Due to the high level of anthropogenic disturbances on-site, and surrounding development, no special-status reptilian species are expected to occur on-site.

#### 4.3.4 Birds

The project site provides suitable foraging and cover habitat for a variety of resident and migrant bird species. A total of fifteen (15) bird species were detected during the field survey and included European starling (*Sturnus vulgaris*), ash-throated flycatcher (*Myiarchus cinerascens*), killdeer (*Charadrius*

*vociferus*), northern rough-winged swallow (*Stelgidopteryx serripennis*), Anna's hummingbird (*Calypte anna*), rock pigeon (*Columba livia*), American crow (*Corvus brachyrhynchos*) American kestrel (*Falco sparverius*), house finch (*Haemorhous mexicanus*), northern mockingbird (*Mimus polyglottos*), lesser goldfinch (*Spinus psaltria*), mourning dove (*Zenaida macroura*), red-tailed hawk (*Buteo jamaicensis*), Cassin's kingbird (*Tyrannus vociferans*), and Say's phoebe (*Sayornis saya*).

#### 4.3.5 Mammals

The MSHCP does not identify any covered or special-status mammalian species as potentially occurring on the project site. The project site and surrounding areas have the potential to support mammalian species adapted to human presence and disturbance. Mammalian species detected during the field survey included Botta's pocket gopher (*Thomomys bottae*), Audubon's cottontail (*Sylvilagus audubonii*) and California ground squirrel (*Spermophilus beecheyi*). Other common mammalian species expected to occur include coyote (*Canis latrans*), opossum (*Didelphis virginiana*), and raccoon (*Procyon lotor*). No bat species are expected to occur due to a lack of suitable roosting habitat (i.e., trees, crevices, abandoned structures) within and surrounding the project site.

#### 4.4 NESTING BIRDS

No active nests or birds displaying nesting behavior were observed during the field survey. The project site and surrounding area provides foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that area adapted to urban environments. The project site has the potential to support birds that nest on open ground and shrubs, such as killdeer (*Charadrius vociferus*). Additional nesting habitat is present in the middle of the project site within the eucalyptus stand that have the potential to provide suitable nesting opportunities for a variety of raptors.

#### 4.5 WILDLIFE CORRIDORS AND LINKAGES

Habitat linkages provide links between larger undeveloped habitat areas that are separated by development. Wildlife corridors are similar to linkages, but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The project site has not been identified as a wildlife corridor or linkage. The Santa Ana River is located approximately 2.5 mile south of the project site, which is the closest identified wildlife corridor to the project site. The proposed development will be confined to existing areas that have been heavily disturbed and surrounded by development. The project site is isolated from regional wildlife corridors and linkages, and there are no riparian corridors, creeks, or useful patches of stepping stone habitat (natural areas) within or connecting the project site to the Santa Ana River. As such, development of the project site is not expected to impact wildlife movement opportunities or prevent the Santa Ana River from continuing to function as a wildlife corridor. Therefore, impacts to wildlife corridors or linkages are not expected to occur.

## 4.6 STATE AND FEDERAL JURISDICTIONAL AREAS

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge and/or fill materials into “waters of the United States” pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act and the CDFW regulates alterations to streambed and associated plant communities pursuant to Section 1602 of the California Fish and Game Code.

Prior to the field investigation, aerial photographs from Google Earth Imaging were reviewed for the project site.

- 1994-2003: From September 1996 to December 2003 project site consist of vacant/undeveloped land that has been heavily disturbed from existing activities and is routinely disked. . The project site appears to consist of a non-native grassland plant community that has been routinely disked and/or been subject to weed abatement activities.
- 2004-2006: The project site continues to consist of vacant/undeveloped land that is routinely disked and/or been subject to weed abatement activities; however, an earthen flood control channel was created between the end of 2004 and October 2005 on the southern boundary of the western property, outside of the project footprint. In October of 2005 a concrete pad was installed immediately east of the northeast corner of the eastern property. Due to the installation of the concrete pad, storm water from the adjacent residential/commercial developments northeast of the project site was conveyed along the northern boundary of the concrete pad (east of the project site) and outlets onto the northeast corner of the project site.
- 2009-2018: Between 2009 and 2018, the entire project site was routinely disked. Over this timeframe, the water flow onto the northeast corner of the project site is continually disturbed from disking activities. The aerial imagery shows the onsite feature there in some years and little to no evidence in other years. It should be noted that in February of 2016 the earthen flood control channel was converted to a concrete lined channel that extends the entire length of the project site (both the western and eastern properties).

It was preliminarily determined that water dissipation on northeast corner of the project site has an insubstantial or speculative effect on the chemical, physical or biological significant nexus to the downstream waters. The storm flows onto the project site are not expected to flow during most storm events. There are no existing blue-line streams traversing the project site, and water flows from the offsite feature do not leave the project site. Plant species associated with this area is consistent with the vegetation found on the majority of the project site. Based on the information above, the on-site feature dissipates/infiltrates on-site and does not present a surface hydrologic connection to any downstream waters. Therefore, the on-site feature would not qualify as jurisdictional by the Corps, Regional Board, or CDFW.

## 4.7 SPECIAL-STATUS BIOLOGICAL RESOURCES

The CNDDDB Rarefind 5 and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Romoland and Perris USGS 7.5-minute quadrangles. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified twenty-four (24) special-status plant species, sixty-nine (69) special-status wildlife species, and two (2) special-status plant communities as having potential to occur within the Romoland and Perris quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the project boundaries based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity are presented in *Table B-1: Potentially Occurring Special-Status Biological Resources*, provided in Appendix B. Refer to Table B-1 for a determination regarding the potential occurrence of special-status plant and wildlife species within the project site.

### 4.7.1 Special-Status Plants

According to the CNDDDB and CNPS, twenty-four (24) special-status plant species have been recorded in the Romoland and Perris quadrangles (refer to Appendix B). The project site primarily consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances from agricultural activities. These disturbances have resulted in a majority of the project site being dominated by non-native vegetation and heavily compacted soils which has reduced, if not eliminated, the ability of the project site to provide suitable habitat for special-status plant species.

Although the field investigation was not conducted during the blooming season for the majority of the special-status plant species known to occur in the general vicinity of the project site, based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the project site has a low potential to provide suitable habitat for smooth tarplant (*Centromadia pungens ssp. laevis*), and paniculate tarplant (*Deinandra paniculata*). The project site does not provide suitable habitat for any of the special-status plant species known to occur in the area and are presumed to be absent from the project site.

### 4.7.2 Special-Status Wildlife

According to the CNDDDB, sixty-six (69) special-status wildlife species have been reported in the Romoland and Perris quadrangles (refer to Appendix B). No special-status wildlife species were observed on-site during the habitat assessment. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the proposed project site has a low potential to provide suitable habitat for Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter straitus*), great egret (*Ardea alba*), great blue heron (*Ardea herodias*), northern harrier (*Circus cyaneus*), snowy egret (*Egretta thula*), white-tailed kite (*Elanus leucurus*), long-billed curlew (*Numenius americanus*), black-crowned night heron (*Nycticorax nycticorax*), and white-faced ibis (*Plegadis chihi*); and a moderate potential to

provide suitable habitat for burrowing owl, California horned lark (*Eremophila alpestris actia*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*). Further it was determined that the project site does not provide suitable habitat for any of the other special-status wildlife species known to occur in the area since the project site has been heavily disturbed from on-site disturbances and existing development.

In order to ensure impacts to the aforementioned species do not occur from site development, a pre-construction nesting bird clearance survey shall be conducted within three (3) days prior to ground disturbance. With implementation of a pre-construction nesting bird clearance survey, impacts to the aforementioned species will be less than significant and no mitigation will be required.

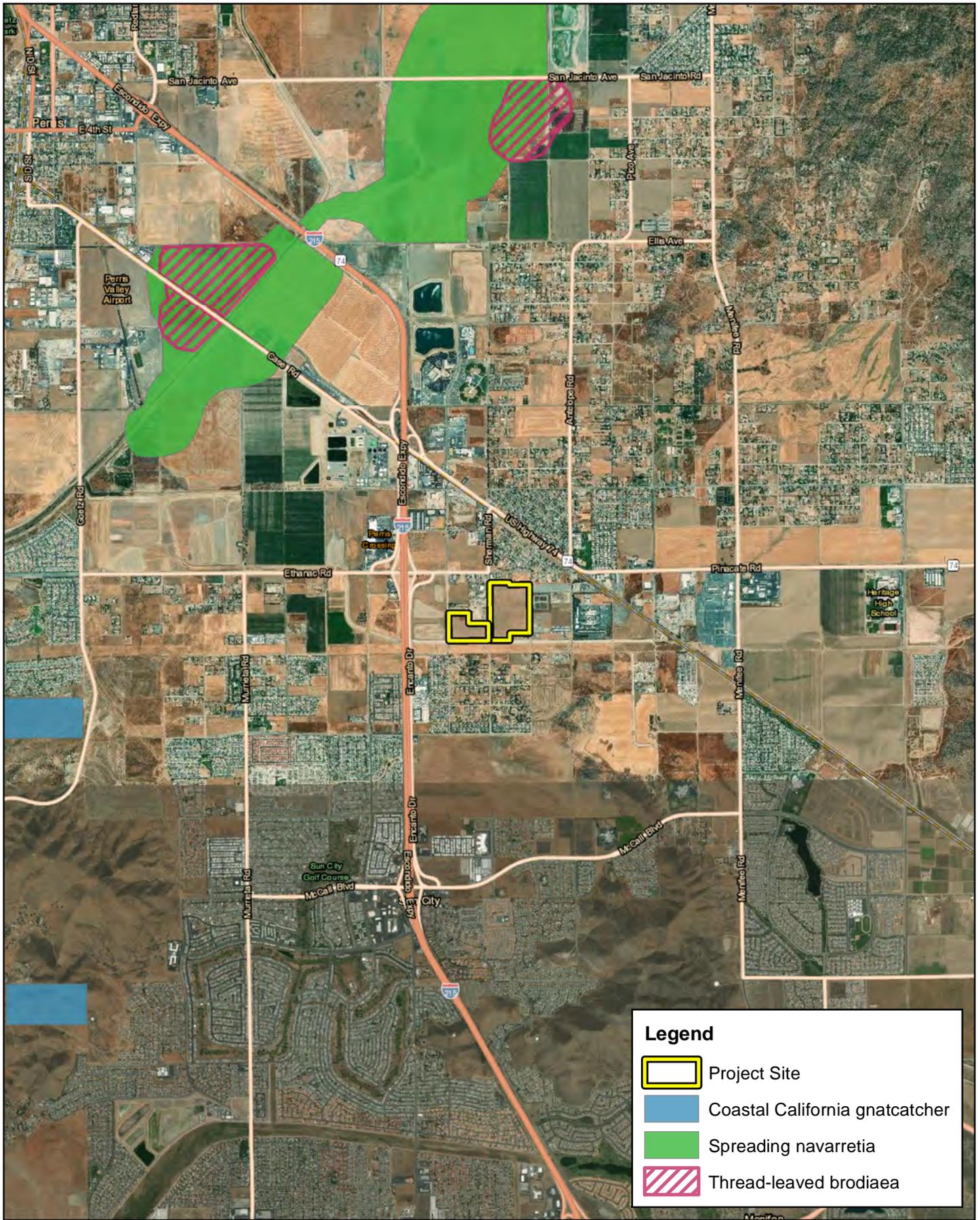
### 4.7.3 Special-Status Plant Communities

The CNDDDB lists two (2) special-status plant communities as being identified within the Romoland and Perris USGS 7.5-minute quadrangles: Southern Coast Live Oak Riparian Forest, and Southern Cottonwood Willow Riparian Forest. None of these special-status plant communities occur within the boundaries of the project site.

## 4.8 CRITICAL HABITAT

Under the federal Endangered Species Act, “Critical Habitat” is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the USFWS regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located within federally designated Critical Habitat. The closest Critical Habitat designation is located along the San Jacinto River approximately 2 miles northwest of the project site for spreading navarretia (*Navarretia fossalis*) and thread-leaved brodiaea (*Brodiaea filifolia*) (Exhibit 6, *Critical Habitat*). Therefore, consultation with USFWS will not be required for the loss or adverse modification of Critical Habitat.



**Legend**

-  Project Site
-  Coastal California gnatcatcher
-  Spreading navarretia
-  Thread-leaved brodiaea

MR-DC INDUSTRIAL BUILDINGS PROJECT  
 HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS  
**Critical Habitat**



Source: ESRI Aerial, World Transportation, USFWS Critical Habitat, Riverside County

## Section 5 MSHCP Consistency Analysis

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The project site is located in the Harvest Valley/Winchester Area Plan of the MSHCP but is not located within any Criteria Cells or MSHCP Conservation Areas (Exhibit 7, *MSHCP Conservation Areas*). Additionally, the project site is located only within the designated survey area for burrowing owl depicted in Figures 6-4 within Sections 6.3.2 of the MSHCP. Refer to the following sections for an analysis of the suitability of the on-site habitat to support burrowing owl.

### 5.1 RIPARIAN/RIVERINE AREAS AND VERNAL POOLS

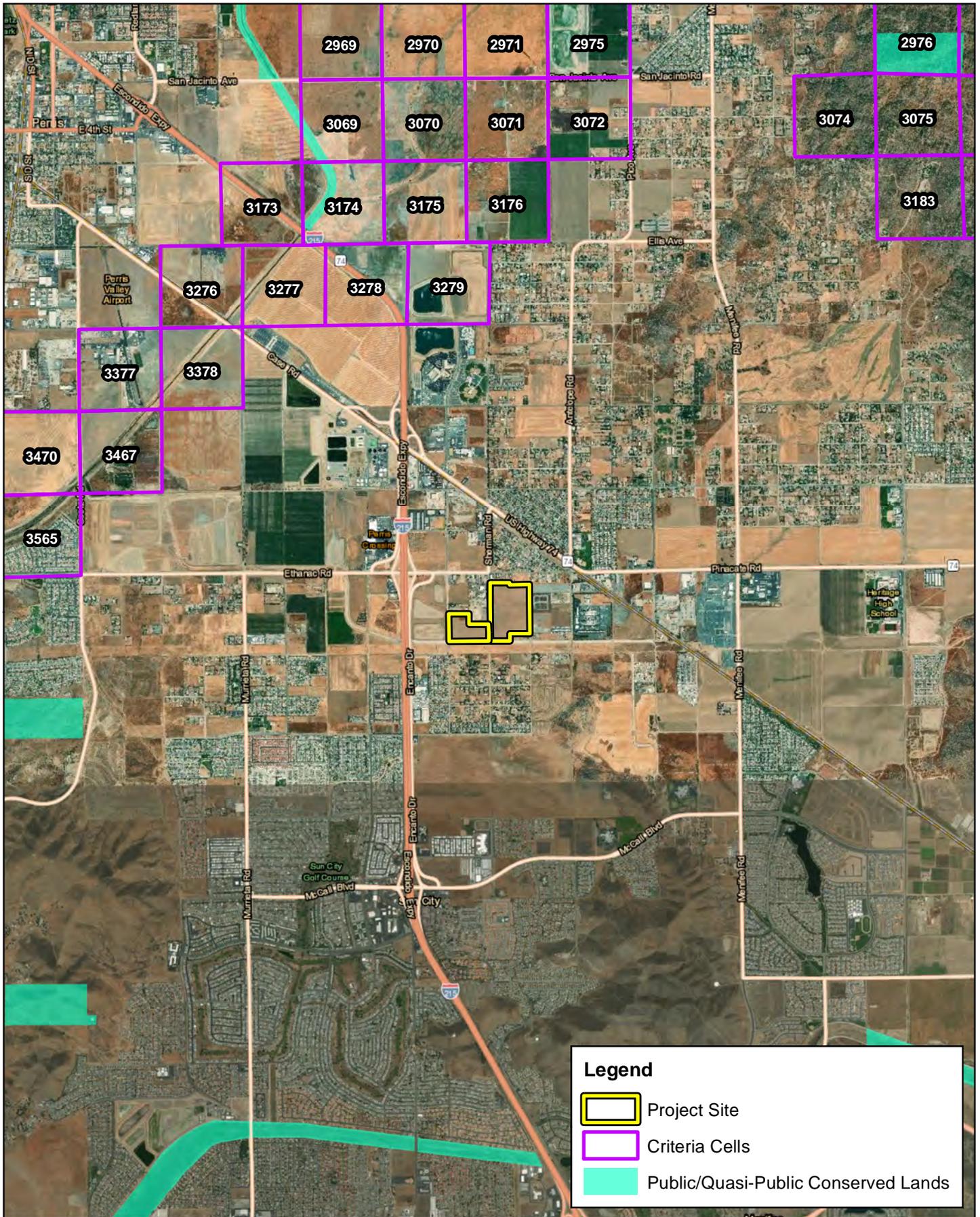
#### 5.1.1 Riparian/Riverine Areas

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 a number of listed or special-status water-dependent fish, amphibian, avian, and plant species. Any alteration or loss of riparian/riverine habitat from development of a Project will require the preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) analysis to ensure the replacement of any lost functions and values of habitats in regards to the listed species. This assessment is independent from considerations given to waters of the United States and waters of the State under the CWA, the California Porter-Cologne Water Quality Control Act, and CDFW jurisdictional streambed under the California Fish and Game Code.

In October of 2005 a concrete pad was installed immediately east of the northeast corner of the eastern property. Due to the installation of the concrete pad, storm water from the adjacent residential/commercial developments northeast of the project site was conveyed along the northern boundary of the concrete pad (east of the project site) and outlets onto the northeast corner of the project site. The storm flows onto the project site are not expected to flow during most storm events. There are no existing blue-line streams traversing the project site, and water flows from the offsite feature do not leave the project site. Based on the information above, the on-site feature dissipates/infiltrates on-site and does not present a surface hydrologic connection to any downstream waters. No jurisdictional drainage features, riparian/riverine areas, or vernal pools were observed within the project site during the field survey. Therefore, a DBESP analysis under the MSHCP will not be required.

#### 5.1.2 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.



MR-DC INDUSTRIAL BUILDINGS PROJECT  
 HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS  
**MSHCP Conservation Areas**



Source: ESRI Aerial, World Transportation, Western Riverside County MSHCP Data, Riverside County

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 should consider the length of time the area exhibits upland and wetland characteristics and the manner in which 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. The specific clay soils known to be associated with special-status species within the MSHCP plan area include Bosanko, Auld, Altamont, and Porterville series soils, whereas Traver-Domino Willows association includes saline-alkali soils largely located along floodplain areas of the San Jacinto River and Salt Creek. Without the appropriate soils to create the impermeable restrictive layer, none of the special-status species associated with vernal pools can occur on the project site. The project site does not support any of these clay soils known to be associated with vernal pools or special-status species.

A review of recent and historic aerial photographs (1996-2018) of the project site 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. No ponding was observed on-site, further supporting the fact that the drainage patterns currently occurring on the project site do not follow hydrologic regimes needed for vernal pools. From this review of historic aerial photographs and observations during the field investigations, it can be concluded that there is no indication of vernal pools or suitable fairy shrimp habitat occurring on the project site. Further, no special-status plant and wildlife species associated with vernal pools were observed.

## **5.2 NARROW ENDEMIC PLANT SPECIES**

Based on the RCA MSHCP Information Map query and review of the MSHCP, it was determined that the project site is not located within the designated survey area for Narrow Endemic Plant Species as depicted in Figure 6-1 within Section 6.1.3 of the MSHCP. Additionally, based on the results of the field investigation, it was determined that the project site does not provide suitable habitat for any of the Narrow Endemic Plant Species.

## 5.3 ADDITIONAL SURVEY NEEDS AND PROCEDURES

The RCA MSHCP Information Map query and review of the MSHCP identified that the project site is located within the designated survey area for burrowing owl as depicted in Figure 6-4 within Section 6.3.2 of the MSHCP.

### 5.3.1 Burrowing Owl

Burrowing owl is currently designated as a California Species of Special Concern. 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 (*A.c. hypugaea*), 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 man-made cavities, such as buried and non-functioning drain pipes, 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.

A focused burrowing owl survey was conducted during the 2018 breeding season. The focused surveys were conducted on April 24, May 18 and 30, and June 10, 2018 by Searl Biological Services (refer to Appendix C – Motte Rancon – Distribution Center Western Riverside County MSHCP Burrowing Owl Assessment, 2018). No burrowing owls or sign (pellets, feathers, castings, or white wash) were observed on the project site during the focused surveys. Out of an abundance of caution, and to ensure burrowing owl remain absent from the project site, a pre-construction burrowing owl clearance survey shall be conducted 30-day prior to any ground disturbing activities in accordance with the 2006 Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area.

## 5.4 ADDITIONAL MSHCP CONSIDERATIONS

### 5.4.1 Nesting Birds

Vegetation within and surrounding the project site has the potential to provide refuge cover from predators, perching sites and favorable conditions for avian nesting that could be impacted by construction activities associated with the project. Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season. Consequently, if avian nesting behaviors are disrupted, such as nest abandonment and/or loss of reproductive effort, it is considered “take” and is potentially punishable by fines and/or imprisonment.

If construction occurs between February 1<sup>st</sup> and August 31<sup>st</sup>, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a 300-foot buffer around the active nest. For listed and raptor species, this buffer is expanded to 500 feet. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

## Section 6 Conclusion

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The project site consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances associated with agricultural activities and surrounding development. These disturbances have eliminated the natural plant communities that once occurred on the project site and resulted in a majority of the project site being dominated by non-native vegetation and heavily compacted soils.

No special-status plant species were observed on-site during the field survey. On-site disturbances have reduced, if not eliminated, the ability of the project site to provide suitable habitat for special-status plant species. Based on habitat requirements for specific special-status plant species and the availability and quality of habitat needed by each species, it was determined that the project site does not provide suitable habitat for any of the special-status plant species that were determined to have the potential to occur in the vicinity of the project site.

No special-status wildlife species were observed on-site during the habitat assessment. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the proposed project site has a low potential to provide suitable habitat for Cooper's hawk, sharp-shinned hawk, great egret, great blue heron, northern harrier, snowy egret, white-tailed kite, long-billed curlew, black-crowned night heron, and white-faced ibis; and a moderate potential to provide suitable habitat for burrowing owl, California horned lark, San Diego black-tailed jackrabbit. Further it was determined that the project site does not provide suitable habitat for any of the other special-status wildlife species known to occur in the area since the project site has been heavily disturbed from on-site disturbances and existing development. In order to ensure impacts to the aforementioned species do not occur from site development, a pre-construction nesting bird clearance survey shall be conducted within three (3) days prior to ground disturbance. With implementation of a pre-construction nesting bird clearance survey, impacts to the aforementioned species will be less than significant and no mitigation will be required.

No special-status wildlife species were observed during the field investigation. Based on the field investigation, it was determined that the project site has a low potential to provide habitat for tricolored blackbird. All remaining special-status wildlife species are presumed to be absent from the project site based on habitat requirements, availability and quality of habitat needed by each species, and known distributions.

In October of 2005 a concrete pad was installed immediately east of the northeast corner of the eastern property. Due to the installation of the concrete pad, storm water from the adjacent residential/commercial developments northeast of the project site was conveyed along the northern boundary of the concrete pad (east of the project site) and outlets onto the northeast corner of the project site. The storm flows onto the project site are not expected to flow during most storm events. There are no existing blueline streams traversing the project site, and water flows from the offsite feature do not leave the project site. Based on the information above, the on-site feature dissipates/infiltrates on-site and does not present a surface hydrologic connection to any downstream waters. No jurisdictional drainage features, riparian/riverine areas, or vernal pools were observed within the project site during the field survey. Therefore, regulatory approvals from the Corps, Regional Board, or CDFW, or a DBESP analysis under the MSHCP will not be required.

Based on the proposed project footprint, and with the implementation of a pre-construction nesting bird clearance survey, none of the special-status species known to occur in the general vicinity of the project site will be directly or indirectly impacted from implementation of the proposed project. Therefore, it was determined that this project will have “no effect” on federally, State, or MSHCP listed species known to occur in the general vicinity of the project site. Additionally, the project will have “no effect” on designated Critical Habitats.

With completion of the recommendations in this document and payment of the MSHCP mitigation fees, development of the project site is fully consistent with the Western Riverside County MSHCP.

## Section 7      References

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## **Appendix A    Site Photographs**

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**Photograph 1:** From the northeast corner of the eastern property looking south along the eastern boundary.



**Photograph 2:** From the northeast corner of the eastern property looking west along the northern boundary.



**Photograph 3:** From the middle of the northern boundary of the eastern property looking south.



**Photograph 4:** From the northwest corner of the eastern property looking east across the northern boundary.



**Photograph 5:** From the northwest corner of the eastern property looking south along the western boundary.



**Photograph 6:** From the middle of the western boundary of the eastern property looking east.



**Photograph 7:** From the southwest corner of the eastern property looking north along the western boundary.



**Photograph 8:** From the southwest corner of the eastern property looking east along the southern boundary.



**Photograph 9:** From the middle of the southern boundary of the eastern property looking east along the southern boundary north of the existing residential property.



**Photograph 10:** From the southeast corner of the eastern property looking north along the eastern boundary.



**Photograph 11:** From the southern boundary of the project site looking north along Sherman Road at the eucalyptus trees on the western boundary of the eastern property.



**Photograph 12:** From the northeast corner of the western property looking west along the northern boundary.



**Photograph 13:** Looking at the disturbed habitat on the north west portion of the western property.



**Photograph 14:** From the southwest corner of the western property looking north along the western boundary.



**Photograph 15:** From the southwest corner of the western property looking east along the southern boundary.



**Photograph 16:** From the middle of the western property looking west.

**Appendix B      Potentially Occurring Special-Status  
Biological Resources**

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Table B-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<b>SPECIAL-STATUS ANIMAL SPECIES</b>				
<i>Accipiter cooperii</i> Cooper's hawk	Fed: None CA: WL	Generally found in forested areas up to 3,000 feet in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests, but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.	No	<b>Low.</b> There is marginal foraging habitat within the project site, but no suitable nesting habitat. This species is adapted to urban environments and occurs commonly.
<i>Accipiter striatus</i> sharp-shinned hawk	Fed: None CA: WL	Found in pine, fir and aspen forests. They can be found hunting in forest interior and edges from sea level to near alpine areas. Can also be found in rural, suburban and agricultural areas, where they often hunt at bird feeders. Typically found in southern California in the winter months.	No	<b>Low.</b> There is marginal foraging habitat within the project site, but no suitable nesting habitat. This species is adapted to urban environments.
<i>Agelaius tricolor</i> tricolored blackbird	Fed: None CA: SSC	Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate (freshwater marsh dominated by cattails, willows, and bulrushes [ <i>Schoenoplectus</i> sp.]), and either flooded or thorny or spiny vegetation and suitable foraging space providing adequate insect prey.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	Fed: None CA: WL	Typically found between 3,000 and 6,000 feet in elevation. Breed in sparsely vegetated shrublands on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush ( <i>Artemisia californica</i> ), but can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Ammodramus savannarum</i> grasshopper sparrow	Fed: None CA: SSC	Occurs in grassland, upland meadow, pasture, hayfield, and old field habitats. Optimal habitat contains short- to medium-height bunch grasses interspersed with patches of bare ground, a shallow litter layer, scattered forbs, and few shrubs. May inhabit thickets, weedy lawns, vegetated landfills, fence rows, open fields, or grasslands.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Aquila chrysaetos</i> golden eagle	Fed: None CA: FP; WL	Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	No	<b>Low.</b> There is marginal foraging habitat within the project site, but no suitable nesting habitat.
<i>Ardea alba</i> great egret	Fed: None CA: None	Yearlong resident throughout California, except for the high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures.	No	<b>Low.</b> There is marginal foraging habitat within the project site, but no suitable nesting habitat.
<i>Ardea herodias</i> great blue heron	Fed: None CA: None	Fairly common all year throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains about foothills.	No	<b>Low.</b> There is marginal foraging habitat within the project site, but no suitable nesting habitat.
<i>Arizona elegans occidentalis</i> California glossy snake	Fed: None CA: SSC	Common throughout southern California in desert habitats. Also occurs in chaparral, sagebrush scrub, valley-foothill hardwood, pine-juniper, and annual grassland. Prefers open sandy areas with scattered brush, but also can be found in rocky areas.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Artemisospiza belli belli</i> Bell's sage sparrow	Fed: None CA: WL	Occurs in chaparral dominated by fairly dense stands of chamise. Also found in coastal sage scrub in south of range.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Asio otus</i> long-eared owl	Fed: None CA: SSC	Requires riparian or other thickets with small, densely canopied trees for roosting and nesting. Hunts mostly at night over grasslands and other open habitats. Also occurs in dense conifer stands at higher elevations.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Aspidoscelis hyperythra</i> orangethroat whiptail	Fed: None CA: CSC	Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	Fed: None CA: None	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Athene cunicularia</i> burrowing owl	Fed: None CA: CSC	Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	No	<b>Moderate:</b> The project site provides suitable foraging opportunities and marginal nesting opportunities. Was not detected during 2018 focused survey.
<i>Baeolophus inornatus</i> oak titmouse	Fed: None CA: None	Oak woods, pinyon-juniper; locally river woods, shade trees. Along Pacific seaboard, occurs most commonly in oak woodland, including areas where oaks meet streamside trees or pines; also in well-wooded suburbs, rarely in coniferous forest in mountains. In the interior, also occurs in some woodlands dominated by pine or juniper.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Bombus crotchii</i> Crotch bumble bee	Fed: None CA: None	Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Buteo regalis</i> ferruginous hawk	Fed: None CA: WL	Occurs primarily in open grasslands and fields, but may be found in sagebrush flats, desert scrub, low foothills, or along the edges of pinyon-juniper woodland. Feeds primarily on small mammals and typically found in agricultural or open fields.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Buteo swainsoni</i> Swainson's hawk	Fed: None CA: <b>THR</b>	Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grassland or suitable grain or alfalfa fields or livestock pastures.	Yes	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Calypte costae</i> Costa's hummingbird	Fed: None CA: None	Desert and semi-desert, arid brushy foothills and chaparral. A desert hummingbird that breeds in the Sonoran and Mojave Deserts. Departs desert heat moving into chaparral, scrub, and woodland habitats.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Chaetodipus californicus femoralis</i> Dulzura pocket mouse	Fed: None CA: SSC	Found most often in grass-chaparral edges, but may also be found in coastal scrub or other habitats, primarily in San Diego County.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	Fed: None CA: CSC	Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters above msl. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or rocky outcroppings, as well as sandy soils for burrowing.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Chaetura vauxi</i> Vaux's swift	Fed: None CA: SSC	Uncommon spring migrant throughout most of California. Forages high in the air over most terrains and habitat and at lower levels in forest openings and above rivers and lakes. Roosts in hollow trees, snags, chimneys, and buildings. Species does not breed in southern California.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Charadrius montanus</i> mountain plover	Fed: None CA: SSC	Found in short grasslands, freshly-plowed fields, newly-sprouting grain fields, and sometimes in sod farms. Prefers short vegetation or bare ground with flat topography, particularly grazed areas or areas with fossorial rodents.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Circus cyaneus</i> northern harrier	Fed: None CA: SSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	No	<b>Low.</b> There is marginal foraging habitat within the project site, but no suitable nesting habitat.
<i>Coleonyx variegatus abbotti</i> San Diego banded gecko	Fed: None CA: None	Occurs in coastal and cismontane southern California from interior Ventura County south, although it is absent from the extreme outer coast. It is uncommon in coastal scrub and chaparral, most often occurring in granite or rocky outcrops in these habitats.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Crotalus ruber</i> red-diamond rattlesnake	Fed: None CA: CSC	It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Diadophis punctatus modestus</i> San Bernardino ringneck snake	Fed: None CA: None	Common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Diadophis punctatus similis</i> San Diego ringneck snake	Fed: None CA: None	Prefers moist habitats, including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, and woodlands.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	Fed: <b>END</b> CA: <b>SSC</b>	Primarily found in Riversidian alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May occur at lower densities in Riversidian upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to Riversidian alluvial fan sage scrub habitats. Tend to avoid rocky substrates and prefer sandy loam substrates for digging of shallow burrows.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Dipodomys simulans</i> Dulzura kangaroo rat	Fed: None CA: None	Typical habitat is sandy and gravelly soils in semi-desert, dry grassland and scrub, and chaparral near the coast; it is also sometimes found in forests of pine, oak and fir.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	Fed: <b>END</b> CA: <b>THR</b>	Occur in arid and semi-arid habitats with some grass or brush. Prefer open habitats with less than 50% protective cover. Require soft, well-drained substrate for building burrows and are typically found in areas with sandy soil.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Egretta thula</i> snowy egret	Fed: None CA: None	Widespread in California along shores of coastal estuaries, fresh and saline emergent wetlands, ponds, slow-moving rivers, irrigation ditches, and wet fields. In southern California, common yearlong in the Imperial Valley and along the Colorado River.	No	<b>Low.</b> There is marginal foraging habitat within the project site, but no suitable nesting habitat.
<i>Elanus leucurus</i> white-tailed kite	Fed: None CA: FP	Occurs in low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Uses trees with dense canopies for cover. Important prey item is the California vole.	No	<b>Low.</b> There is marginal foraging habitat within the project site, but no suitable nesting habitat.
<i>Empidonax traillii</i> willow flycatcher	Fed: None CA: <b>END</b>	A rare to locally uncommon, summer resident in wet meadow and montane riparian habitats (2,000 to 8,000 ft) in the Sierra Nevada and Cascade Range. Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	Fed: <b>END</b> CA: <b>END</b>	Occurs in riparian woodlands in southern California. Typically requires large areas of willow thickets in broad valleys, canyon bottoms, or around ponds and lakes. These areas typically have standing or running water, or are at least moist.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Emys marmorata</i> western pond turtle	Fed: None CA: CSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Found at elevations from sea level to over 5,900 feet (1,800 m).	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Eremophila alpestris actia</i> California horned lark	Fed: None CA: WL	Generally found in shortgrass prairies, grasslands, disturbed fields, or similar habitat types. Flocks in groups.	No	<b>Moderate:</b> The project site provides suitable foraging opportunities and marginal nesting opportunities.
<i>Eumops perotis californicus</i> western mastiff bat	Fed: None CA: CSC	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least three meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Euphydryas editha quino</i> Quino checkerspot butterfly	Fed: <b>END</b> CA: None	Range is now limited to a few populations in Riverside and San Diego counties. Common in meadows and upland sage scrub/chapparral habitat.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Falco columbarius</i> merlin	Fed: None CA: WL	Common winter resident of southern California. Occurs in open grassland and woodland habitats near water. Prefers coastlines, lakes, and wetlands. Species does not breed in California.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Falco mexicanus</i> prairie falcon	Fed: None CA: WL	Uncommon yearlong resident of southern California. Occurs primarily within perennial grasslands, savannahs, rangeland, agricultural areas, and desert scrub. Usually nests in canyons, cliffs, escarpments, rock outcrops, or sheltered ledge overlooking a large, open area.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Falco peregrinus anatum</i> American peregrine falcon	Fed: DL CA: DL , FP	Uncommon winter resident of the inland region of southern California. Active nesting sites are known along the coast north of Santa Barbara, in the Sierra Nevada, and in other mountains of northern California. Breeds mostly in woodland, forest, and coastal habitats. Riparian areas and coastal and inland wetlands are important habitats yearlong, especially in nonbreeding seasons.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Haliaeetus leucocephalus</i> bald eagle	Fed: DL CA: END , FP	Locally permanent resident and uncommon winter migrant of southern California. Requires large bodies of water, or free flowing rivers with abundant fish and adjacent snags or other perches. Nests in large, old-growth, or dominant live tree with open branchwork near a permanent water sources.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Icteria virens</i> yellow-breasted chat	Fed: None CA: CSC	Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Breeding habitat must be dense to provide shade and concealment. It winters south the Central America.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Lanius ludovicianus</i> loggerhead shrike	Fed: None CA: SSC	Often found in broken woodlands, shrublands, and other habitats. Prefers open country with scattered perches for hunting and fairly dense brush for nesting.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Lasiurus xanthinus</i> western yellow bat	Fed: None CA: SSC	Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	Fed: None CA: SSC	Occupies many diverse habitats, but primarily is found in arid regions supporting short-grass habitats, agricultural fields, or sparse coastal scrub.	No	<b>Moderate:</b> The project site provides foraging opportunities for this species.
<i>Myotis yumanensis</i> Yuma myotis	Fed: None CA: None	This species is found in a variety of habitats, ranging from juniper and riparian woodlands to desert regions near open water. Primarily found wherever there are rivers, streams, ponds, lakes, etc. When not near water over which to forage, these animals can be found in the thousands roosting in caves, attics, buildings, mines, underneath bridges, and other similar structures.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	Fed: None CA: SSC	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Prefers moderate to dense canopies, and especially rocky outcrops.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Numenius americanus</i> long-billed curlew	Fed: None CA: WL	Preferred winter habitats include large coastal estuaries, upland herbaceous areas, and croplands. On estuaries, feeding occurs mostly on intertidal mudflats.	No	<b>Low.</b> There is marginal foraging habitat within the project site, but no suitable nesting habitat.
<i>Nycticorax nycticorax</i> black-crowned night heron	Fed: None CA: None	Require aquatic habitat for foraging and terrestrial vegetation for cover. Found in saltmarshes, freshwater marshes, swamps, streams, rivers, lakes, ponds, lagoons, tidal flats, canals, reservoirs, and wet agricultural fields.	No	<b>Low.</b> There is marginal foraging habitat on the fringes of the project site, but no suitable nesting habitat.
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	Fed: None CA: CSC	Often found in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Onychomys torridus ramona</i> southern grasshopper mouse	Fed: None CA: SSC	Inhabits alkali desert scrub and other desert scrub habitats, and to a lesser extent succulent shrubs, desert washes, desert riparian, coastal scrub, mixed chaparral, and sagebrush habitats. Generally rare in valley foothill and montane riparian habitats. Prefers low to moderate shrub cover and requires friable soils.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Pandion haliaetus</i> osprey	Fed: None CA: WL	Uncommon winter resident of southern California. Primarily associated with large, fish-bearing waterbodies such as rivers, lakes, reservoirs, bays, and estuaries. Requires clear, open waters for foraging and use large snags and open trees for roosting.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Passerculus sandwichensis beldingi</i> Belding's savannah sparrow	Fed: None CA: <b>END</b>	Exclusively tied to southern California coastal salt marshes, as well as on some of the Channel Islands. Sedentary subspecies that does not occur away from the coast.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Pelecanus erythrorhynchos</i> American white pelican	Fed: None CA: SSC	Locally common winter resident of southern California. Typically forage in shallow inland waters, such as open areas in marshes and along lake or river edges. Also occur in shallow coastal marine habitats.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Pelecanus occidentalis californicus</i> California brown pelican	Fed: None CA: FP	Coastal areas, with nesting occurring on islands. Species found occasionally along Arizona's lakes and rivers. This species inhabits shallow inshore waters, estuaries and bays, avoiding the open sea. Its diet is comprised mostly of fish, causing great congregations in areas with abundant prey. Prey species include sardines and anchovies, but has been seen to take shrimps and carrion, and even nestling egrets. It regularly feeds by plunging and is often the victim of kleptoparasites.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	Fed: None CA: SSC	Occurs in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows, but instead will seek refuge under weeds and dead leaves instead.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Phalacrocorax auritus</i> double-crested cormorant	Fed: None CA: WL	Common yearlong resident in southern California. Occurs widely in freshwater and marine habitats along coastlines. Require open water where they can forage for schooling fish.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Phrynosoma blainvillii</i> coast horned lizard	Fed: None CA: CSC	Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (i.e. fire, floods, roads, grazing, fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Plegadis chihi</i> white-faced ibis	Fed: None Ca: WL	Prefers to feed in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded pastures and croplands. Roosts amidst dense, freshwater emergent vegetation such as bulrushes, cattails, reeds or low shrubs over water.	No	<b>Low.</b> There is marginal foraging habitat within the project site, but no suitable nesting habitat.
<i>Polioptila californica californica</i> coastal California gnatcatcher	Fed: THR CA: CSC	Obligate resident of sage scrub habitats that are dominated by California sagebrush ( <i>Artemisia californica</i> ). This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. Ranges from the Ventura County, south to San Diego County and northern Baja California and it is less common in sage scrub with a high percentage of tall shrubs. Prefers habitat with more low-growing vegetation.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Salvadora hexalepis virgulata</i> coast patch-nosed snake	Fed: None CA: SSC	Found in brushy or shrubby vegetation along the coast and requires small mammal burrows for refuge and overwintering.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Setophaga petechia</i> yellow warbler	Fed: None CA: CSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Spea hammondi</i> western spadefoot	Fed: None CA: CSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washed, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rainpools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Spinus lawrencei</i> Lawrence's goldfinch	Fed: None CA: None	Nests in open oak or other arid woodlands, as well as chaparral, near water sources. Feeds on nearby herbaceous vegetation, especially weedy vegetation (mustard, etc.).	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	Fed: <b>END</b> CA: None	Restricted to deep seasonal vernal pools, vernal pool like ephemeral ponds, and stock ponds and other human modified depressions. All known habitat lies within annual grasslands, which may be interspersed through chaparral or coastal sage scrub vegetation.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Taxidea taxus</i> American badger	Fed: None CA: SSC	Primarily occupy grasslands, parklands, farms, tallgrass and shortgrass prairies, meadows, shrub-steppe communities and other treeless areas with sandy loam soils where it can dig more easily for its prey. Occasionally found in open chaparral (with less than 50% plant cover) and riparian zones.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Vireo bellii pusillus</i> least Bell's vireo	Fed: <b>END</b> CA: <b>END</b>	Primarily occupy Riverine riparian habitat that typically feature dense cover within 1 -2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<b>SPECIAL-STATUS PLANT SPECIES</b>				
<i>Abronia villosa var. aurita</i> chaparral sand-verbena	Fed: None CA: None CNPS: 1B.1	Found on the coastal side of the southern California mountains in chaparral and coastal sage scrub plant communities in areas of full sun and sandy soils. Found at elevations ranging from 262 to 5,249 feet. Blooming period is from January to September.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Allium munzii</i> Munz's onion	Fed: <b>END</b> CA: <b>THR</b> CNPS: 1B.1	Occurs on clay and cobbly-clay soils in mesic or seasonally inundated areas in grassy opening in coastal scrub, chaparral, juniper woodland, and valley/foothill grassland. Grows in elevations ranging from 970 to 3,510 feet above msl. Blooming period is from March to May.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Atriplex coronata var. notatior</i> San Jacinto Valley crownscale	Fed: <b>END</b> CA: None CNPS: 1B.1	Grows in alkaline conditions within playas, mesic valley and foothill grasslands, and vernal pools. Found at elevations ranging from 456 to 1,640 feet. Blooming period is from April to August.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Atriplex pacifica</i> South Coast saltscale	Fed: None CA: None CNPS: 1B.2	Found in coastal bluff scrub, coastal dunes, coastal scrub, and in playas. Found at elevations ranging from 0 to 459 feet. Blooming period is from March to October.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Atriplex parishii</i> Parish's brittle scale	Fed: None CA: None CNPS: 1B.1	Habitat types include chenopod scrub, playas, and vernal pools. Found at elevations ranging from 82 to 6,234 feet. Blooming period is from June to October.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Atriplex serenana var. davidsonii</i> Davidson's saltscale	Fed: None CA: None CNPS: 1B.2	Grows in alkaline soils within coastal bluff scrub and coastal scrub. Found at elevations ranging from 33 to 656 feet. Blooming period is from April to October.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Brodiaea filifolia</i> thread-leaved brodiaea	Fed: <b>THR</b> CA: <b>END</b> CNPS: 1B.1	Typically occurs on gently hillsides, valleys, and floodplains in semi-alkaline mudflats, vernal pools, and grassland habitats in association with clay, or alkaline silty-clay soils. Grows in elevations ranging from 80 to 3,675 feet above msl. Blooming period is from March to June.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Caulanthus simulans</i> Payson's jewelflower	Fed: None CA: None CNPS: 4.2	Occurs in pinyon-juniper woodland, chaparral, and coastal sage scrub, typically on north-facing slopes and ridgelines on sandy-granitic soils. Grows in elevations ranging from 295 to 7,220 feet above msl. Blooming period is from March to May.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Centromadia pungens ssp. laevis</i> smooth tarplant	Fed: None CA: None CNPS: 1B.1	Occurs in alkaline soils within chenopod scrub, meadows and seeps, playas, riparian woodland, and valley/foothill grassland habitats. Grows in elevations ranging from 0 to 2,100 feet above msl. Blooming period is from April to September.	No	<b>Low:</b> The project site provides marginally suitable habitat.
<i>Chorizanthe leptotheca</i> Peninsular spineflower	Fed: None CA: None CNPS: 4.2	Found on dry, rocky soils in chaparral, coastal scrub, valley and foothill grasslands, as well as rocky outcrops. From 2,035 4,035 feet in elevation.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Chorizanthe parryi var. parryi</i> Parry's spineflower	Fed: None CA: None CNPS: 1B.1	Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet above msl. Blooming period is from April to June.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Chorizanthe polygonoides var. longispina</i> long-spined spineflower	Fed: None CA: None CNPS: 1B.2	Primarily associated with heavy, often rocky, clay soils in southern needlegrass grassland, and openings in coastal sage scrub, and chaparral. Grows in elevations ranging from 98 to 5,020 feet above msl. Blooming period is from April to July.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Convolvulus simulans</i> small-flowered morning glory	Fed: None CA: None CNPS: 4.2	Grows in clay and serpentinite seeps within chaparral (openings), coastal scrub, valley and foothill grassland habitats. Found at elevations ranging from 98 to 2,297 feet. Blooming period is from March to July.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Deinandra paniculata</i> paniculate tarplant	Fed: None CA: None CNPS: 4.2	Occurs in coastal scrub, vernal pools, and valley/foothill grassland habitats and disturbed areas. Found at elevations ranging from 82 to 3,084 feet above msl. Blooming period is from April to November.	No	<b>Low:</b> The project site provides marginally suitable habitat.
<i>Harpagonella palmeri</i> Palmer's grapplinghook	Fed: None CA: None CNPS: 4.2	Occurs on clay soils in chaparral, coastal scrub, and valley and foothill grasslands. Found at elevations ranging from 66 to 3,133 feet. Blooming period is from March to May.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Hordeum intercedens</i> vernal barley	Fed: None CA: None CNPS: 3.2	Primarily associated with alkali grasslands, vernal pools, alkali scrub, and alkali playa habitat associated with Traver-Domino-Willow soil associations. Grows in elevations ranging from 16 to 3,281 feet above msl. Blooming period is from March to June.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Juglas californica</i> southern California black walnut	Fed: None CA: None CNPS: 4.2	Found in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats. Found at elevations ranging from 164 to 2,953 feet. Blooming period is from March to August.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Lasthenia glabrata ssp. coulteri</i> Coulter's goldfields	Fed: None CA: None CNPS: 1B.1	Prefers playas, vernal pools, and coastal salt marshes and swamps. Found at elevations ranging from 3 to 4,003 feet. Blooming period is from February to June.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Lepidium virginicum var. robinsonii</i> Robinson's pepper-grass	Fed: None CA: None CNPS: 4.3	Dry soils on chaparral and coastal sage scrub. Found at elevations ranging from 3 to 2,904 feet. Blooming period is from January to July.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Microseris douglasii ssp. platycarpha</i> small-flowered microseris	Fed: None CA: None CNPS: 4.2	Grows in clay soils within cismontane woodland, coastal scrub, vernal pools, valley and foothill grassland habitats. Found at elevations ranging from 49 to 3,511 feet. Blooming period is from March to May.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Myosurus minimus ssp. apus</i> little mousetail	Fed: None CA: None CNPS: 3.1	Occurs in alkaline soils in valley and foothill grassland and vernal pools. Found at elevations ranging from 66 to 2,100 feet. Blooming period is from March to June.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.

Scientific Name Common Name	Status	Habitat	Observed Onsite	Potential to Occur
<i>Navarretia fossalis</i> spreading navarretia	Fed: <b>THR</b> CA: None CNPS: 1B.1	Primarily restricted to the alkali floodplains of the San Jacinto River, Mystic Lake, and Salt Creek in association with the Traver-Domino-Willow soil associations. This species is associated with vernal pools, floodplains, and areas with depressions and ditches dominated by alkali playa and alkali grassland. Grows in elevations ranging from 100 to 2,150 feet above msl. Blooming period is from April to June.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Orcuttia californica</i> California Orcutt grass	Fed: END CA: END CNPS: 1B.1	Primarily restricted to the southern basaltic claypan vernal pools at the Santa Rosa Plateau, and alkali vernal pools at Skunk Hollow, and at Salt Creek. Grows in elevations ranging from 45 to 2,165 feet above msl. Blooming period is from April to August.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<i>Trichocoronis wrightii</i> var. <i>wrightii</i> Wright’s trichocoronis	Fed: None CA: None CNPS: 2B.1	Grows in alkaline soils in meadows and seeps, marshes and swamps, riparian forest, and vernal pools. Found at elevations ranging from 16 to 1,427 feet. Blooming period is from May to September.	No	<b>Presumed Absent:</b> No suitable habitat is present within the limits of disturbance.
<b>SPECIAL-STATUS PLANT COMMUNITIES</b>				
Southern Coast Live Oak Riparian Forest	CDFW Sensitive Habitat	Open to locally dense evergreen riparian woodlands dominated by <i>Quercus agrifolia</i> . This type appears to be richer in herbs and poorer in understory shrubs than other riparian communities. Bottomlands and outer floodplains along larger streams, on fine-grained, rich alluvium. Canyons and valleys of coastal southern California.	No	<b>Absent</b>
Southern Cottonwood Willow Riparian Forest	CDFW Sensitive Habitat	Dominated by cottonwood ( <i>Populus</i> spp.) and willow ( <i>Salix</i> spp.) trees and shrubs. Considered to be an early successional stage as both species are known to germinate almost exclusively on recently deposited or exposed alluvial soils.	No	<b>Absent</b>

**U.S. Fish and Wildlife Service (USFWS) - Federal**  
 END- Federal Endangered  
 THR- Federal Threatened  
 Candidate END – Under Review

**California Department of Fish and Wildlife (CDFW) - California**  
 END- California Endangered  
 CSC- California Species of Concern  
 WL- Watch List  
 FP- California Fully Protected

**California Native Plant Society (CNPS) California Rare Plant Rank**  
 1A- Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere  
 1B- Plants Rare, Threatened, or Endangered in California and Elsewhere  
 2B- Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere  
 4- Plants of Limited Distribution – A Watch List

**Threat Ranks**  
 0.1- Seriously threatened in California  
 0.2- Moderately threatened in California  
 0.3- Not very threatened in California

**Western Riverside County MSHCP**  
 Yes- Fully covered  
 No- Not covered  
 Yes (a)- May require surveys under MSHCP Section 6.1.2  
 Yes (b)- May require surveys under MSHCP Section 6.1.3  
 Yes (c)- May require surveys under MSHCP Section 6.3.2

**Appendix C    MR-DC   Western Riverside County  
MSHCP   Burrowing Owl Assessment  
(2018)**

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# Motte Rancon Distribution Center Western Riverside County MSHCP Burrowing Owl Assessment

Date & Time: Tue Apr 24 07:45:08 PDT 2018  
Position: 11 N 483073 3733013  
Altitude: 1434ft  
Datum: WGS-84  
Azimuth/Bearing: 061° N61E 1084mils (True)  
Elevation Angle: -03.6°  
Horizon Angle: +00.4°  
Zoom: 1X



September 12, 2018

**ASSESSOR'S PARCEL NUMBERS: 331-110-027, -035, -041, 331-140-010, and -025**  
**TOTAL PROPERTY SIZE (Riverside County GIS data): 71.70 Acres**  
**ONSITE SUITABLE BURROWING OWL HABITAT: 68.26 Acres**  
**150-METER BUFFER SUITABLE BURROWING OWL HABITAT: 49.08 Acres**

**LOCATED IN TOWNSHIP 5 SOUTH, RANGE 3 WEST,  
IN SECTION 15 OF THE ROMOLAND  
7.5 MINUTE USGS CALIFORNIA QUADRANGLE**

Prepared for:

**City of Menifee (Lead Agency)**  
29714 Haun Rd.  
Menifee, CA 92586

and

**ELMT Consulting, Inc.**  
Contact: Travis J. McGill  
2201 N. Grand Ave. #10098  
Santa Ana, CA 92711

Prepared by:



43430 E. Florida Avenue, Suite F  
PMB 291  
Hemet, California 92544  
Contact: Tim Searl  
Cell: (951) 805-2028  
Email: [tsearl@searlbio.com](mailto:tsearl@searlbio.com)  
Website: [www.searlbio.com](http://www.searlbio.com)

**September 12, 2018**

## Table of Contents

1.0 INTRODUCTION .....	1
1.1 Purpose.....	1
1.2 Property Location .....	1
1.3 Proposed Project .....	1
1.4 Property Description .....	1
1.4.1 Soils.....	5
1.4.2 Vegetation and Land Covers .....	5
1.6 Wildlife .....	9
1.7 Field Surveys and Weather.....	9
2.0 MSHCP SECTION 6.3.2 ADDITIONAL SURVEY NEEDS AND PROCEDURES – BURROWING OWL.....	9
2.1 Life History .....	9
2.2 MSHCP Background and Objectives.....	11
2.3 Survey Protocol .....	13
2.3.1 Step I: Habitat Assessment .....	13
2.3.2 Step II: Locating Burrows and Burrowing Owls .....	13
2.3.3 Reporting Requirements.....	14
2.3.4 30 Day Pre-Construction Survey .....	14
2.4 Soil Suitability .....	14
2.5 Burrowing Owl CNDDDB Query .....	15
2.5.1 Query Results.....	15
2.6 Assessment Methods.....	15
2.6.1 Step I: Habitat Assessment .....	15
2.6.2 Step II Part A and Part B: Focused Burrow and Burrowing Owl Surveys .....	15
2.7 Assessment Results.....	15
2.7.1 Step I: Habitat Assessment .....	18
2.7.2 Step II Part A: Focused Burrow Survey .....	18
2.7.3 Step II Part B: Focused Burrowing Owl Surveys .....	18
3.0 CONCLUSION .....	18
3.1 BUOW 30-Day Pre-Construction Survey .....	18
3.2 Pre-Construction Nesting Bird Survey.....	18
4.0 CERTIFICATION .....	19
5.0 REFERENCES.....	19

### List of Tables

Table 1 - Property APNs..... 1  
Table 2 - Property Soils ..... 5  
Table 3 - Property Land Covers..... 8  
Table 4 – Survey Date, Weather, and Astronomical Data ..... 10

### List of Figures

Figure 1 - Vicinity Map ..... 2  
Figure 2 - USGS Topographic Map..... 3  
Figure 3 - Aerial Photograph ..... 4  
Figure 4 – Soils Map..... 6  
Figure 5 – Vegetation/Land Covers Map..... 7  
Figure 6 - Burrowing Owl Five Mile Query Results ..... 16  
Figure 7 - Burrowing Owl Survey Results..... 17

### List of Appendices

Appendix A – Site Photographs..... A-1  
Appendix B – Vascular Plants Observed..... B-1  
Appendix C – Wildlife Observed..... C-1

## 1.0 INTRODUCTION

### 1.1 Purpose

The purpose of this Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Burrowing Owl (*Athene cunicularia*) (BUOW) assessment was to determine presence or absence of BUOW on the 71.70-acre subject property (Property and/or Site), and areas within 150-meters of the Property within MSHCP-designated BUOW assessment areas.

### 1.2 Property Location

The Property was located on both the east and west side of Sherman Road between Dawson Road and Trumble Road approximately 330-feet south of Ethanac Road in the City of Menifee, California. *Figure 1 - Vicinity Map* (Page 2) depicts the general location of the Property.

The Site was geographically located in Township 5 South, Range 3 West, in Section 15 of the Romoland 7.5 Minute United States Geological Survey (USGS) California Quadrangle. *Figure 2 - USGS Topographic Map* (Page 3) depicts the Site's geographic location. The Universal Transverse Mercator (UTM) coordinates of the approximate center of the Site was 483493 East, 3733304 North (east side of Sherman Road) and 483079 East, 3733101 North (west side of Sherman Road) in Zone 11 (North American Datum [NAD] 83).

### 1.3 Proposed Project

Please see the MSHCP Compliance Document titled *MR-DC Industrial Buildings Project Habitat Assessment and Western Riverside County Multiple Species Conservation Plan Consistency Analysis* prepared by ELMT Consulting for a detailed proposed project description.

### 1.4 Property Description

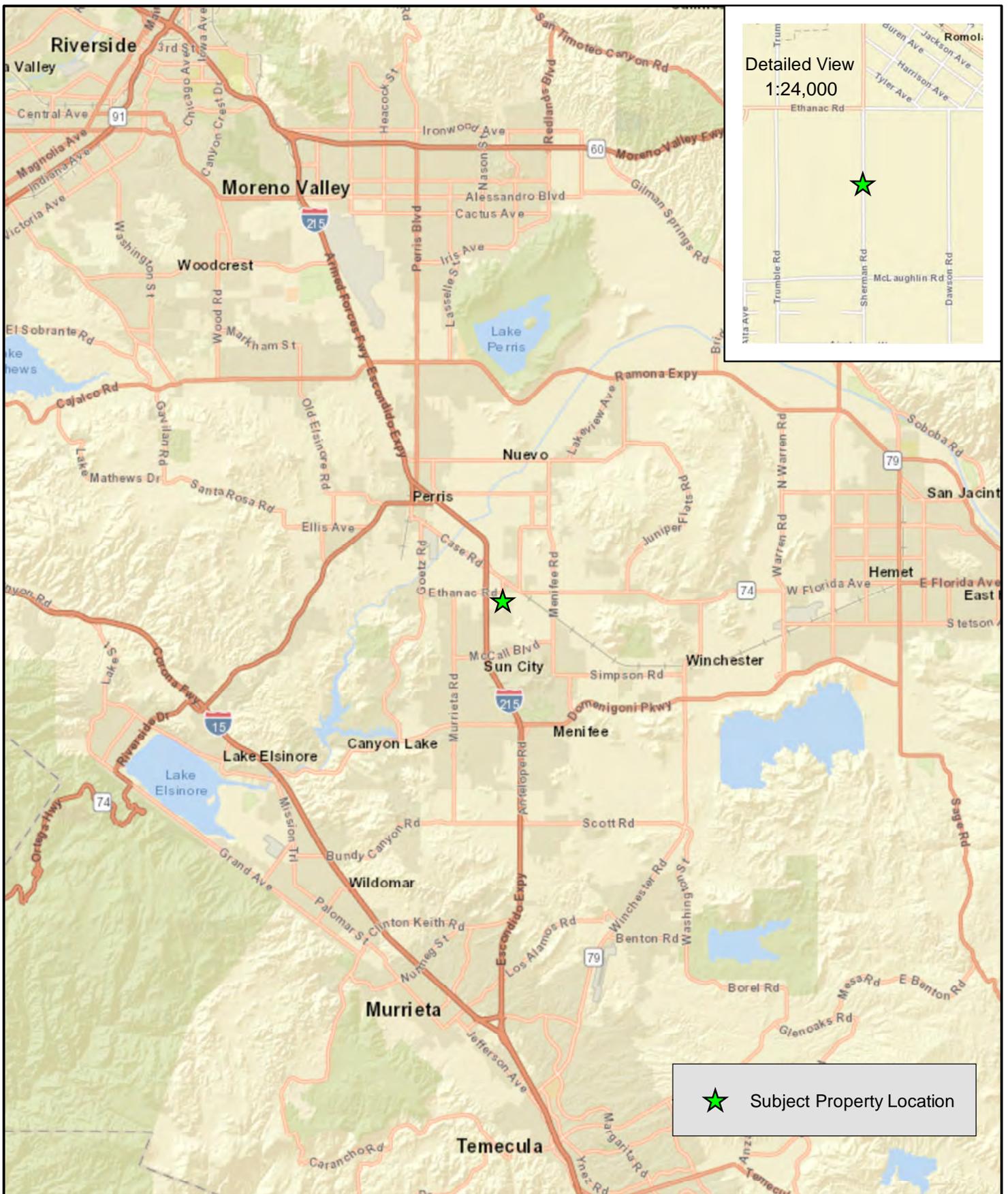
The Property consisted of five Assessor's Parcel Numbers (APN). A brief description of each is presented in *Table 1 – Property APNs* (below).

Table 1 - Property APNs

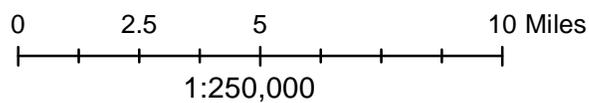
APN	ACRES <sup>1</sup>	DESCRIPTION
331-110-027	0.98	This APN was the only of all the APNs that had a structure present. The structure was located in the western portion of the APN and consisted of an occupied rural residence. The eastern portion of the APN consisted of dirt berms and mounds that were once used as a "bike track."
331-110-035	1.98	This APN was a vacant lot consisting of an open field.
331-110-041	18.35	This APN was a vacant lot consisting of an open field.
331-140-010	0.96	This APN was a vacant lot consisting of an open field.
331-140-025	49.43	This APN was a vacant lot consisting of an open field.

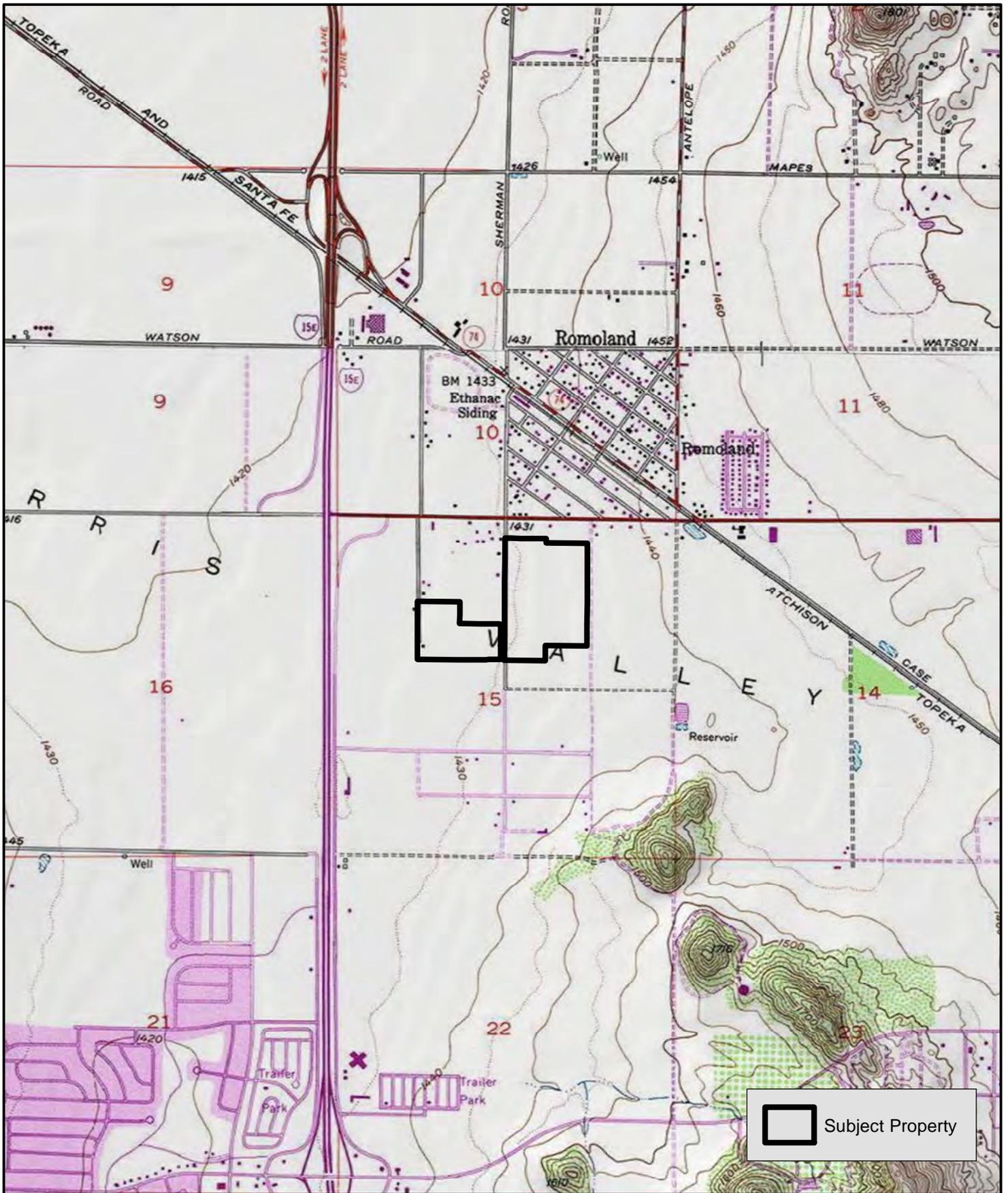
*Figure 3 - Aerial Photograph* (Page 4) depicts relatively current Site conditions. Appendix A depicts a collection of representative photographs of the Property and surrounding area. The photographs approximate location and direction are depicted on Figure 3. According to Figure 2, elevations on the Site

<sup>1</sup> Acreages were generated using ArcGIS based on the Riverside County Spatial Data "ParcelAssessor" feature class (Riverside County, 2018) and are approximations given the "ParcelAssessor" feature class often does not match the County's recorded lot size acreages.

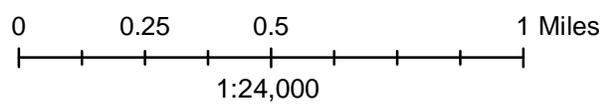


**FIGURE 1**  
Vicinity Map





**FIGURE 2**  
**USGS Topographic Map**

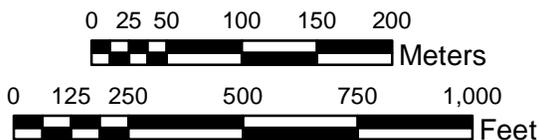


DATE: June 1, 2018  
 COORDINATE SYSTEM: NAD 1983 State Plane Zone VI (feet)  
 SOURCE: ESRI USA Topo Maps, Riverside County Spatial Data

Motte Rancon Distribution Center



**FIGURE 3**  
Aerial Photograph



DATE: June 25, 2018  
 COORDINATE SYSTEM: NAD 1983 State Plane Zone VI (feet)  
 SOURCE: ESRI World Imagery and Transportation,  
 Riverside County Spatial Data, Theodolite

Motte Rancon Distribution Center

ranged from 1,425 feet above mean sea level (msl) in the southwestern portion to 1,435 feet msl in the eastern portion.

1.4.1 Soils

The Property was comprised of four soil series as depicted by *Figure 4 – Soils Map* (Page 6). A brief description, as described by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (United States Department of Agriculture Natural Resources Conservation Service, 2010) is presented in *Table 2 – Property Soils* (below).

Table 2 - Property Soils

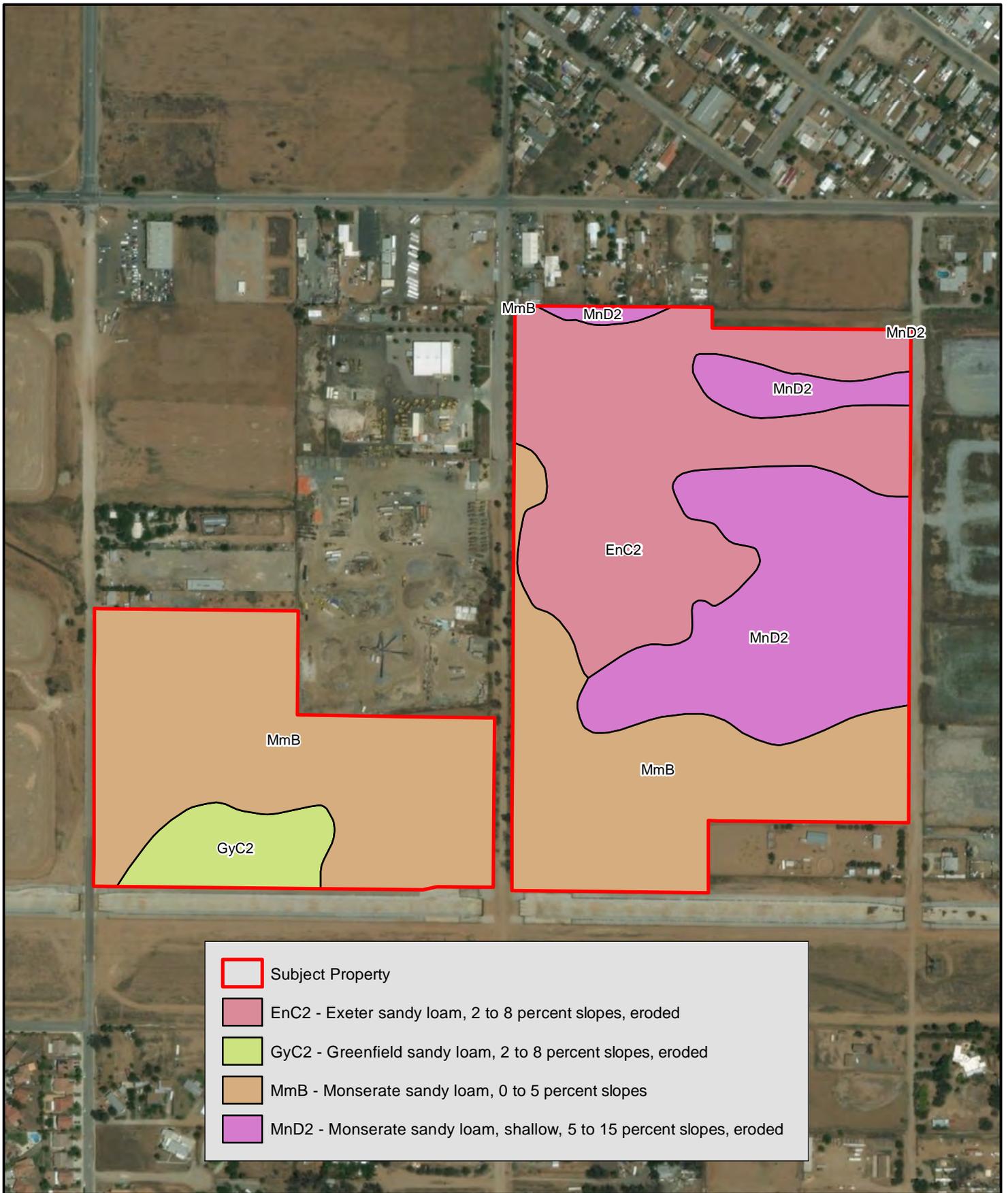
ACRONYM	SOIL NAME	SOIL DESCRIPTION	ACRES <sup>2</sup>
EnC2	Exeter sandy loam, 2 to 8 percent slopes, eroded	A well-drained alluvium soil derived from granite. Generally, 20 to 40 inches deep until duripan is reached with the water table occurring at more than 80 inches.	19.46
GyC2	Greenfield sandy loam, 2 to 8 percent slopes, eroded	GyC2 is a well-drained alluvium soil derived from granite. The depth to the restrictive layer and the water table generally occurs at 80 inches or more.	3.39
MmB	Monserate sandy loam, 0 to 5 percent slopes	A well-drained alluvium soil derived from granite. The depth to duripan generally occurs between 20 to 39 inches.	32.55
MnD2	Monserate sandy loam, shallow, 5 to 15 percent slopes, eroded	A well-drained alluvium soil derived from granite. The depth to duripan generally occurs between 10 to 20 inches.	16.30

1.4.2 Vegetation and Land Covers

Vegetation community classifications are typically conducted in accordance with the California Department of Fish and Wildlife’s (CDFW) Vegetation Classification and Mapping Program (VegCAMP) *List of Vegetation Alliances and Associations* (Natural Communities List) (California Department of Fish and Wildlife, 2010) and *A Manual of California Vegetation*. Vegetation communities and land covers are mapped in the field utilizing both Collector for ArcGIS (Collector) installed on an iPhone 7 and paper maps (i.e., aerial photographs and USGS topographic maps).

Some land cover types (i.e., developed, disturbed, agriculture, etc.) are not classified in the above-referenced sources; therefore, each land cover is designated with a common name for the purpose of this report. A description of the land cover types on the Property is presented in *Table 3 – Property Land Covers* (Page 8). The distribution of vegetation communities and land covers on the Property are depicted on *Figure 5 – Vegetation/Land Covers Map* (Page 7). A complete list of vascular plant species observed on the Property is provided in Appendix B.

<sup>2</sup> Acreages were generated using ArcGIS based on the Riverside County Spatial Data “ParcelAssessor” feature class (Riverside County, 2018) and are approximations given the “ParcelAssessor” feature class often does not match the County’s recorded lot size acreages.



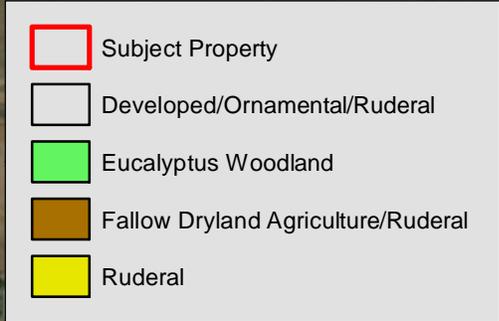
	Subject Property
	EnC2 - Exeter sandy loam, 2 to 8 percent slopes, eroded
	GyC2 - Greenfield sandy loam, 2 to 8 percent slopes, eroded
	MmB - Monserate sandy loam, 0 to 5 percent slopes
	MnD2 - Monserate sandy loam, shallow, 5 to 15 percent slopes, eroded

**FIGURE 4  
Soils Map**



DATE: June 21, 2018  
 COORDINATE SYSTEM: NAD 1983 State Plane Zone VI (feet)  
 SOURCE: ESRI World Imagery, Riverside County Spatial Data,  
 Web Soil Survey

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**FIGURE 5**  
Vegetation/Land  
Covers Map



DATE: June 21, 2018  
 COORDINATE SYSTEM: NAD 1983 State Plane Zone VI (feet)  
 SOURCE: ESRI World Imagery, Riverside County Spatial Data

Motte Rancon Distribution Center

Table 3 - Property Land Covers

COMMON NAME	VEGCAMP COMMUNITY	DESCRIPTION	ACRES <sup>3</sup>
Developed/Ornamental/ Ruderal	No Corresponding VegCAMP Classification	This land cover was present in the western portion of the Site on APN 331-110-027 and consisted of the rural residence and associated outbuildings (i.e., detached garage and sheds), driveway, ornamental landscape, and ruderal weedy areas. Very little vegetation was present and the only ornamental plant observed was canary island date palm ( <i>Phoenix canariensis</i> ).	0.53
Eucalyptus Woodland	Eucalyptus (globulus, camaldulensis) Semi-Natural Alliance 79.100.02	A small patch of Eucalyptus ( <i>Eucalyptus</i> spp.) woodland was present in the western portion of APN 331-140-025 near an overgrown detention basin. The patch on the Property was just a small portion of a much more expansive Eucalyptus woodland planted in the right-of-way of Sherman Road that bordered the entire western boundary of APN 331-140-025 and eastern boundary of APN 331-110-041.	0.11
Fallow Dryland Agriculture/Ruderal	Brassica nigra and other mustards Semi-Natural Alliance Upland mustards 42.011.00	The majority of the Property consisted of an open field that appeared to have been historically utilized for dryland agriculture with the presence of remnant cultivar oats ( <i>Avena</i> spp.) detected sparsely throughout. Dominants detected at the time of this assessment consisted primarily of ruderal/non-native plants such as lamb's quarters ( <i>Chenopodium album</i> ), London rocket ( <i>Sisymbrium irio</i> ), shortpod mustard ( <i>Hirschfeldia incana</i> ), wall barley ( <i>Hordeum murinum</i> ), cheeseweed ( <i>Malva parviflora</i> ), and stinknet ( <i>Oncosiphon piluliferum</i> ).	68.03

<sup>3</sup> Acreages were generated using ArcGIS based on the Riverside County Spatial Data "ParcelAssessor" feature class (Riverside County, 2018) and are approximations given the "ParcelAssessor" feature class often does not match the County's recorded lot size acreages.

COMMON NAME	VEGCAMP COMMUNITY	DESCRIPTION	ACRES <sup>3</sup>
Ruderal	Brassica nigra and other mustards Semi-Natural Alliance Upland mustards 42.011.00	This land cover was similar in plant species composition to the Fallow Dryland Agriculture/Ruderal community but was located in areas not recently used for agriculture. The northern strip was an area not routinely maintained for weed abatement, the central polygon was the “bike track” area, and the southern strip was sparsely vegetated due to vehicular traffic.	3.03

### 1.6 Wildlife

All wildlife species and their respective sign observed during the field surveys was identified and recorded in the field. A sample of the species detected on, above, or near the Site included House Sparrow (*Passer domesticus*), California Horned Lark (*Eremophila alpestris actia*), Western Meadowlark (*Sturnella neglecta*), House Finch (*Haemorhous mexicanus*), California ground squirrel (*Spermophilus beecheyi*), and Botta's pocket gopher (*Thomomys bottae*). A complete list of the wildlife species observed on and in close proximity to the Site is provided in Appendix C.

### 1.7 Field Surveys and Weather

Field surveys were conducted on April 24, May 18, May 30, and June 10, 2018 by biologist Tim Searl. The weather conditions encountered during surveys (includes both start and end conditions), the annual precipitation to-date, and astronomical data (i.e., sunrise/sunset times and moon phase) is presented in *Table 4 – Survey Date, Weather, and Astronomical Data* (Page 10).

## 2.0 MSHCP SECTION 6.3.2 ADDITIONAL SURVEY NEEDS AND PROCEDURES – BURROWING OWL

### 2.1 Life History

The BUOW is a priority 2 California Species of Special Concern (SSC) (Gervais, 2008), and is a planning species under the MSHCP. In California, the BUOW is a year-round resident throughout much of the state (Gervais, 2008); however, migrants from other regions of western North America may augment resident lowland populations in winter (Gervais, 2008). Habitat for the BUOW primarily consists of open grasslands, but it also occurs in some human-altered landscapes such as agricultural environments (Gervais, 2008). Nest and roost burrows of the BUOW are most commonly dug by the California ground squirrel in California, but it will also utilize burrows and dens constructed by the American badger (*Taxidea taxus*), coyote (*Canis latrans*), and fox (*Urocyon cinereoargenteus* and *Vulpes* spp.) (Gervais, 2008).

The diet of the BUOW consists primarily of insects (i.e., centipedes, spiders, beetles, crickets, and grasshoppers) (Gervais, 2008), but it will also take small mammals, reptiles, birds, and carrion (i.e., dead flesh) (Polite, 1999). BUOW hunt from a perch, hover, hawk, dive, and hop after prey on the ground (Polite, 1999). Although insects dominate the BUOW diet numerically, recent research has suggested that in California, rodent populations, particularly those of the California vole (*Microtus californicus*), may greatly influence BUOW survival and reproductive success (Gervais, 2008).

Table 4 – Survey Date, Weather, and Astronomical Data

DATE	BIOLOGIST	SURVEY TYPE	SURVEY TIME	SUNRISE <sup>4</sup>	TEMPERATURE <sup>5</sup>	HUMIDITY	CLOUD COVER	WIND SPEED	ANNUAL PRECIPITATION TO-DATE <sup>6</sup>	MOON PHASE
4/24/2018	Tim Searl	BUOWHA, BUOWBS, BUOWFS, VM	0530-1400	0607	51.0-81.4	62.0-22.3	Clear	2.0-4.6	4.76	Waxing Gibbous 71%
5/18/2018	Tim Searl	BUOWFS	0545-1000	0545	52.8-60.4	82.4-67.4	Overcast to Partly Cloudy	3.6-5.1	4.81	Waxing Crescent 15%
5/30/2018	Tim Searl	BUOWFS	0600-1000	0540	59.9-61.4	84.6-81.3	Overcast	2.0-3.0	4.81	Full 99%
6/10/2018	Tim Searl	BUOWFS	0530-1000	0537	56.8-71.6	90.3-45.2	Partly Cloudy	<1.0- <1.0	4.81	Waning Crescent 12%

BUOWHA – Burrowing Owl Habitat Assessment  
 BUOWBS - Burrowing Owl Burrow Survey  
 BUOWFS - Burrowing Owl Focused Survey  
 VM – Vegetation Mapping

<sup>4</sup> Sunrise and Moon Phase (plus the percent of the moon’s illumination) was obtained from the Menifee, California Weather Underground Website (Weather Underground, 2018).

<sup>5</sup> Temperature (Degrees Fahrenheit), Humidity (percent), and Wind Speed (mean miles per hour) were obtained in the field with a Kestrel 3500 weather meter.

<sup>6</sup> Annual Precipitation (July 01 to June 30) To-Date was obtained from the Riverside County Flood Control and Water Conservation District’s Rain Gauge Map Website for the “Winchester Station – Station No. 248 (Riverside County Flood Control and Water Conservation District, 2018).

The BUOW breeding season is typically March through August with peak breeding activity occurring in April and May (Polite, 1999). Male BUOW give courtship displays and notes in front of the burrow (Polite, 1999). Clutch size is relatively large with a range of two to ten eggs and a mean of five to six eggs per clutch (Polite, 1999). Young BUOW emerge from the burrow at about two weeks old and are able to fly by about four weeks old (Polite, 1999).

## 2.2 MSHCP Background and Objectives

The MSHCP covers 146 species of plants and animals of which 40 species have specific survey requirements (Dudek & Associates, Inc., 2003). 34 of the 40 species, including BUOW, have an associated survey area map that designates areas where surveys may be required if suitable habitat is present (Dudek & Associates, Inc., 2003).

BUOW is covered under MSHCP Section 6.3.2 *Additional Survey Needs and Procedures* of the MSHCP. The purpose of this section is to provide coverage under the MSHCP for those species for which existing available information was not sufficient, and therefore, survey requirements are incorporated in the MSHCP to provide the level of information necessary for these species to receive coverage (Dudek & Associates, Inc., 2003). Section 6.3.2 states the following regarding locations where survey results are positive for species covered under this section:

*"For locations with positive survey results, 90% of those portions of the property that provide for long-term conservation value for the identified species shall be avoided until it is demonstrated that conservation goals for the particular species are met. Avoidance shall not be considered to be Conservation contributing to Reserve Assembly unless the avoided populations are acquired and managed as Additional Reserve Lands."*

The MSHCP objectives for BUOW include the following:

### **Objective 1**

*Include within the MSHCP Conservation Area at least 27,470 acres of suitable primary habitat for the burrowing owl including grasslands.*

### **Objective 2**

*Include within the MSHCP Conservation Area at least 5 Core Areas and interconnecting linkages. Core areas may include the following: (1) Lake Skinner/Diamond Valley Lake area (Existing Core C plus Proposed Extension of Existing Cores 5, 6, 7; 29,060 acres); (2) playa west of Hemet (Proposed Noncontiguous Habitat Block 7; 1,250 acres); (3) San Jacinto Wildlife Area/Mystic Lake area including Lake Perris area (Existing Core H; 17,470 acres); (4) Lake Mathews (Existing Core C plus Proposed Extension of Existing Cores 2; 23,710 acres); and (5) along the Santa Ana River (9,670 acres). The Core Areas should support a combined total breeding population of approximately 120 burrowing owls with no fewer than five pairs in any one Core area.*

### **Objective 3**

*Include within the MSHCP Conservation Area at least 22,120 acres of suitable secondary habitat for the burrowing owl including playas and vernal pools, and agriculture outside of the Core Areas identified above. Areas where additional suitable habitat could be conserved include west of the Jurupa Mountains, near Temescal Wash (i.e., vicinity of*

*Alberhill), near Temecula Creek, within the Lakeview Mountains, Banning, the Badlands, Gavilan Hills, and Quail Valley.*

**Objective 4**

*Include within the MSHCP Conservation Area the known nesting locations of the burrowing owl at Lake Perris, Mystic Lake/San Jacinto Wildlife area, Lake Skinner area, the area around Diamond Valley Lake, playa west of Hemet, Lakeview Mountains, Lake Mathews/Estelle Mountain Reserve and Sycamore Canyon Regional Park.*

**Objective 5**

*Surveys for burrowing owl will be conducted as part of the project review process for public and private projects within the burrowing owl survey area where suitable habitat is present (see Burrowing Owl Survey Area Map, Figure 6-4 of the MSHCP, Volume I). The locations of this species determined as a result of survey efforts shall be conserved in accordance with procedures described within Section 6.3.2, MSHCP, Volume I and the guidance provided below:*

*Burrowing owl surveys shall be conducted utilizing accepted protocols as follows. If burrowing owls are detected on the project site then the action(s) taken will be as follows:*

*If the site is within the Criteria Area, then at least 90 percent of the area with long-term conservation value will be included in the MSHCP Conservation Area. Otherwise:*

- 1. If the site contains, or is part of an area supporting less than 35 acres of suitable habitat or the survey reveals that the site and the surrounding area supports fewer than 3 pairs of burrowing owls, then the on-site burrowing owls will be passively or actively relocated following accepted protocols.*
- 2. If the site (including adjacent areas) supports three or more pairs of burrowing owls, supports greater than 35 acres of suitable habitat and is non-contiguous with MSHCP Conservation Area lands, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite.*

*The survey and conservation requirements stated in this objective will be eliminated when it is demonstrated that Objectives 1 – 4 have been met.*

**Objective 6**

*Pre-construction presence/absence surveys for burrowing owl within the survey area where suitable habitat is present will be conducted for all Covered Activities through the life of the permit. Surveys will be conducted within 30 days prior to disturbance. Take of active nests will be avoided. Passive relocation (use of one way doors and collapse of burrows) will occur when owls are present outside the nesting season.*

**Objective 7**

*Translocation sites for the burrowing owl will be created in the MSHCP Conservation Area for the establishment of new colonies. Translocation sites will be identified, taking into consideration unoccupied habitat areas, presence of burrowing mammals to provide suitable burrow sites, existing colonies and effects to other Covered Species. Reserve*

*Managers will consult with the Wildlife Agencies regarding site selection prior to translocation site development.*

## 2.3 Survey Protocol

Habitat assessments and focused surveys for BUOW in the MSHCP Plan Area are conducted in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (Environmental Programs Department, 2006) (BUOW Survey Instructions). These instructions detail the steps necessary and the methods to be employed in order to sufficiently assess a specific location for the presence or absence of BUOW. The BUOW Survey Instructions are detailed below.

### 2.3.1 Step I: Habitat Assessment

The BUOW Survey Instructions describe Step I as follows:

*"The first step in the assessment process is to walk the property to identify the presence of burrowing owl habitat on the project site. If habitat is found on the site, then walk a 150-meter (approximately 500 feet) buffer zone around the project boundary. If permission to access the buffer area cannot be obtained, do not trespass on adjacent property but visually inspect the adjacent habitat areas with binoculars and/or spotting scopes."*

If a habitat assessment reveals that BUOW habitat occurs on a site, then, in the least, a *Step II Part A: Focused Burrow Surveys* and *Pre-construction Survey* are required. If BUOW habitat is not present, then no further surveys are required.

### 2.3.2 Step II: Locating Burrows and Burrowing Owls

Step II surveys consist of two parts; *Part A: Focused Burrow Surveys* and *Part B: Focused Burrowing Owl Surveys*. All Step II surveys must be conducted during the BUOW breeding season (March 1 to August 31), generally between the hours of one hour before sunrise and two hours after sunrise, and/or two hours before sunset and one hour after sunset. Further, Step II surveys cannot be conducted within five days of rain, during rain, high winds (>20mph), dense fog, or temperatures exceeding 90 °F.

#### 2.3.2.1 Part A: Focused Burrow Surveys

Part A surveys are conducted in an effort to detect natural potential BUOW burrows (i.e., California ground squirrel burrows), suitable human-created structures (i.e., culverts), and/or occupied BUOW burrows. The BUOW Survey Instructions describe the methods for conducting a Part A survey and those are presented below.

*"1. A systematic survey for burrows including burrowing owl sign should be conducted by walking through suitable habitat over the entire survey area (i.e. the project site and within 150 meters). Pedestrian survey transects need to be spaced to allow 100% visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (approximately 100 ft.) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more qualified surveyors conduct concurrent surveys."*

*"2. The location of all suitable burrowing owl habitat, potential owl burrows, burrowing owl sign, and any owls observed should be recorded and mapped, including GPS coordinates. If the survey area contains natural or man-made structures that could potentially support burrowing owls, or owls are observed during the burrow surveys, the*

*systematic surveys should continue as prescribed in Part B. If no potential burrows are detected, no further surveys are required. A written report including photographs of the project site, location of burrowing owl habitat surveyed, location of transects, and burrow survey methods should be prepared. If the report indicates further surveys are not required, then the report should state the reason(s) why further focused burrowing owl surveys are not necessary."*

#### **2.3.2.2 Part B: Focused Burrowing Owl Surveys**

Part B surveys are conducted on four separate field survey dates, and the first survey may be conducted concurrent with the Part A survey. These four focused surveys are conducted to adequately determine the presence or absence of BUOW when those structures or features it inhabits, as described above, are present on a subject property. The BUOW Survey Instructions describe the methods for conducting Part B surveys and those are presented below.

*"1. Upon arrival at the survey area and prior to initiating the walking surveys, surveyors using binoculars and/or spotting scopes should scan all suitable habitat, location of mapped burrows, owl sign, and owls, including perch locations to ascertain owl presence. This is particularly important if access has not been granted for adjacent areas with suitable habitat."*

*"2. A survey for owls and owl sign should then be conducted by walking through suitable habitat over the entire project site and within the adjacent 150 m (approx. 500 feet). These "pedestrian surveys" should follow transects (i.e. Survey transects that are spaced to allow 100% visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (approx 100 feet.) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more qualified surveyors conduct concurrent surveys.) It is important to minimize disturbance near occupied burrows during all seasons."*

*"3. If access is not obtained, then the area adjacent to the project site shall also be surveyed using binoculars and/or spotting scopes to determine if owls are present in areas adjacent to project site. This 150-meter buffer zone is included to fully characterize the population. If the site is determined not to be occupied, no further surveys are required until 30 days prior to grading (see Pre-construction Surveys below)."*

#### **2.3.3 Reporting Requirements**

Subsequent to the completion of the proper surveys, a final report shall be submitted to the appropriate Lead Agency (i.e., City or County). The final report shall contain and discuss the necessary information (i.e., survey methods, transect widths, duration, conditions, results, etc.), and the appropriate maps (i.e., transect location map, burrow location map, etc.).

#### **2.3.4 30 Day Pre-Construction Survey**

All subject properties containing suitable habitat and/or potential BUOW burrows must conduct a Pre-Construction Survey within 30 days prior to ground disturbance. This includes sites where BUOW were determined to be absent.

### **2.4 Soil Suitability**

The soils that comprise the Site were suitable for BUOW and other fossorial animals.

## 2.5 Burrowing Owl CNDDDB Query

Prior to initiating field surveys, Searl Biological Services (SBS) conducted a query of the California Natural Diversity Database<sup>7</sup> (CNDDDB) GIS data to determine if any BUOW have been reported within five miles of the Property.

### 2.5.1 Query Results

A total of 22 records of BUOW have been reported within five miles of the Property from 1989 to 2016. The nearest occurrence was approximately 0.63 mile southeast of the Property in 2015. Tim Searl scanned this general area from public roads with both 10x42 binoculars and a 20-60x spotting scope on April 24 and May 18, 2018. No BUOW was observed; however, many areas were obscured from the scanning locations and a protocol-level survey was not conducted. *Figure 6 - Burrowing Owl Five Mile Query Results* (Page 16) depicts the location of the 22 records.

## 2.6 Assessment Methods

The habitat assessment, focused burrow survey, and focused BUOW surveys were performed according to the Survey Instructions described above. Prior to initiating field surveys, SBS produced a GIS BUOW assessment area map by generating a 150-meter buffer using the Property boundary, then clipping the County's "Burrowing Owl Survey" GIS Feature Class (Riverside County, 2018) to the 150-meter area.

### 2.6.1 Step I: Habitat Assessment

Initially, those areas visible from onsite and nearby roads were observed from a vehicle while driving and making frequent stops (i.e., windshield survey) to observe general habitat conditions. Subsequent to performing the "windshield survey," a pedestrian survey of the Site was conducted. Transects were spaced at no more than 30 meters (100 feet) to allow for 100% visual coverage. The property ownership of the areas within the 150-meter survey buffer was uncertain; therefore, these areas were scanned using 10x42 binoculars and a 20-60x spotting scope rather than transected. Field observations such as plant communities, vegetation height and density, topography, and soil suitability were noted.

### 2.6.2 Step II Part A and Part B: Focused Burrow and Burrowing Owl Surveys

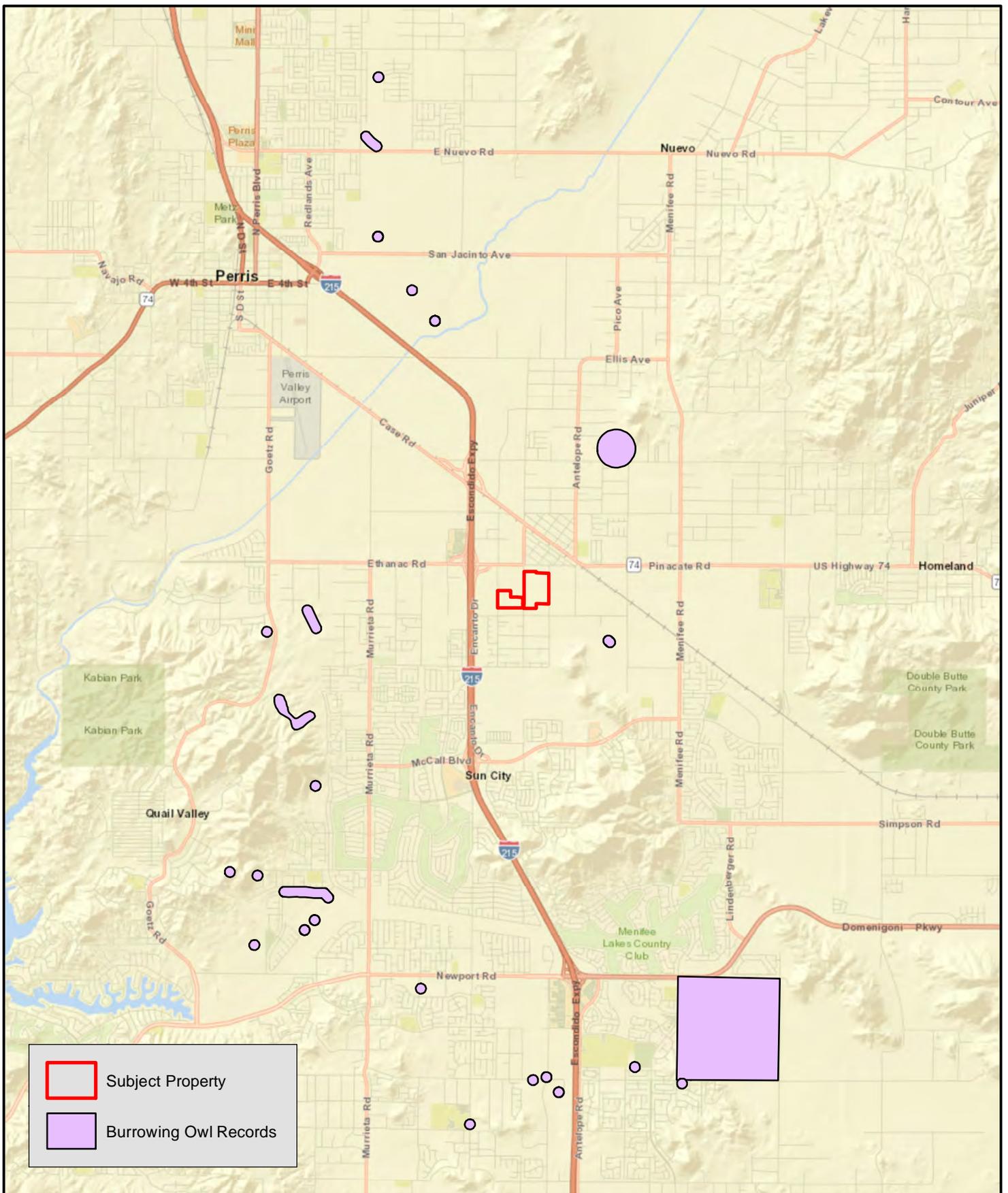
The methods to conduct the Part A and B focused assessments were similar to those of the habitat assessment. Potential BUOW burrows (i.e., California ground squirrel burrows) and burrow surrogates (i.e., culverts, etc.), if present, were mapped in the field utilizing Collector. Data collected for each burrow location included type of burrow or burrow surrogate, a range of the number of burrows (i.e., single burrow vs. burrow complex), presence or absence of BUOW sign (i.e., feathers, wash, pellets, etc.), and pertinent ecological notes. If BUOW was detected the location was recorded using Collector. Additional data recorded included the number of adults and juveniles, detection location (i.e., burrow site, perch, etc.), and any pertinent ecological and/or behavioral observations.

## 2.7 Assessment Results

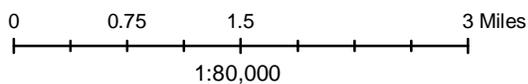
No BUOW was detected on or within 150-meters of the Site. The results of the BUOW assessment are detailed below. The survey area, suitable habitat, transects, and potential owl burrow locations are depicted on *Figure 7 – Burrowing Owl Survey Results* (Page 17).

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<sup>7</sup> The CNDDDB is an inventory of the status and locations of rare plants and animals in California. CNDDDB staff work with partners to maintain current lists of rare species as well as maintain an ever-growing database of GIS-mapped locations for these species.

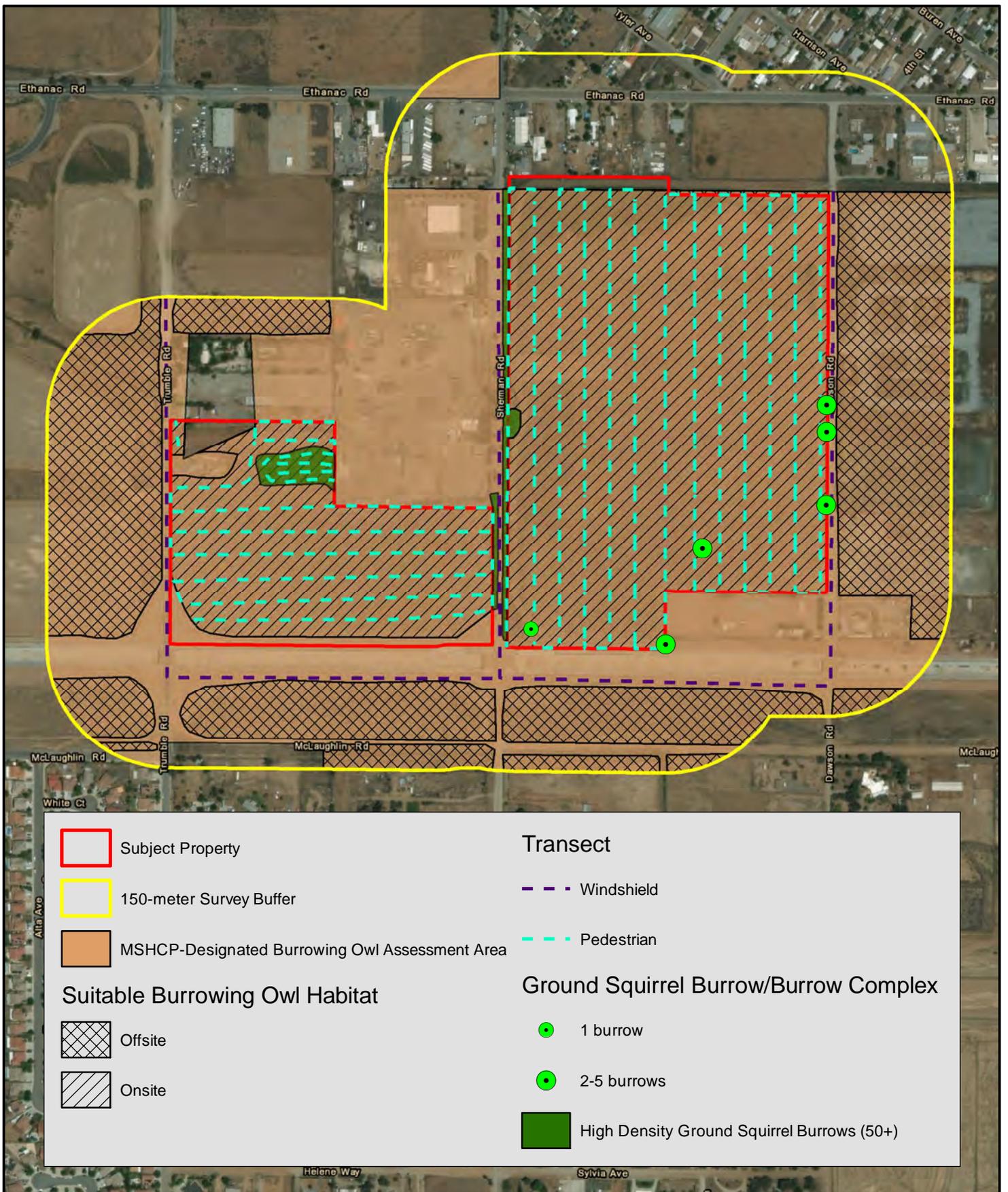


**FIGURE 6**  
**Burrowing Owl**  
**Five Mile Query Results**



DATE: June 22, 2018  
 COORDINATE SYSTEM: NAD 1983 State Plane Zone VI (feet)  
 SOURCE: ESRI World Street Map, Riverside County Spatial Data,  
 CNDDDB (April 2018 Data)

Motte Rancon Distribution Center



**FIGURE 7**  
**Burrowing Owl**  
**Survey Results**



### 2.7.1 Step I: Habitat Assessment

The Property supported 68.26-acres of suitable BUOW habitat. An additional 49.08-acres of suitable BUOW habitat was present within 150-meters of the Property. Suitable habitat on the Property consisted of ruderal areas comprised of low-growing vegetation. The “bike track” area and areas along fence-lines had the highest potential to support BUOW. Suitable habitat east of the Property was open, vacant lots with low-growing vegetation. These areas were utilized as recently as 2016 for industrial and equipment storage purposes but have since been vacated. Suitable BUOW habitat south of the Property was also ruderal areas with low-growing vegetation with the majority present within a Southern California Edison (SCE) easement that appeared to be routinely mowed for weed abatement purposes. Suitable habitat west and north of the Site consisted of ruderal vacant lots with low-growing vegetation.

### 2.7.2 Step II Part A: Focused Burrow Survey

Potential owl burrows detected on the Property consisted entirely of California ground squirrel burrows/burrow complexes. No suitable burrow surrogates were detected on the Property. California ground squirrel burrows were most abundant on the Property within the “bike track” area with over 50 burrows detected. Over 100 California ground squirrel burrows were present in the right-of-way of Sherman Road in the understory and often at the base of Eucalyptus trees. Eucalyptus woodland is generally not suitable habitat for BUOW; however, due to the high-densities of burrows and suitable habitat immediately adjacent to these areas, these burrows were surveyed for BUOW sign during the focused burrow survey. No BUOW sign was observed at any of the potential owl burrow locations, including the entrances, or suitable perch locations nearby (i.e., fence posts, stakes, etc.).

### 2.7.3 Step II Part B: Focused Burrowing Owl Surveys

No BUOW was detected on or within 150-meters of the Property over the course of the four protocol-level focused BUOW surveys.

## 3.0 CONCLUSION

### 3.1 BUOW 30-Day Pre-Construction Survey

BUOW were absent from the Property. This notwithstanding, a 30-day pre-construction survey is required by the MSHCP prior to any Project-related ground disturbance activities because the Site supports suitable habitat and potential owl burrows. If BUOW have colonized the Property prior to the initiation of Project-related construction, the project proponent should immediately inform the City of Menifee and the Wildlife Agencies (i.e., CDFW and USFWS), and would need to coordinate further with City of Menifee and the Wildlife Agencies, including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance.

### 3.2 Pre-Construction Nesting Bird Survey

Project-related grubbing, grading, and/or tree removal activities that occur during the bird nesting season (typically January 01 to August 31 for raptors; February 01 to August 31 all other birds) require a pre-construction nesting bird survey within three days of Project-related disturbance to avoid direct and indirect impacts to nesting birds, and thus ensure compliance with the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code 3503 and 3503.5.

## 4.0 CERTIFICATION

I hereby certify that the statements furnished above, the associated figures, and the attached appendices present 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.

Signed: Tim Searl Date: September 12, 2018  
Tim Searl, Owner/Biologist, Searl Biological Services

## 5.0 REFERENCES

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#### FIGURE DISCLAIMER

Figures and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. Tim Searl, SBS makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on any of the Figures associated with this report.

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# APPENDIX A

Site Photographs

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**PHOTOGRAPH 1:** A northwesterly view of the eastern portion of the Site.



**PHOTOGRAPH 2:** A northwesterly view of the western portion of the Site. The rural residence is depicted in the background.



**PHOTOGRAPH 3:** A view of the Eucalyptus woodland present in the right-of-way of Sherman Road.



**PHOTOGRAPH 4:** A domestic dog is depicted. Two domestic dogs were observed on the Property on each of the four surveys.



**PHOTOGRAPH 5:** The “bike track” area is depicted. This area supported high-densities of California ground squirrel burrows.

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# APPENDIX B

Vascular Plants Observed

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The plants listed below were detected on the Property during field surveys conducted in April, May, and June 2018. Nomenclature follows *The Jepson Online Interchange*. Introduced species are indicated with an (I). Cultivar species are indicated with a (C).

COMMON NAME	SCIENTIFIC NAME
<b>Borage Family</b>	<b>Boraginaceae</b>
common fiddleneck	<i>Amsinckia intermedia</i>
salt heliotrope	<i>Heliotropium curassavicum</i> var. <i>oculatum</i>
<b>Buckwheat Family</b>	<b>Polygonaceae</b>
common knotweed (I)	<i>Polygonum aviculare</i> subsp. <i>depressum</i>
curly dock (I)	<i>Rumex crispus</i>
<b>Geranium Family</b>	<b>Geraniaceae</b>
long-beaked filaree (I)	<i>Erodium botrys</i>
Red-stemmed filaree (I)	<i>Erodium cicutarium</i>
<b>Goosefoot Family</b>	<b>Chenopodiaceae</b>
lamb's quarters (I)	<i>Chenopodium album</i>
tumbleweed (I)	<i>Salsola tragus</i>
<b>Grass Family</b>	<b>Poaceae</b>
annual blue grass (I)	<i>Poa annua</i>
common Mediterranean grass (I)	<i>Schismus barbatus</i>
cultivated oat (C)	<i>Avena</i> sp.
little-seeded canary grass (I)	<i>Phalaris minor</i>
rabbitfoot grass (I)	<i>Polypogon monspeliensis</i>
red brome (I)	<i>Bromus madritensis</i> subsp. <i>rubens</i>
ripgut grass (I)	<i>Bromus diandrus</i>
rye grass (I)	<i>Festuca perennis</i>
slender wild oat (I)	<i>Avena barbata</i>
wall barley (I)	<i>Hordeum murinum</i>
<b>Legume Family</b>	<b>Fabaceae</b>
yellow sweetclover (I)	<i>Melilotus officinalis</i>
<b>Mallow Family</b>	<b>Malvaceae</b>
cheeseweed (I)	<i>Malva parviflora</i>
<b>Morning-Glory Family</b>	<b>Convolvulaceae</b>
bindweed (I)	<i>Convolvulus arvensis</i>
<b>Mustard Family</b>	<b>Brassicaceae</b>
black mustard (I)	<i>Brassica nigra</i>
London rocket (I)	<i>Sisymbrium irio</i>
radish (I)	<i>Raphanus sativus</i>
shortpod mustard (I)	<i>Hirschfeldia incana</i>
<b>Myrtle Family</b>	<b>Myrtaceae</b>
gum tree (I)	<i>Eucalyptus</i> sp.
<b>Nettle Family</b>	<b>Urticaceae</b>
dwarf nettle (I)	<i>Urtica urens</i>
tree tobacco (I)	<i>Nicotiana glauca</i>
<b>Pink Family</b>	<b>Carophyllaceae</b>
red sand-spurrey (I)	<i>Spergularia rubra</i>
small-flowered silene (I)	<i>Silene gallica</i>
<b>Spurge Family</b>	<b>Euphorbiaceae</b>
rattlesnake sandmat	<i>Euphorbia albomarginata</i>

COMMON NAME	SCIENTIFIC NAME
spotted spurge (I)	<i>Euphorbia maculata</i>
<b>Sunflower Family</b>	<b>Asteraceae</b>
common sow thistle (I)	<i>Sonchus oleraceus</i>
common sunflower	<i>Helianthus annuus</i>
mayweed (I)	<i>Anthemis cotula</i>
pineapple weed	<i>Matricaria discoidea</i>
prickly lettuce (I)	<i>Lactuca serriola</i>
royal goldfields	<i>Lasthenia coronaria</i>
stinknet (I)	<i>Oncosiphon piluliferum</i>
western marsh cudweed	<i>Gnaphalium palustre</i>
<b>Tamarisk Family</b>	<b>Tamaricaceae</b>
salt cedar (I)	<i>Tamarix ramosissima</i>
<b>Willow Family</b>	<b>Salicaceae</b>
arroyo willow	<i>Salix lasiolepis</i>

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# APPENDIX C

Wildlife Observed

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## Birds

The bird species listed below were detected either on or near the Site during field surveys conducted in March, April, and June 2018. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Falconidae), Common Name, and Scientific Name follow the American Ornithologists' Union (AOU) *Checklist of North and Middle American Birds*. Introduced species are indicated with an (I).

COMMON NAME	SCIENTIFIC NAME
<b>Blackbirds</b>	<b>Icteridae</b>
Western Meadowlark	<i>Sturnella neglecta</i>
<b>Caracaras and Falcons</b>	<b>Falconidae</b>
American Kestrel	<i>Falco sparverius</i>
<b>Crows and Jays</b>	<b>Corvidae</b>
Common Raven	<i>Corvus corax</i>
<b>Cuckoos, Roadrunners, and Anis</b>	<b>Cuculidae</b>
Greater Roadrunner	<i>Geococcyx californianus</i>
<b>Finches and Allies</b>	<b>Fringillidae</b>
House Finch	<i>Haemorhous mexicanus</i>
<b>Hawks, Kites, Eagles, and Allies</b>	<b>Accipitridae</b>
Red-tailed Hawk	<i>Buteo jamaicensis</i>
White-tailed Kite	<i>Elanus leucurus</i>
<b>Hérons, Bitterns, and Allies</b>	<b>Ardeidae</b>
Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>
<b>Hummingbirds</b>	<b>Trochilidae</b>
Anna's Hummingbird	<i>Calypte anna</i>
Costa's Hummingbird	<i>Calypte costae</i>
<b>Lapwings and Plovers</b>	<b>Charadriidae</b>
Killdeer	<i>Charadrius vociferus</i>
<b>Larks</b>	<b>Alaudidae</b>
Horned Lark	<i>Eremophila alpestris</i>
<b>Mockingbirds and Thrashers</b>	<b>Mimidae</b>
Northern Mockingbird	<i>Mimus polyglottos</i>
<b>New World Sparrows</b>	<b>Passerellidae</b>
Savannah Sparrow	<i>Passerculus sandwichensis</i>
<b>Old World Sparrows</b>	<b>Passeridae</b>
House Sparrow (I)	<i>Passer domesticus</i>
<b>Pigeons and Doves</b>	<b>Columbidae</b>
Mourning Dove	<i>Zenaida macroura</i>
<b>Starlings</b>	<b>Sturnidae</b>
European Starling (I)	<i>Sturnus vulgaris</i>
<b>Swallows</b>	<b>Hirundinidae</b>
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>
<b>Tyrant Flycatchers</b>	<b>Tyrannidae</b>
Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>
Black Phoebe	<i>Sayornis nigricans</i>
Cassin's Kingbird	<i>Tyrannus vociferans</i>
Say's Phoebe	<i>Sayornis saya</i>

## Mammals

The mammals listed below were observed on or near the Site through sign and/or physical sightings during field surveys conducted in April, May, and June 2018. The list below is presented in alphabetic order. Nomenclature for the Family (i.e., Sciuridae), Common Name, and Scientific Name follow *Wilson & Reeder's Mammal Species of the World*. Domestic animals are indicated with a (D).

COMMON NAME	SCIENTIFIC NAME
<b>Canids</b>	<b>Canidae</b>
domestic dog (D)	<i>Canis lupus familiaris</i>
<b>Ground Squirrels</b>	<b>Sciuridae</b>
California ground squirrel	<i>Spermophilus beecheyi</i>
<b>Pocket Gophers</b>	<b>Geomyidae</b>
Botta's pocket gopher	<i>Thomomys bottae</i>
<b>Rabbits and Hares</b>	<b>Leporidae</b>
desert cottontail	<i>Sylvilagus audubonii</i>

## **Appendix D      Regulations**

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*Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.*

## **Federal Regulations**

### ***Endangered Species Act of 1973***

Federally listed threatened and endangered species and their habitats are protected under provisions of the Federal Endangered Species Act (ESA). Section 9 of the ESA prohibits “take” of threatened or endangered species. “Take” under the ESA is defined as to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct.” The presence of any federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in “take” of the species or its habitat. Under the regulations of the ESA, the United States Fish and Wildlife Service (USFWS) may authorize “take” when it is incidental to, but not the purpose of, an otherwise lawful act.

Critical Habitat is designated for the survival and recovery of species listed as threatened or endangered under the ESA. Critical Habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an ESA listed species and which may require special management considerations or protection. Critical Habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the ESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the U.S. Army Corps of Engineers (Corps)).

If USFWS determines that Critical Habitat will be adversely modified or destroyed from a proposed action, the USFWS will develop reasonable and prudent alternatives in cooperation with the federal institution to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy Critical Habitat, USFWS will include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.

### ***Migratory Bird Treaty Act***

The Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) makes it unlawful to pursue, capture, kill, possess, or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered “take.” This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

### **State Regulations**

#### ***California Environmental Quality Act (CEQA)***

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State lead agencies. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. Section 15380 of the CEQA Guidelines independently defines “endangered” and “rare” species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, “endangered” species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while “rare” species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

#### ***California Endangered Species Act (CESA)***

In addition to federal laws, the state of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in “take” of individuals (defined in CESA as; “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) are regulated by CDFW. Habitat degradation or modification is not included in the definition of “take” under CESA. Nonetheless, CDFW has interpreted “take” to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the

absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

### ***Fish and Game Code***

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

### ***Native Plant Protection Act***

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California. The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

### ***California Native Plant Society Rare and Endangered Plant Species***

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under FESA or CESA are defined as follows:

#### California Rare Plant Rank

- 1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere
- 1B- Plants Rare, Threatened, or Endangered in California and Elsewhere

- 2A- Plants Presumed Extirpated in California, But More Common Elsewhere
- 2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
- 3- Plants about Which More Information is Needed - A Review List
- 4- Plants of Limited Distribution - A Watch List

#### Threat Ranks

- .1- Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- .3- Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

#### **Local Policies**

##### ***Western Riverside County MSHCP***

The MSHCP is a comprehensive, multi-jurisdictional HCP focusing on conservation of species and their associated habitats in western Riverside County. The goal of the MSHCP is to maintain biological and ecological diversity within a rapidly urbanizing region.

The approval of the MSHCP and execution of the Implementing Agreement (IA) by the wildlife agencies allows signatories of the IA to issue “take” authorizations for all species covered by the MSHCP, including state- and federal-listed species as well as other identified sensitive species and/or their habitats. Each city or local jurisdiction will impose a Development Mitigation Fee for projects within their jurisdiction. With payment of the mitigation fee to the County and compliance with the survey requirements of the MSHCP where required, full mitigation in compliance with the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), CESA, and FESA will be granted. The Development Mitigation Fee varies according to project size and project description. The fee for residential development ranges from approximately \$800 per unit to \$1,600 per unit depending on development density (County Ordinance 810.2). Payment of the mitigation fee and compliance with the requirements of Section 6.0 of the MSHCP are intended to provide full mitigation under CEQA, NEPA, CESA, and FESA for impacts to the species and habitats covered by the MSHCP pursuant to agreements with the USFWS, the CDFW, and/or any other appropriate participating regulatory agencies and as set forth in the IA for the MSHCP.

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

## **Federal Regulations**

### ***Section 404 of the Clean Water Act***

Since 1972, the Corps and U.S. Environmental Protection Agency (EPA) have jointly regulated the filling of “waters of the U.S.,” including wetlands, pursuant to Section 404 of the Clean Water Act (CWA). The Corps has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the CWA. The Corps and EPA define “fill material” to include any “material placed in waters of the United States where the material has the effect of: (i) replacing any portion of a water of the United States with dry land; or (ii) changing the bottom elevation of any portion of the waters of the United States.” Examples include, but are not limited to, sand, rock, clay, construction debris, wood chips, and “materials used to create any structure or infrastructure in the waters of the United States.” In order to further define the scope of waters protected under the CWA, the Corps and EPA published the Clean Water Rule on June 29, 2015. Pursuant to the Clean Water Rule, the term “waters of the United States” is defined as follows:

- (i) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- (ii) All interstate waters, including interstate wetlands<sup>1</sup>.
- (iii) The territorial seas.
- (iv) All impoundments of waters otherwise defined as waters of the United States under the definition.
- (v) All tributaries<sup>2</sup> of waters identified in paragraphs (i) through (iii) mentioned above.
- (vi) All waters adjacent<sup>3</sup> to a water identified in paragraphs (i) through (v) mentioned above, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

<sup>1</sup> The term *wetlands* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

<sup>2</sup> The terms *tributary* and *tributaries* each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (iv) mentioned above), to a water identified in paragraphs (i) through (iii) mentioned above, that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark.

<sup>3</sup> The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (i) through (v) mentioned above, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like.

- (vii) All prairie potholes, Carolina bays and Delmarva bays, Pocosins, western vernal pools, Texas coastal prairie wetlands, where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (i) through (iii) mentioned above.
- (viii) All waters located within the 100-year floodplain of a water identified in paragraphs (i) through (iii) mentioned above and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (i) through (v) mentioned above, where they are determined on a case-specific basis to have a significant nexus to a waters identified in paragraphs (i) through (iii) mentioned above.

The following features are not defined as “waters of the United States” even when they meet the terms of paragraphs (iv) through (viii) mentioned above:

- (i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.
- (ii) Prior converted cropland.
- (iii) The following ditches:
  - (A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
  - (B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
  - (C) Ditches that do not flow, either directly or through another water, into a water of the United States as identified in paragraphs (i) through (iii) of the previous section.
- (iv) The following features:
  - (A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;
  - (B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;
  - (C) Artificial reflecting pools or swimming pools created in dry land;
  - (D) Small ornamental waters created in dry land;
  - (E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;
  - (F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of a tributary, non-wetland swales, and lawfully constructed grassed waterways; and
  - (G) Puddles.
- (v) Groundwater, including groundwater drained through subsurface drainage systems.
- (vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

- (vii) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

### ***Section 401 of the Clean Water Act***

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits, and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Water Quality Control Boards (Regional Board) that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board assumed this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

### **State Regulations**

#### ***Fish and Game Code***

Fish and Game Code Sections 1600 et. seq. establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

- (1) substantially obstruct or divert the natural flow of a river, stream, or lake;
- (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake;  
or
- (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

***Porter Cologne Act***

The California *Porter-Cologne Water Quality Control Act* gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool in the post SWANCC and Rapanos regulatory environment, with respect to the state’s authority over isolated and insignificant waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although “waste” is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include fill discharged into water bodies.

## **APPENDIX 9.3.2**

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FAIRY SHRIMP HABITAT SUITABILITY ASSESSMENT



October 15, 2021

Updated November 3, 2021

## **CORE 5 INDUSTRIAL PARTNERS**

Contact: Jon Kelly

300 Spectrum Center Drive, Suite 880

Irvine, California 92618

**SUBJECT: Fairy Shrimp Habitat Suitability Assessment for the Menifee Commerce Center Project Located in the City of Menifee, Riverside County, California**

### **Introduction**

The report contains the findings of ELMT Consulting's (ELMT) fairy shrimp habitat suitability assessment for the Menifee Commerce Center Project located in the City of Menifee, Riverside County, California. This assessment was conducted to determine the ability of the project site to provide suitable habitat for Riverside fairy shrimp (*Streptocephalus woottoni*), Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*), and vernal pool fairy shrimp (*Branchinecta lynchi*), and determine the need to conduct focused surveys for fairy shrimp. As discussed below, based upon our prior survey work and the provisions of the MSHCP, there is no need for fairy shrimp surveys to be undertaken.

### **Project Location**

The project site is generally located east of Interstate 215, south of State Route 74, west of State Route 79, and north of Salt Creek, in the City of Murrieta, Riverside County, California. The project site is depicted on the Romoland quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series in Section 15 of Township 5 South, Range 3 West. Specifically, the project site is located south of Ethanac Road and north of McLaughlin Road, and bordered by Trumble Road on its western boundary and Dawson Road within APNs 331-110-027, -035, -041, 331-140-010, -18, -021, and -025. The project site is separated into two properties (eastern property and western property) by Sherman Road.

The possible offsite street improvement areas associated with project development are located along the following streets:

#### **Ethanac Road**

- Widen Ethanac Rd to 4 lanes from I-215 eastward to Sherman Rd with left and right turn pockets at intersections.
- Ethanac Rd from Sherman Rd will make a transition to a 2 lane road. The 2 lane road could be reconstructed all the way to Antelope Rd. Existing road to receive new pavement. Potentially left and right turn pockets at Dawson.

#### **Sherman Road**

- From SR-74 to Sherman Rd potential right and/or left turn pockets at Ethanac Rd and Sherman intersection expanding Sherman Road to accommodate turn pockets. On west side of Sherman

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Rd., assume 30 ft of vacant land could be disturbed to construct improvements along Sherman Rd north of Ethanac Rd.

- From Ethanac Rd. to McLaughlin (past project frontage), Sherman Rd will be a 4 lane 78 ft wide ROW to flood channel. From flood control channel to McLaughlin Rd., Sherman Rd will be 2 lanes with shoulders stopping at McLaughlin. See the area on attachment for location of dirt roads.

#### Dawson Road

- Dawson Rd is dirt road from Ethanac Rd to McLaughlin (past project frontage). Ultimate ROW is 4 lanes plus sidewalk (78 ft width) to flood control channel. Road south of flood channel to McLaughlin will be 2 lane road with shoulders

#### Trumble Road

- A portion of Trumble Rd is currently dirt. Project will be required to construct a min of 2 lanes from flood channel to existing paved road further north on Trumble Rd.

#### McLaughlin Road

- New 2 lane road with shoulders from Dawson Rd to Trumble Rd. McLaughlin Rd from Trumble to Encanto Rd is already paved.

#### Encanto Road

- Existing paved road

#### Off-Site Intersection Improvement

- State Route-74 and Bonnie Road near the end of the southbound exit ramp of Interstate 215.

### **Project Description**

The Project consists of the grading, construction, and operation of two industrial warehouses and office space within two buildings (Building 1 and 2) encompassing approximately 71.70 acres. Specifically, Building 1 will consist of approximately 1,254,160 square feet of warehouse space, and Building 2 will consist of approximately 385,970 square feet of warehouse space. The development will also include the required ratio of parking stalls and landscaped areas. Access to Building 1 will be provided by two driveways on Sherman Rd. and two driveways on Dawson Rd. Access to Building 2 will be provided by two driveways on Sherman Rd. and two driveways on Trumble Rd.

### **Methodology**

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may fall under the jurisdiction of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory jurisdiction. In addition, ELMT reviewed jurisdictional

waters information through examining historical aerial photographs to gain an understanding of the impact of land-use on natural drainage patterns in the area. The USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program “My Waters” data layers were also reviewed to determine whether any hydrologic features and wetland areas have been documented on or within the vicinity of the project site.

### **Surrounding Land Uses**

The project site is located in an area that has undergone a transformation from agricultural land uses to residential and commercial developments. The eastern property is bordered by residential developments and vacant/undeveloped parcels on its northern boundary, vacant/undeveloped parcels on its eastern boundary, a residential development and flood control channel on its southern boundary, and commercial and vacant parcels on its western boundary. The western property is bordered by commercial and residential developments on its northern boundary, vacant/undeveloped parcels on its western and eastern boundaries, and a flood control channel on its southern boundary.

### **Topography and Soils**

The project site is relatively flat with no areas of significant topographic relief at an elevation of approximately 1,435 feet above mean sea level. According to the USDA NRCS Soil Resource Report, the project site is underlain by the following soil units: Exeter sandy loam (2 to 8 percent slopes, eroded), Greenfield sandy loam (2 to 8 percent slopes, eroded), Monserate sandy loam (0 to 5 percent slopes), and Monserate sandy loam, shallow (5 to 15 percent slopes, eroded). Soils on-site have been mechanically disturbed and heavily compacted from historic land uses (i.e., agricultural activities).

### **Vegetation**

Due to existing land uses (i.e., agricultural activities, disking, and weed abatement activities), no native plant communities or natural communities of special concern were observed on or adjacent to the proposed project site. Two (2) plant communities were observed within the boundaries of the project site during the habitat assessment: fallow agricultural land and eucalyptus stand. In addition, the project site contains land cover types that would be classified as disturbed and developed. These communities are described in further detail below.

### **Potential Jurisdictional Areas**

Prior to the field investigation, aerial photographs from Google Earth Imaging were reviewed for the project site.

- 1966-2003: From September 1996 to December 2003 project site consist of vacant/undeveloped land that has been heavily disturbed from existing activities and is routinely disked. The project site appears to consist of a non-native grassland plant community that has been routinely disked and/or been subject to weed abatement activities.
- 2004-2006: The project site continues to consist of vacant/undeveloped land that is routinely disked and/or been subject to weed abatement activities; however, an earthen flood control

channel was created between the end of 2004 and October 2005 on the southern boundary of the western property, outside of the project footprint. In October of 2005 a concrete pad was installed immediately east of the northeast corner of the eastern property. Due to the installation of the concrete pad, storm water from the adjacent residential/commercial developments northeast of the project site was conveyed along the northern boundary of the concrete pad (east of the project site) and outlets onto the northeast corner of the project site.

2009-2018: Between 2009 and 2018, the entire project site was routinely disked. Over this timeframe, the water flow onto the northeast corner of the project site is continually disturbed from disking activities. The aerial imagery shows the onsite feature there in some years and little to no evidence in other years. It should be noted that in February of 2016 the earthen flood control channel was converted to a concrete lined channel that extends the entire length of the project site (both the western and eastern properties).

The National Wetlands Inventory maps does not depict any wetland resources on or immediately bordering the project site. Additionally, no blueline streams, ponded areas, pits, or water features have been documented on the topographic maps for the project site.

During the field investigation, an ephemeral swale was observed along the northern boundary of the project site, the extends east to west along the northern boundary before dissipating on the western boundary of the site. The swale only receives water, from direct precipitation and from storm flows from the adjacent residential/commercial development northeast of the project site. The stormwater overflows are not expected to flow during most storm events. As noted above, this swale was first observed in 2005 when a concrete pad was constructed adjacent to the northeast corner of the project site. It was preliminarily determined that water dissipation on northeast corner of the project site has an insubstantial or speculative effect on the chemical, physical or biological significant nexus to the downstream waters.

A review of historic aerials and survey results determined that swale on-site was artificially created, wholly within the uplands, as a result of the development of the concrete pad adjacent to the northeast corner of the project site. Historic aerial photographs suggest that the project site was undeveloped, flat, and used for agricultural purposes, and lacked any evidence of a natural drainage feature or pattern prior to the installation of the offsite concrete pad. The swale did not replace an existing blueline stream. Further, the swale does not support any riparian vegetation or suitable habitat for riparian wildlife species, as vegetation with the swale is consistent with the surrounding disturbed area. Additionally, the swale is isolated, as it begins on the northeast corner of the project site and terminates on the northwest corner of the site, with no connectivity to downstream waters.

Therefore, the swale would not qualify as a jurisdictional feature by the Corps, Regional Board, or CDFW, and regulatory approvals will not be required. Further, the swale is not expected to qualify as riparian/riverine habitat under the MSHCP, and a Determination of Biologically Equivalent or Superior Preservation (DBESP) analysis would not be required to address the replacement of any lost functions and values of habitats in regard to MSHCP listed species. Refer to Attachment C, *Site Photographs*, for representative site photographs.

### **Vernal Pools and Fairy Shrimp Habitat**

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 should be considered the length of time the areas exhibits upland and wetland characteristics and the manner in which 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.

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.

The MSHCP lists two general classes of soils known to be associated with listed and special-status plant species; clay soils and Traver-Domino Willow association soils. The specific clay soils known to be associated with listed and special-status species within the MSHCP plan area include Bosanko, Auld, Altamont, and Porterville series soils, whereas Traver-Domino Willows association includes saline-alkali soils largely located along floodplain areas of the San Jacinto River and Salt Creek. Without the appropriate soils to create the impermeable restrictive layer, none of the special-status plant or wildlife species associated with vernal pools can occur on the project site. None of these soils have been documented within the project site.

A review of recent and historic aerial photographs (1966-2018) of the project site, and field surveys did not provide visual evidence of an astatic or vernal pool conditions within the project site. As previously noted, in 2005 a concrete pad was installed immediately east of the northeast corner of the eastern property that diverted storm water from the adjacent residential/commercial developments northeast of the project site onto the project site. Storm flows are conveyed along the northern boundary of the concrete pad (east of the project site) and outlet onto the northeast corner of the project site, before infiltrating on the northwest corner of the site. After storm flows were diverted onsite, the entire project site continued to be subject to a regime of disking activities. Following large storm events that have the potential to bring water onsite (after the building of the concrete pad northeast of the site) any water that is conveyed onsite, and subsequent ponding has been subject to a regime of disking activities, as the aerial imagery shows the onsite

feature is present in some years, with little to no evidence in other years. Additionally, no indicator wetland/obligate plant species were observed onsite. From this review of historic aerial photographs and observations during the field investigations, it was determined that no indication of vernal pools or suitable fairy shrimp habitat occurs onsite.

### **Fairy Shrimp Suitability Assessment**

One of the species objectives for fairy shrimp under the MSHCP is to include additional areas within the Criteria Area through implementation of Section 6.1.2 of the MSHCP. If suitable habitat for fairy shrimp, defined as vernal pools, stock ponds, ephemeral ponds, or other human-modified depression (identified onsite during the initial site assessment) cannot be avoided, a single season dry or wet season survey (focused surveys) shall be conducted. If riparian/riverine habitat and vernal pools are identified onsite during the initial assessment, then the site has the potential to provide suitable habitat for fairy shrimp under the MSHCP, and if the proposed project design does not incorporate avoidance of the identified habitat, focused surveys for fairy shrimp shall be conducted, and avoidance and minimization measures shall be implemented in accordance with the species-specific objectives for those species. Conversely, if no riparian/riverine features or vernal pools are identified onsite, then suitable habitat for fairy shrimp does not exist onsite and focused surveys would not be warranted.

Below is a review of the three (3) listed fairy shrimp species known to occur in western Riverside County:

#### *Riverside fairy shrimp (*Streptocephalus woottoni*)*

Riverside fairy shrimp are restricted to deep seasonal vernal pools, vernal pool like ephemeral ponds, and stock ponds and other human modified depressions. They prefer warm-water pools that have low to moderate dissolved solids, are less predictable, and remained filled for extended periods of time. Basins that support Riverside fairy shrimp are typically dry a portion of the year, but usually are filled by late fall, winter or spring rains, and may persist through May. Known habitat occur within annual grasslands, which may be interspersed through chaparral or coastal sage scrub vegetation. In Riverside County, Riverside fairy shrimp have been found in pools formed over the following soils: Murrieta stony clay loams, Las Posas series, Wyman clay loam, and Willows soils.

The project site is underlain by Exeter sandy loam (2 to 8 percent slopes, eroded), Greenfield sandy loam (2 to 8 percent slopes, eroded), Monserate sandy loam (0 to 5 percent slopes), and Monserate sandy loam, shallow (5 to 15 percent slopes, eroded) soils. The soils that Riverside fairy shrimp are typically associated with in Riverside County do not occur onsite. Further, soils on-site have been mechanically disturbed and heavily compacted from historic land uses (i.e., agricultural activities, and onsite and surrounding development), and there are no native/undisturbed habitats onsite. The nearest documented location of Riverside fairy shrimp is found approximately 4.8 miles southeast of the project site in an area that supports native coastal sage scrub habitat. Due to the lack of soils associated with Riverside fairy shrimp, routine onsite anthropogenic disturbances, and astatic water conditions, the site was determined not to provide suitable habitat for Riverside fairy shrimp.

#### *Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*)*

Santa Rosa Plateau fairy shrimp are restricted to seasonal southern basalt flow vernal pools with cool clear

to milky waters that are moderately predictable and remain filled for extended periods of time and are known only from vernal pool on the Santa Rosa Plateau. The nearest documented location of Santa Rosa Plateau fairy shrimp is found approximately 17 miles southwest of the project site in the Santa Rosa Plateau. Since the project site is not located within the known area where Santa Rosa Plateau fairy shrimp have been documented, and astatic water conditions the site was determined not to provide suitable habitat for Santa Rosa Plateau fairy shrimp.

Vernal pool fairy shrimp (*Branchinecta lynchi*)

Vernal pool fairy shrimp are restricted to seasonal vernal pools (vernal pools and alkali vernal pools) and prefer cool-water pools that have low to moderate dissolved solids, are unpredictable, and often short lived. The vernal pool fairy shrimp is known from four locations in Western Riverside County MSHCP Plan Area: Skunk Hollow, the Santa Rosa Plateau, Salt Creek, and the vicinity of the Pechanga Indian Reservation. The nearest documented location of vernal pool fairy shrimp is found approximately 7.2 miles southeast of the project site in in Willow silty, saline-alkali soils. Since the project site is not located within or adjacent to the four know populations, has been heavily disturbed by existing agricultural activities, does not support saline-alkali soils, and no astatic water conditions were observed onsite, the site was determined not to provide suitable habitat for vernal pool fairy shrimp.

**Conclusion**

Per section 6.1.2 of the MSHCP, a site assessment shall consider species composition, topography/hydrology, and soil analysis, where appropriate, to identify and map riparian/riverine areas and vernal pools. Based on an assessment of species composition, hydrology, soils analysis, and individual characteristics for each of the listed fairy shrimp known in western Riverside County (i.e., species requirements, and historic records) it was determined that the project site does not support riparian/riverine habitat or vernal pools, and, therefore, does not provide suitable habitat for federally/State and/or MSHCP listed fairy shrimp. Due to the lack of riparian/riverine habitat and vernal pools, the project site was determined not provide suitable habitat for federally/State and/or MSHCP listed fairy shrimp, and focused surveys for fairy shrimp are not required per the MSHCP.

Please do not hesitate to contact Tom McGill at (951) 285-6014 or [tmcgill@elmtconsulting.com](mailto:tmcgill@elmtconsulting.com) or Travis McGill at (909) 816-1646 or [travismcgill@elmtconsulting.com](mailto:travismcgill@elmtconsulting.com) should you have any questions regarding this proposal.

Sincerely,



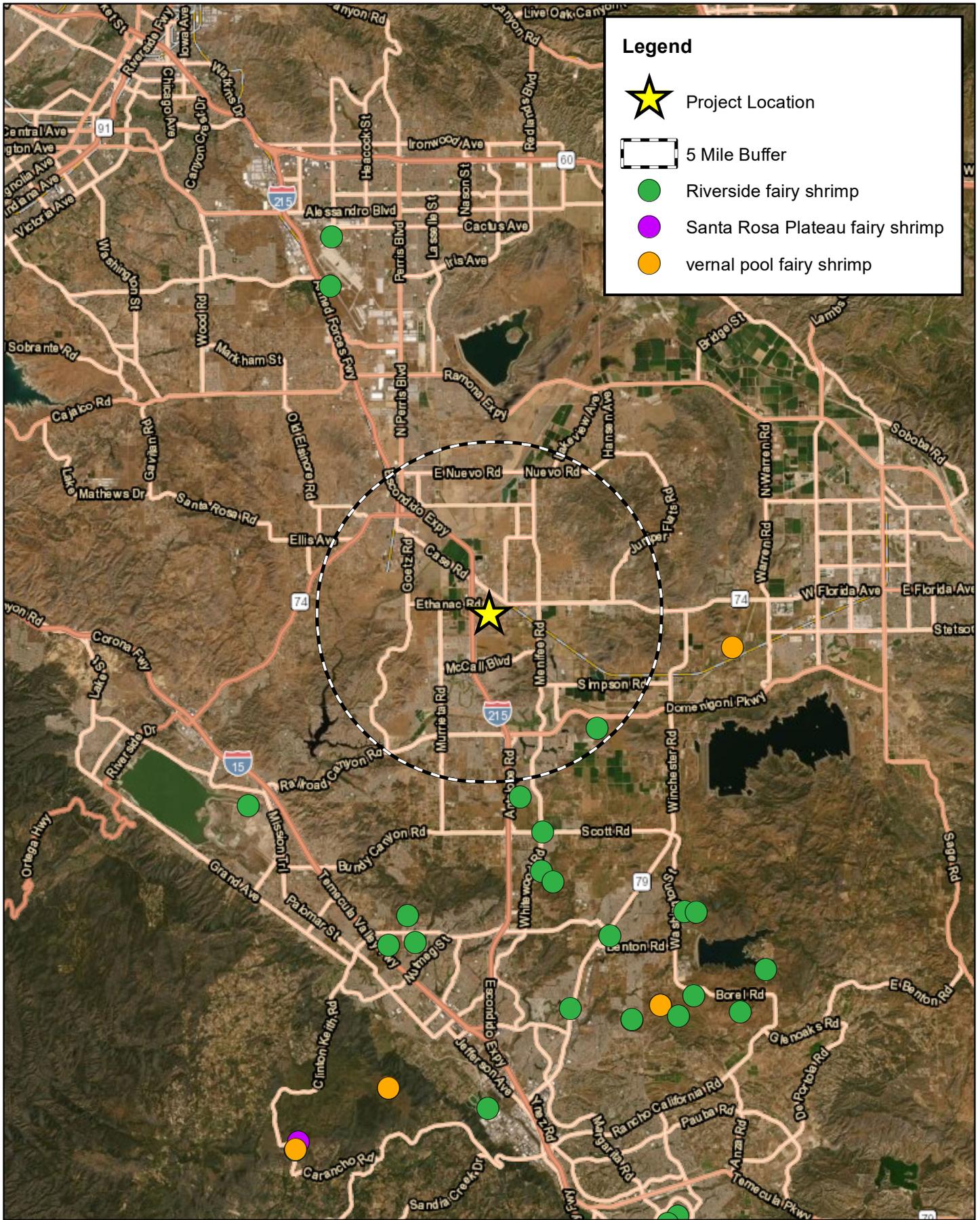
Thomas J. McGill, Ph.D.  
Managing Director



Travis J. McGill  
Director

Attachments:

A. *Project Exhibits*



**Legend**

-  Project Location
-  5 Mile Buffer
-  Riverside fairy shrimp
-  Santa Rosa Plateau fairy shrimp
-  vernal pool fairy shrimp



Source: ESRI Aerial Imagery, Riverside County

MENIFEE COMMERCE CENTER  
 FAIRY SHRIMP HABITAT SUITABILITY ASSESSMENT  
**CNDDB Locations**