# **Biological Technical Report**

# Navajo Road 32.2-Acre Project

City of Apple Valley, San Bernardino County, California

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#### LIST OF ACRONYMS AND ABBREVIATIONS

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CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNPS	California Native Plant Society
CNPSEI	CNPS Electronic Inventory
CWA	Clean Water Act
ESA	Endangered Species Act
GPS	Global Positioning System
НСР	Habitat conservation plan
MBTA	Migratory Bird Treaty Act
NCCP	Natural Community Conservation Plan
NRCS	Natural Resources Conservation Service
Project	Mediterranean Village Apartments Project
SAA	Streambed Alteration Agreement
SSAR	Society for the Study of Amphibians and Reptiles
SSC	Species of Special Concern
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

# 1.0 INTRODUCTION

ECORP Consulting, Inc. conducted a biological reconnaissance survey for a proposed residential development (Project). The Proposed Project would be located on an approximately 32.2-acre parcel (Assessor Parcel Number 434-063-02) in the Town of Apple Valley, San Bernardino County, California. The survey of the Project site was conducted to identify biological resources that could be affected by the Proposed Project, pursuant to the terms of the California Environmental Quality Act (CEQA) and for the purposes of identifying any biological constraints that would affect the site plan for the Project. The Project will be subject to County, State, and federal regulations regarding compliance with the federal Endangered Species Act (ESA), California ESA, Migratory Bird Treaty Act (MBTA), and California Fish and Game Code.

# 1.1 Location and Setting

The Project site is located south of Bear Valley Road within the Town of Apple Valley (Town), San Bernardino County, California (Figure 1). The Project site is bounded by residential development to the north and west, Navajo Road to the east and Sandia Road to the south. The Project site is immediately west of Apple Valley High School and surrounding land uses consisted mainly of residential developments. The Project site, as depicted on the Apple Valley South, California 7.5-minute topographical quadrangle (U.S. Geological Survey [USGS] 1994 and 1977, respectively) lies within Section 4, Township 4 North and Range 3 West (Figure 2). The elevation of the Project site is approximately 3,000 feet above mean sea level.

# 1.2 Project Description and Purpose

BMI Investments proposes the development of most of the property for residential purposes. The proposed Project also includes infrastructure improvements such as access drives to the residences on the site and associated infrastructure. The Town has also designated a portion of the property to be used as a drainage channel in accordance with the Town's Master Drainage Plan.

# 2.0 SPECIAL-STATUS SPECIES REGULATIONS

This biological reconnaissance survey was conducted to identify potential issues and ensure compliance with State and federal regulations regarding listed, protected, and sensitive species. The regulations are detailed below.



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Figure 1. Project Vicinity 2018-248 Navajo Road Biological Resources Report



Map Date: 12/18/2019 Service Layer Cordia: Sources: Earl, HERE, Gamilo, USGS, Intarmap, INCREMENT P. NRCan, Earl Japan, METT, Earl Challe (Hong Kang), Eerl Kanes, Eerl (Theiland, NGCC, (c) CoenStructing contributions, and the GS Lawer Community



Figure 2. Project Location 2018-248 Navajo Road Biological Resources Report

# 2.1 Federal Regulations

## 2.1.1 The Federal Endangered Species Act

The federal ESA protects plants and animals that are listed as endangered or threatened by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service. Section 9 of the ESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 U.S. Code 1538). Under Section 7 of the ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of the ESA provides for issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan (HCP) is developed.

# 2.1.2 Migratory Bird Treaty Act

The MBTA implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities including hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures and 50 CFR Part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code.

# 2.1.3 Federal Clean Water Act

The federal Clean Water Act's (CWA's) purpose is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into Waters of the U.S. without a permit from the U.S. Army Corps of Engineers (USACE). The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water 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" (33 CFR 328.3 7b). The U.S. Environmental Protection Agency (USEPA) acts as a cooperating agency to set policy, guidance and criteria for use in evaluation permit applications and also reviews USACE permit applications.

The USACE regulates "fill" or dredging of fill material within its jurisdictional features. "Fill material" means any material used for the primary purpose of replacing an aquatic area with dry land or changing the bottom elevation of a water body. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the State Water Resources Control Board, administered by each of the nine California Regional Water Quality Control Boards.

# 2.2 State and Local Regulations

## 2.2.1 California Endangered Species Act

The California ESA generally parallels the main provisions of the ESA but, unlike its federal counterpart, the California ESA applies the take prohibitions to species proposed for listing (called "candidates" by the State). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the California Fish and Game Code as "*hunt*, *pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.*" The California ESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with California Department of Fish and Wildlife (CDFW) to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

## 2.2.2 Fully Protected Species

The State of California first began to designate species as "fully protected" prior to the creation of the federal and California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under federal and/or California ESAs. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code § 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any State agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

### 2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code §§ 1900-1913) was created with the intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by CDFW. The Fish and Wildlife Commission has the authority to designate native plants as "endangered" or "rare" and to protect endangered and rare plants from take. The California ESA of 1984 (California Fish and Game Code § 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

# 2.2.4 California Fish and Game Code

### Streambed Alteration Agreement

Section 1602 of the California Fish and Game Code requires that a Notification of Lake or Streambed Alteration be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." The CDFW reviews the proposed actions and, if necessary, submits to the Applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the Applicant is the Streambed Alteration Agreement (SAA). Often, projects that require an SAA also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the SAA may overlap.

### **Migratory Birds**

The CDFW enforces the protection of nongame native birds in §§ 3503, 3503.5, and 3800 of the California Fish and Game Code. Section 3513 of the California Fish and Game Code prohibits the possession or take of birds listed under the MBTA. These sections mandate the protection of California nongame native birds' nests and also make it unlawful to take these birds. All raptor species are protected from "take" pursuant to California Fish and Game Code § 3503.5 and are also protected at the federal level by the MBTA of 1918.

## 2.2.5 Town of Apple Valley Joshua Tree Ordinance

The Town of Apple Valley has a Joshua tree (*Yucca brevifolia*) protection ordinance that protects all existing Joshua trees (Ordinance Number 511; Title 9; Chapter 9.76.040). If the Project will result in impacts to any Joshua trees on site, then approval must be obtained from the Town prior to removal of the trees.

### 2.2.6 California Environmental Quality Act Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;
- have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and

conflict with the provisions of an adopted HCP, Natural Community Conservation Plan (NCCP), or other approved local, regional, or State HCP.

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of an important resource on a population-wide or region-wide basis

### 3.0 METHODS

### 3.1 Literature Review

Prior to conducting the biological reconnaissance survey, ECORP biologists performed a literature review using the CDFW's California Natural Diversity Database (CNDDB; CDFW 2019a) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI; CNPS 2019) to determine the special-status plant and wildlife species that have been documented near the Project site. ECORP searched CNDDB and CNPSEI records within the Project site boundaries as depicted on USGS 7.5-minute Apple Valley South topographic quadrangle, plus the surrounding eight topographic quadrangles, including Victorville, Apple Valley North, Fairview Valley, Hesperia, Fifteenmile Valley, Silverwood Lake, Lake Arrowhead, and Butler Peak. The CNDDB and CNPSEI contain records of reported occurrences of federally or state-listed endangered, threatened, proposed endangered or threatened species, California Species of Special Concern (SSC), and/or other special-status species or habitat that may occur within or near the Project. Additional information was gathered from the following sources and includes, but is not limited to:

- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2019b);
- Special Animals List (CDFW 2019c);
- The Jepson Manual (Baldwin et al. 2012);
- The Manual of California Vegetation, 2nd Edition (Sawyer et al. 2009); and
- various online websites (e.g., Calflora 2019).

Using this information and observations in the field, a list of special-status plant and animal species that have the potential to occur on or near the Project site was generated. For the purposes of this assessment, special-status species are defined as plants or animals that:

- have been designated as either rare, threatened, or endangered by CDFW, CNPS, or the USFWS, and/or are protected under either the federal or California ESAs;
- are candidate species being considered or proposed for listing under these same acts;
- are fully protected by the California Fish and Game Code, §§ 3511, 4700, 5050, or 5515; and/or

are of expressed concern to resource and regulatory agencies or local jurisdictions.

Special-status species reported for the region in the literature review or for which suitable habitat occurs on the site were assessed for their potential to occur within the Project site based on the following guidelines:

**Present:** The species was observed on site during a site visit or focused survey.

**High:** Habitat (including soils and elevation factors) for the species occurs within the Project site and a known occurrence has recently been recorded (within the last 20 years) within five miles of the area.

**Moderate:** Habitat (including soils and elevation factors) for the species occurs within the Project site and a documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or a recently documented observation occurs within five miles of the area and marginal or limited amounts of habitat occurs in the Project site.

**Low:** Limited or marginal habitat for the species occurs within the Project site and a recently documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search.

**Presumed Absent:** Species was not observed during a site visit or focused surveys conducted in accordance with protocol guidelines at an appropriate time for identification; habitat (including soils and elevation factors) does not exist on site; or the known geographic range of the species does not include the Project site.

Note that location information on some special-status species may be of questionable accuracy or unavailable. Therefore, for survey purposes, the environmental factors associated with a species' occurrence requirements may be considered sufficient reason to give a species a positive potential for occurrence. In addition, just because a record of a species does not exist in the databases does not mean it does not occur. In many cases, records may not be present in the databases because an area has not been surveyed for that species.

# 3.2 Field Survey

# 3.2.1 Biological Reconnaissance Survey

The biological reconnaissance survey was conducted by walking the entire Project site to determine the vegetation communities and wildlife habitats on the Project site. The biologists documented the plant and animal species present on the Project site, and the location and condition of the Project site were assessed for the potential to provide habitat for special-status plant and wildlife species. Data were recorded on a Global Positioning System (GPS) unit, field notebooks, and/or maps. Photographs were also taken during the survey to provide visual representation of the conditions within the Project site. The Project site was also examined to assess its potential to facilitate wildlife movement or function as a movement corridor for wildlife moving throughout the region. In addition, the biologist documented the vegetation communities present on the Project site.

Plant and wildlife species, including any special-status species that were observed during the survey, were recorded. Plant nomenclature follows that of *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012). Wildlife nomenclature follows Society for the Study of Amphibians and Reptiles (SSAR; SSAR 2017), *Check-list of North American Birds* (Chesser et al. 2019), and the *Revised Checklist of North American Mammals North of Mexico* (Bradley et al. 2014).

In instances where a special-status species was observed, the date, species, location and habitat, and GPS coordinates were recorded. The locations of special-status species observations were recorded using a handheld GPS in NAD 83, Universal Transverse Mercator coordinates, Zone 11S.

### 3.2.2 Aquatic Resources Delineation

An aquatic resources delineation was conducted by ECORP biologists during a separate survey effort, the results of which are presented under a separate cover (ECORP 2019).

## 4.0 RESULTS

Summarized below are the results of the literature review and field survey, including site characteristics, vegetation communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors).

### 4.1 Literature Review

### 4.1.1 Special-Status Plants and Wildlife

The literature review and database searched identified 46 special-status plant species and 37 specialstatus wildlife species that could occur near the Project site. A list was generated from the results of the literature review and the Project site was evaluated for suitable habitat that could support any of the special-status plant or wildlife species on the list.

### 4.1.2 U.S. Fish and Wildlife Service Designated Critical Habitat

The Project site is not located within any USFWS-designated critical habitat. The closest designated critical habitat is for southwestern willow flycatcher (*Empidonax traillii extimus*) and is located approximately four miles west of the Project site near the Mojave River.

### 4.2 Biological Reconnaissance Survey

The biological reconnaissance survey was conducted on October 31, 2019, by ECORP biologist Philip Wasz. Summarized below are the results of the biological reconnaissance survey, including site characteristics, plant communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors). Weather conditions during the survey are summarized in Table 1.

Table 1. Weather Conditions During the Survey									
Date	Tì	ne	Temperature (°F)		Cloud Cover (%)		Wind Speed (mph)		
	Start	end	Min	Max	min	max	min	max	
10/31/19	1100	1200	75	77	25	25	2	5	

### 4.2.1 Property Characteristics

The Project site consists of a vacant lot that encompasses approximately 32.2 acres and is located north of Sandia Road and west of Navajo Road. Surrounding areas include residential development to the north, south and west and Apple Valley High School to the east. An undeveloped parcel occurs across Sandia Road to the southeast. The Project is located in the Mojave Desert (excluding mountains) Subregion of the Mojave Desert region of the Desert Province (Baldwin, et al., editors. 2012). This area is characterized by a hot semi-arid climate, which is comprised of hot and dry summer months and cold winter months with little precipitation recorded annually. The Project site is subjected to repeated and ongoing disturbance from pedestrian traffic and vehicular traffic. There were other signs of disturbance such as presence of windblown trash and signs that much of the land had been mostly cleared of native vegetation previously. Small areas of disturbed Creosote Bush Scrub, with a few small Joshua trees, represented the only native vegetation community on site. The other vegetation community present on the Project site was California annual grassland. No sensitive vegetation communities were observed on the Project site. In addition, one land cover type, disturbed area was observed on the Project site. The plant species observed within these cover types consisted of nonnative or invasive weedy species. Classification of the vegetation communities and land cover types within the Project site are described in detail below. Soils on the Project site included Bryman Loamy Fine Sand and Helendale Loamy Sand. Representative site photographs are presented in Appendix A.

### 4.2.2 Vegetation Communities

Native vegetation communities present on the Project site included disturbed Mojave creosote bush scrub. Non-native vegetation communities included California Annual Grassland. The Project site was generally classified as disturbed.

#### Creosote Bush Scrub - Disturbed (Larrea tridentata Shrubland Alliance)

*Larrea tridentata* Shrubland Alliance (Creosote Bush Scrub) is a vegetation type characterized by a sparse cover of shrubs where creosote bush (*Larrea tridentata*), a typical Mojave Desert shrub, represents more than 60 percent of the relative cover in the shrub canopy. This community represented the only native vegetation community on the Project site and covered approximately five percent of the Project site. The small areas of creosote bush scrub consisted of two small stands located in the southeastern corner of the Project site along developed edges. The community was highly disturbed, but included rabbit brush (*Ericameria nauseosa*), silver cholla (*Cylindropuntia echinocarpa*) and Joshua trees, along with nonnative weedy plants interspersed throughout.

### California Annual Grassland

California annual grassland was located in large patches in the northern, western and southern portions of the Project site and covered 50 percent of the Project site. California annual grassland is a classification derived from the first edition of the Manual of California Vegetation (Sawyer and Keeler-Wolf 1995) that covers a wide range of herbaceous cover. The second edition (Sawyer et al. 2009) breaks this category down into a number of stands and the majority of the vegetation within the site could be classified as a combination of several of these stands. Dominant species within the California annual grassland areas of the site consist of nonnative species such as brome grasses (*Bromus* sp.) and Mediterranean schismus (*Schismus barbatus*). Also present were Russian thistle (*Salsola tragus*) and field mustard (*Hirschfeldia incana*). These areas would likely fall into the following classification: *Bromus* (*diandrus, hordeaceus*) – *Hirschfeldia* and other mustards semi-natural stands, which is dominated by nonnative species.

### Disturbed

Disturbed is not a vegetation classification, but rather a land cover type. Areas classified as disturbed were largely devoid of native vegetation due to human disturbance and were dominated by open areas or nonnative weedy vegetation. Areas of dirt roads and bare dirt were also mapped as disturbed. The disturbed land cover type covered 45 percent of the Project site and was present mostly around the perimeter of the Project site. Plants present in this land cover type included a small group of Chinese elm (*Ulmus parviflora*), along with nonnative weedy species such as Russian thistle.

### 4.2.3 Plants

Plant species observed on the Project site were typical of the annual grassland community, disturbed land, and Mojave creosote bush scrub community present on the Project site for the time of the year in which the survey was conducted. Dominant species included brome grasses and Mediterranean schismus. Native species observed on the Project site included creosote bush, Joshua tree, silver cholla, rabbitbrush, and California buckwheat (*Eriogonum fasciculatum*). Nonnative species included Russian thistle, field mustard, Chinese elm, red-stemmed filaree (*Erodium cicutarium*), rattail sixweeks grass (*Festuca myuros*), and Arabian schismus grass (*Schismus arabicus*). A full list of plant species observed on or immediately adjacent to the Project site is included in Appendix B.

### 4.2.4 Wildlife

Wildlife species observed and detected on the Project site were characteristic of disturbed annual grassland and creosote bush scrub habitat and urban development in the region. One mammal species was detected on the Project site, domestic dog (*Canus lupus familiaris*); however, coyote (*Canis latrans*), desert cottontail (*Sylvilagus audubonii*), and rodent species such as kangaroo rat (*Dipodomys* sp.) and deer mouse (*Peromyscus maniculatus*) are also expected to occur. Five bird species were also detected on the Project site, including western kingbird (*Tyrannus verticalis*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), white-crowned sparrow (*Zonotrichia leucophrys*), and European starling (*Sturnus vulgaris*). One reptile species was observed on site: common side-blotched lizard (*Uta stansburiana*). Although not observed on site, other reptile species expected to occur include Mojave green rattlesnake (*Crotalus scutulatus*). Due to the high level of human activity in the area and the disturbed nature of the

Project site, the property represents relative low-quality habitat for most wildlife species. A complete list of wildlife species observed on or immediately adjacent to the Project site is included in Appendix C.

### 4.2.5 Potential for Special-Status Plant and Wildlife Species to Occur on the Project Site

The literature review and database searches identified 46 special-status plant species and 37 specialstatus wildlife species that occur on or near the Project site. However, due to the level of human disturbance at the Project site and the current lack of suitable habitat for the special-status plant and wildlife species, many of the species are presumed absent from the Project site. Additionally, with the Mojave River to the east and the San Bernardino mountains to the south, many of the species that appeared in the literature review were species associated with riparian or high-elevation habitats not present at the Project site and were thus presumed absent.

#### **Special-Status Plants**

There were 46 special-status plant species that appeared in the literature review and database searches for the Project site (CDFW 2019a; CNPS 2019). A list was generated from the results of the literature review and the Project was evaluated for suitable habitat that could support any of the special-status plant species on the list. Descriptions of the CNPS designations are found in Table 2. Of the 46 special-status plants identified, 11 have a low potential to occur on the Project site due to the presence of moderately suitable habitat in the disturbed creosote bush scrub. The remaining 35 species identified in the literature review are presumed absent from the Project site. A complete list of the special-status plants identified in the literature review is included in Appendix D.

Table 2. CNPS Status Designations							
List Designation	Meaning						
1A	Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere						
1B	Plants Rare, Threatened, or Endangered in California and Elsewhere						
2A	2A Plants Presumed Extirpated in California, But Common Elsewhere						
2B	Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere						
3	Plants about which we need more information; a review list						
4	Plants of limited distribution; a watch list						
List 1B, 2, and 4 extensi	on meanings:						
.1	Seriously threatened in California (over 80 percent of occurrences threatened / high degree and immediacy of threat)						
.2	Moderately threatened in California (20-80 percent occurrences threatened / moderate degree and immediacy of threat)						

Note: According to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code (CDFW 1984). This interpretation is inconsistent with other definitions.

#### Plant Species with a Low Potential to Occur

The following species have a low potential to occur on the Project site because limited or marginal habitat for the species occurs within the Project site and a recently documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search.

- white pygmy-poppy (Canbya candida) CNPS 4.2
- Mojave spineflower (Chorizanthe spinosa) CNPS 4.2
- desert cymopterus (Cymopterus deserticola) CNPS 1B.2
- purple-nerve cymopterus (Cymopterus multinervatus) CNPS 1B.2
- Mojave monkeyflower (Diplacus mohavensis) CNPS 1B.2
- Parish's daisy (Erigeron parishii) Federally-listed Threatened, CNPS 1B.1
- crowned muilla (*Muilla coronata*) CNPS 4.2
- short-joint beavertail (Opuntia basilaris var. brachyclada) CNPS 1B.2
- Beaver dam breadroot (Pediomelum castoreum) CNPS 1B.2
- Latimer's woodland-gilia (Saltugilia latimeri) CNPS 1B.2.
- Mojave fish-hook cactus (Sclerocactus polyancistrus) CNPS 4.2

#### **Plant Species Presumed Absent**

The following species are presumed absent from the Project site due to the lack of suitable habitat, soil type, and/or elevation range at the Project site:

- Coville's dwarf abronia (Abronia nana var. covillei) CNPS 4.2
- Cushenbury oxytheca (Acanthoscyphus parishii var. goodmaniana), Federally-listed Endangered, CNPS 1B.1
- Parish's oxytheca (Acanthoscyphus parishii var. parishii) CNPS 4.2
- Mt. Pinos onion (Allium howellii var. clokeyi) CNPS 1B.3
- California androsace (Androsace elongata ssp. acuta)
- Big Bear Valley milk-vetch (Astragalus lentiginosus var. sierrae), CNPS 1B.2
- Big Bear Valley woollypod (Astragalus leucolobus), CNPS 1B.2
- Mexican mosquito fern (Azolla microphylla), CNPS 4.2
- pinyon rockcress (Boechera dispar) CNPS 2B.3
- Parish's rockcress (Boechera parishii), CNPS 1B.2
- Shockley's rockcress (Boechera shockleyi) CNPS 2B.2

- Palmer's mariposa lily (Calochortus palmeri var. palmeri) CNPS 4.2
- Plummer's mariposa lily (Calochortus plummerae) CNPS 4.2
- San Bernardino Mountains owl's-clover (Castilleja lasiorhyncha) CNPS 1B.2
- white-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*) CNPS 1B.2
- Mojave tarplant (Deinandra mohavensis), State-listed Candidate Endangered, CNPS 1B.3
- San Bernardino Mountains dudleya (Dudleya abramsii ssp. affinis) CNPS 1B.2
- Big Bear Valley sandwort (Eremogone ursina) Federally-listed threatened, CNPS 1B.2
- Booth's evening-primrose (Eremothera boothii ssp. boothii) CNPS 2B.3
- Southern mountain buckwheat (*Eriogonum kennedyi var. austromontanum*), Federally-listed Threatened, CNPS 1B.2
- Cushenbury buckwheat (*Eriogonum ovalifolium* var. *vineum*) Federally-listed Endangered, CNPS 1B.1
- Little purple monkeyflower (*Erythranthe purpurea*) CNPS 1B.2
- Parish's alumroot (Heuchera parishii) CNPS 1B.3
- Silver-haired iyesia (*Ivesia argyrocoma* var. *argyrocoma*) CNPS 1B.2
- Ocellated Humboldt lily (Lilium humboldtii ssp. ocellatum) CNPS 4.2
- Lemon lily (Lilium parryi) CNPS 1B.2
- Parish's desert-thorn (Lycium parishii) CNPS 2B.3
- Torrey's box-thorn (Lycium torreyi) CNPS 4.2
- Baja navarretia (Navarretia peninsularis) CNPS 1B.2
- San Bernardino ragwort (Packera bernardina) CNPS 1B.3
- Parish's yampah (Perideridia parishii ssp. parishii) CNPS 2B.2
- Big Bear Valley phlox (Phlox dolichantha) CNPS 1B.2
- Southern mountains skullcap (Scutellaria bolanderi ssp. austromontana) CNPS 1B.2
- Parish's checkerbloom (Sidalcea hickmanii ssp. parishii) Federally-listed Rare, CNPS 1B.2
- San Bernardino aster (Symphyotrichum defoliatum) CNPS 1B.2

### Special-Status Wildlife

Of the 37 special-status wildlife species identified in the literature review, three were found to have a moderate potential to occur; three found to have a low potential to occur; the remaining 31 species are presumed absent from the Project site. A brief natural history and discussion of the special-status wildlife species found to have a moderate potential to occur on the Project site is provided below. None of the sensitive wildlife species with a potential to occur in the area were observed during the reconnaissance survey. A complete list of the special-status wildlife identified in the literature review is included in Appendix E.

### Wildlife Species with a Moderate Potential to Occur

The following species have a moderate potential to occur on the Project site because either habitat for the species occurs onsite and a known occurrence has been reported in the database, but not within five miles of the site, a historic documented observation was recorded within five miles of the Project site; or a known recently documented occurrence has been reported within five miles of the site and marginal or limited amounts of habitat occurs onsite.

### Burrowing Owl

The burrowing owl (*Athene cunicularia*) is a CDFW SSC (CDFW 2019c). Burrowing owls prefer habitat that includes open, sparsely vegetated scrublands and grasslands. Burrowing owls are often documented occupying abandoned mammal burrows and can be associated with the presence of California ground squirrel colonies. Although the creosote bush scrub habitat on site is disturbed, it provides suitable habitat for burrowing owl. The literature review identified multiple records of recent burrowing owl observations within five miles of the Project site (CDFW 2019a). Although burrowing owls and sign of burrowing owl were not identified during the survey, the Project site provides suitable burrowing owl habitat. Therefore, this species has been given a moderate potential to occur on the Project site.

### Loggerhead Shrike

The loggerhead shrike (*Lanius ludovicianus*) is a CDFW SSC (CDFW 2019c). The Project site was considered marginally suitable habitat for loggerhead shrike. This species prefers habitat that includes grasslands and open desert areas with scattered trees and shrubs for foraging and nesting. The Project site provided suitable foraging and nesting habitat for this species within the disturbed creosote bush scrub; however, the level of disturbance at the site may preclude this species from occurring. The literature review identified a recent record of loggerhead shrike within five miles of the Project site (CDFW 2019a). Due to the presence of marginally suitable habitat and recently documented records within five miles of the Project site.

### Desert Kit Fox

Desert kit fox (*Vulpes macrotis arsipus*) is a fur-bearing mammal that is protected under the CCR Title 14, Chapter 5, § 460, which prohibits take of the species at any time. Therefore, CDFW does not have a mechanism for take (e.g., permit) of the species by development projects. The desert kit fox is found in desert habitats that include creosote bush, shadscale, greasewood, and sagebrush. It feeds primarily on nocturnal rodents and rabbits, but will opportunistically take birds, reptiles, and insects. This species is not currently tracked in the CNDDB database and no records of this species were revealed in the literature review. Suitable foraging habitat for this species was present throughout the Project site, and adequate soils for digging burrows were present. This species could utilize the Project site while foraging or while moving through the area, but due to the disturbed nature of the Project site and vicinity, it is unlikely that this species would den on the Project site. Therefore, this species has a moderate potential to occur on the Project site.

#### Wildlife Species with a Low Potential to Occur

The following species have a low potential to occur on the Project site because limited or marginal habitat for the species occurs within the Project site and a recently documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search.

- Crotch bumble bee (Bombus crotchii), State Candidate Endangered
- Desert tortoise (Gopherus agassizii), Federally and State-listed Threatened
- Blainville's horned lizard (Phrynosoma blainvillii), CDFW SSC

#### Wildlife Species Presumed Absent

The following species are presumed absent from the Project site due to the lack of suitable habitat on the Project site:

- Quino checkerspot butterfly (*Euphydryas editha quino*) federally listed Endangered
- arroyo chub (Gila orcuttii) CDFW SSC
- Mohave tui chub (Siphateles bicolor mohavensis), federally listed Endangered, State-listed Endangered, and CDFW fully protected
- arroyo toad (Anaxyrus californicus), federally listed Endangered and CDFW SSC
- California red-legged frog (Rana draytonii), federally listed Threatened and CDFW SSC
- Southern mountain yellow-legged frog (Rana mucosa), federally listed Endangered, State-listed Endangered
- Southern California legless lizard (Anniella stebbinsi) CDFW SSC
- Southern rubber boa (Charina umbratical) State-listed Threatened
- western pond turtle (Emys marmorata), CDFW SSC
- two-striped gartersnake (Thamnophis hammondii), CDFW SSC
- tricolored blackbird (Agelaius tricolor), State-listed Threatened and CDFW SSC
- golden eagle (Aquila chrysaetos), CDFW fully protected
- long-eared owl (Asio otus), CDFW SSC
- Swainson's hawk (Buteo swainsoni), State-listed Threatened
- western yellow-billed cuckoo (Coccyzus americanus occidentalis), federally listed Threatened and State-listed Endangered
- southwestern willow flycatcher (*Empidonax traillii extimus*), federally listed Endangered and Statelisted Endangered

- bald eagle (Haliaeetus leucocephalus) federally delisted, State-listed Endangered, and CDFW fully protected
- yellow-breasted chat (*Icteria virens*), CDFW SSC
- summer tanager (Piranga rubra), CDFW SSC
- yellow warbler (Setophaga petechia), CDFW SSC
- Bendire's thrasher (Toxostoma bendirei), CDFW SSC
- Le Conte's thrasher (*Toxostoma lecontel*), CDFW SSC (San Joaquin population only)
- least Bell's vireo (Vireo bellii pusillus), federally listed Endangered and State-listed Endangered
- gray vireo (Vireo vicinior), CDFW SSC
- pallid bat (Antrozous pallidus), CDFW SSC
- a pallid San Diego pocket mouse (Chaetodipus fallax pallidus), CDFW SSC
- Townsend's big-eared bat (Corynorhinus townsendii), CDFW SSC
- San Bernardino flying squirrel (Glaucomys sabrinus californicus) CDFW SSC
- Mohave river vole (Microtus californicus mohavensis), CDFW SSC
- American badger (Taxidea taxus), CDFW SSC
- Mohave ground squirrel (Xerospermophilus mohavensis), State-listed Threatened

### 4.2.6 Aquatic Resources Delineation

An aquatic resources delineation was conducted by ECORP biologists during a separate survey effort, the results of which are presented under a separate cover (ECORP 2019).

### 4.2.7 Raptors and Migratory Birds

Suitable nesting habitat for numerous species of migratory birds protected under the federal MBTA and California Fish and Game Code is present on the Project site in some of the shrubs, Joshua trees, surrounding buildings and landscaping, and other anthropogenic structures (e.g., telephone poles, buildings). Therefore, nesting birds could use the Project site during the nesting bird season (typically February 15 through August 31).

### 4.2.8 Wildlife Movement Corridors, Linkages, and Significant Ecological Areas

The concept of habitat corridors addresses the linkage between large blocks of habitat that allow the safe movement of mammals and other wildlife species from one habitat area to another. The definition of a corridor varies, but corridors may include such areas as greenbelts, refuge systems, underpasses, and biogeographic land bridges. In general, a corridor is described as a linear habitat, embedded in a dissimilar matrix, which connects two or more large blocks of habitat. Wildlife movement corridors are critical for the survivorship of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife

species populations, thereby maintaining genetic variability and adaptability to maximize the success of wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. The nature of corridor usage and wildlife movement patterns vary greatly among species.

The Project site was assessed for its ability to function as a wildlife corridor. The Project site provides some wildlife movement opportunities because it is open. However, it is not situated along any major drainages or washes that would be considered movement corridors for wildlife. The fact that the Project site is relatively isolated by development also reduces its ability to facilitate wildlife movement through the area.

## 4.2.9 Local Policies and Ordinances

### Town of Apple Valley Joshua Tree Ordinance

Joshua trees were identified within the Project site during the reconnaissance survey that are considered protected by the Town of Apple Valley Joshua Tree Ordinance. An official Joshua tree inventory was not conducted during the reconnaissance survey.

# 5.0 IMPACT ANALYSIS

# 5.1 Special-Status Species

The Project site is generally classified as disturbed with creosote bush scrub and non-native grassland habitats. No special-status plant or wildlife species were observed during the biological survey. Forty-six special-status plant species were identified in the literature review and database searches, but based on the condition of the Project site and the available habitat, only 11 species (white pygmy-poppy, Mojave spineflower, desert cymopterus, purple-nerve cymopterus, Mojave monkeyflower, Parish's daisy, crowned muilla, short-joint beavertail, Beaver dam breadroot, Latimer's woodland-gilia, Mojave fish-hook cactus) were determined have low potential to occur on the Project site. No special status plant species have a moderate or high potential to occur on the site. The removal of fewer than 30 acres of low-quality disturbed creosote bush scrub habitat for these 11 species would not be expected to contribute substantially to the overall decline of these species. As such, impacts to white pygmy-poppy, Mojave spineflower, desert cymopterus, purple-nerve cymopterus, Mojave monkeyflower, Parish's daisy, crowned muilla, short-joint beavertail, Beaver dam breadroot, Latimer's woodland-gilia, and Mojave fish-hook cactus would be less than significant.

The literature review and database searches identified 37 special-status wildlife species that occur in the vicinity of the Project site but based on condition of the Project site and the available habitat, only three species were determined have moderate potential to occur on the Project site (burrowing owl, loggerhead shrike, and desert kit fox) and may require mitigation and/or avoidance measures. Three species (crotch bumble bee, desert tortoise, and Blainville's horned lizard,) were determined to have a low potential to occur and the remaining 31 species identified in the literature review and database searches are presumed absent from the Project site due to the absence of records in the vicinity and/or lack of suitable habitat on the Project site.

Burrowing owl was identified to have a moderate potential to occur of the Project site. The Project site contained only marginally suitable foraging and burrowing habitat. Although burrowing owls may not

have been present when the survey was conducted, the species is mobile and could take up residence at any time. Direct impacts in the form of habitat loss and indirect impacts in the form of construction noise and ground vibrations may occur. Impacts to burrowing owl would be less than significant with the implementation of Mitigation Measure BIO-1.

Loggerhead shrike, a CDFW SSC, was also determined to have a moderate potential to occur on the Project site due to the presence of suitable foraging and nesting habitat. Direct impacts to nesting loggerhead shrike may occur through removal of the larger shrubs and Joshua trees in the Project site. Impacts to loggerhead shrike would be less than significant with the implementation of Mitigation Measure BIO-2.

Desert kit fox was found to have a moderate potential to occur on the Project site while moving through the area, but due to the disturbed urban nature of the Project site, it is unlikely that this species would den on the Project site. This species does not currently have a special-status designation from CDFW or USFWS but is regulated by CDFW as a fur-bearing mammal. As a fur-bearing mammal, the desert kit fox is protected under the CCR Title 14, Chapter 5, § 460, which prohibits "take" of the species at any time. Although there are no formal regulations published by CDFW regarding desert kit fox protection measures at the time this report was written, it is likely that CDFW could require avoidance, mitigation, and minimization measures to be built into the Project's environmental documents to ensure that impacts to desert kit fox are less than significant. Direct impacts in the form of habitat loss and injury or death may occur. Impacts to desert kit fox would be less than significant with the implementation of Mitigation Measure BIO-3.

Three species have a low potential to occur on the Project site: crotch bumble bee, desert tortoise, and Blainville's horned lizard; however, presence of these species is likely precluded due to the lack of quality habitat and abundance of anthropogenic disturbances. Impacts to crotch bumble bee and coast horned lizard in the form of mortality, injury, and/or loss of habitat not would not be expected to contribute substantially to the overall decline of these species. As such, impacts to crotch bumble bee and coast horned lizard would be less than significant. Project-related impacts to desert tortoise, if present, would be considered significant because it is a federally and State-listed species. Although this species is not expected to occur on or adjacent to the Project site, impacts could occur in the form of injury or mortality, loss of habitat, ground vibrations, increased human activity, and noise. Impacts to desert tortoise would be less than significant with the implementation of Mitigation Measure BIO-3.

The Project site contained suitable nesting habitat for bird species protected under the MBTA, including the CDFW SSC loggerhead shrike. Development of the Project site will be required to comply with the MBTA and avoid impacts to nesting birds. If construction of the Project occurs during the bird-breeding season (typically February 1 through August 31), ground-disturbing construction activities could directly affect birds protected by the MBTA and their nests through the removal of habitat and indirectly through increased noise. Impacts to nesting birds would be less than significant with the implementation of Mitigation Measure BIO-2.

# 5.2 Sensitive Natural Communities

The Project site consisted of disturbed habitats including creosote bush scrub and California annual grassland. The Project site did not contain any riparian habitat or sensitive natural communities that

would need to be preserved and no Project-related impacts to these types of resources are anticipated with the development of the Project.

### 5.3 State or Federally Protected Wetlands and Waters of the United States

The results of the Aquatic Resources Delineation and discussion of potential impacts on State or federally protected wetlands or Waters of the U.S are discussed in the Aquatic Resources Delineation Report (ECORP 2019), prepared under a separate cover.

### 5.4 Wildlife Corridors and Nursery Sites

The Project site is located within and adjacent to areas containing existing disturbances (e.g., paved roads and residential, commercial, and industrial developments). The Project site is disturbed and contained very little cover that would only allow for local movement of wildlife. No migratory wildlife corridors or native wildlife nursery sites were identified within the Project site. Therefore, no impacts to wildlife corridors or nursery sites are expected to occur during the development of the Project site.

### 5.5 Local Policies and Ordinances

Joshua trees were observed amongst the creosote bush scrub on site. If Joshua trees will be affected by the Project, then the Joshua trees will need to be inventoried and the location, size, and general health of each tree will need to be documented. This inventory will need to be submitted to the Town prior to ground-disturbing activities for approval by the Town in order to maintain compliance with the Town's Joshua tree ordinance (Ordinance Number 511; Title 9; Chapter 9.76.040). Impacts to Joshua trees would be less than significant with the implementation of Mitigation Measure BIO-4.

### 5.6 Habitat Conservation Plans and Natural Community Conservation Plans

The Project site is not located within an adopted HCP or NCCP. Therefore, development of the Project site will not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State HCP.

### 6.0 **RECOMMENDATIONS**

The following mitigation measures are recommended prior to Project implementation:

**BIO-1 – Pre-construction Surveys for Burrowing Owl:** Pre-construction surveys for burrowing owl shall be conducted prior to the start of construction. The surveys shall follow the methods described in the CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). Two surveys shall be conducted, with the first survey being conducted between 30 and 14 days before initial ground disturbance (e.g., grading, grubbing, construction), and the second survey being conducted no more than 24 hours prior to initial ground disturbance. If burrowing owls and/or suitable burrowing owl burrows with sign (e.g., whitewash, pellets, feathers, prey remains) are identified on the Project site during the survey and impacts to those features are unavoidable, consultation with the CDFW shall be conducted and the methods described in the CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFW 2012) for avoidance and/or passive relocation shall be followed.

**BIO-2 – Pre-construction Nesting Bird Survey:** If construction or other Project activities are scheduled to occur during the bird breeding season (February 1 through August 31), a pre-construction nesting bird survey shall be conducted by a qualified biologist to ensure that active bird nests, including those for the loggerhead shrike, will not be disturbed or destroyed. The survey shall be completed no more than three days prior to initial ground disturbance. The nesting bird survey shall include the Project site and adjacent areas where Project activities have the potential to affect active nests, either directly or indirectly due to construction activity, noise, or ground disturbance. If an active nest is identified, a qualified avian biologist shall establish an appropriate disturbance limit buffer around the nest using flagging or staking. Construction activities shall not occur within any disturbance limit buffer zones until the nest is deemed inactive by the qualified biologist.

### BIO-3 – Pre-construction Survey for Special-Status Wildlife Species (Desert Tortoise, Desert Kit

**Fox):** The Project site provides low quality habitat for desert kit fox and desert tortoise; therefore, a preconstruction survey for these species is recommended. Survey methods should follow those outlined in Preparing for Any Action that May Occur within the Range of the Mojave Desert Tortoise (USFWS 2018). During the survey, biologists will document observations of other sensitive species, such as coast horned lizard. If individuals or sign of desert kit fox or desert tortoise (e.g., burrows, carcasses, scat) are observed on or immediately adjacent to the Project site, then coordination with USFWS and/or CDFW will need to occur. If impacts to these species will occur from the Project, then the appropriate permits will need to be obtained prior to the start of Project activities. The pre-construction survey should take place no more than 14 days prior to construction. This survey can be conducted concurrently with the 14-30-day or the 24-hour pre-construction burrowing owl survey (described above).

**BIO-4 – Joshua Tree Inventory:** A Joshua tree inventory should be conducted to document the location, height, diameter, and general health of the Joshua trees that may be affected by the Project. Following the inventory, the report will need to be presented to the Town for approval prior to tree removal. Due to the low number of Joshua trees observed on site during the reconnaissance survey, this inventory can be conducted concurrently with the 14-30-day burrowing owl pre-construction survey (described above).

The following best management practices are not mitigation measures pursuant to CEQA but are recommended to further reduce impacts to special-status species that have potential to occur on the property:

- Confine all work activities to a pre-determined work area.
- To prevent inadvertent entrapment of wildlife during the construction phase of a project, all excavated, steep-walled holes or trenches more than two feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.
- Wildlife are often attracted to burrow- or den-like structures such as pipes and may enter stored pipes and become trapped or injured. To prevent wildlife use of these structures, all construction pipes, culverts, or similar structures with a diameter of four inches or greater should be capped while stored onsite.

- All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from a construction or project site.
- Use of rodenticides and herbicides on Project site should be restricted. This is necessary to prevent primary or secondary poisoning of wildlife, including burrowing owl and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the USEPA, California Department of Food and Agriculture, and other State and federal legislation. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to burrowing owl.

## 7.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the Project applicant or the applicant's representative and that I have no financial interest in the Project.

DATE:

January 08, 2020

SIGNED: Lauren Simpson Biologist ECORP Consulting, Inc.

ECORP Consulting, Inc. Navajo Road 32.2-Acre Project

### 8.0 LITERATURE CITED

- Baldwin, B.G., G.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, Eds. 2012. The Jepson Manual; Vascular Plants of California, Second Edition. Berkeley, CA, University of California Press.
- Bradley, R.D., L.K. Ammerman, R.J. Baker, L.C. Bradley, J.A Cook, R.C. Dowler, C. Jones, D.J Schmidly, F.B. Stangl, Jr., R.A. Van Den Bussche, B. Wursig. 2014. Revised Checklist of North American Mammals North of Mexico. Museum of Texas Tech University.
- Calflora. 2019. Information on California plants for education, research and conservation. [Web application]. Berkeley, California: The Calflora Database [a non-profit organization]. Available: <a href="http://www.calflora.org/">http://www.calflora.org/</a>.
- CCR. 2017. California Code of Regulations. Title 14, Chapter 5, Section 460. California Office of Administrative Law. Sacramento, CA
- CDFG. 1984. California Endangered Species Act. Fish and Game Code Section 2050-2085.
- CDFW. 2012. Staff Report on Burrowing Owl Mitigation. State of California, Natural Resources Agency, Department of Fish and Wildlife.
  - \_\_\_\_\_. 2019a. RareFind California Department of Fish and Game Natural Diversity Database (CNDDB). California. Sacramento, CA, California Department of Fish and Wildlife, Biogeographic Data Branch.
  - . 2019b. State and Federally Listed Endangered and Threatened Animals of California. Sacramento (CA): State of California, Natural Resources Agency, Department of Fish and Wildlife.
    - \_\_\_. 2019c. Special Animals List. Sacramento (CA): State of California, Natural Resources Agency, Department of Fish and Game. Available: <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline</u>.
- Chesser, R. T., K. J. Burns, C. Cicero, J. L. Dunn, A. W. Kratter, I. J. Lovette, P. C. Rasmussen, J. V. Remsen, Jr.,
  D. F. Stotz, and K. Winker. 2019. Check-list of North American Birds (online), 7th edition with 59th
  Supplement. American Ornithological Society. <u>http://checklist.aou.org/taxa</u>
- CNPS, Rare Plant Program. 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). California Native Plant Society, Sacramento, CA. Website <u>http://www.rareplants.cnps.org</u>.
- ECORP. 2019. Aquatic Resources Delineation Survey Report of an Approximately 32.2-Acre Property at Apple Valley, San Bernardino County, California. February 2019.
- Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, 2nd ed. California Native Plant Society, Sacramento, CA. Sibley, D. A. (2003).
- Skinner, M.W., and B.M. Pavlik, eds. 1994. California Native Plant Society's inventory of rare and endangered vascular plants of California. Fifth edition. Spec. Publ. No. 1, California Native Plant Society, Sacramento, CA, 338 pp.

SSAR. 2017. Scientific and Standard English Names of Amphibians and Reptiles of North American North of Mexico, With Comments Regarding Confidence in our Understanding. Eighth Edition. Committee on Standard English and Scientific Names.

USFWS. 1918. Migratory Bird Treaty Act. Section 16 of the U.S. Code (703-712), as amended 1989.

## LIST OF APPENDICES

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Appendix A – Representative Site Photographs

Appendix B – Plant Species Observed

Appendix C – Wildlife Species Observed

Appendix D – Special-Status Plant Species Potential to Occur

Appendix E – Special-Status Wildlife Species Potential to Occur

# APPENDIX A

Representative Site Photographs

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# APPENDIX A

### **Representative Site Photographs**



Photo 1. Representative photograph of disturbed portion of the Project site.



Photo 2. Representative photograph of non-native vegetation on the Project site.



Photo 3. Representative photograph of non-native grassland on the Project site.



Photo 4. Representative photograph of native shrubs within the Project site.

# **APPENDIX B**

# Plant Species Observed

SCIENTIFIC NAME	COMMON NAME
Bromus diandrus	ripgut brome*
Bromus madritensis ssp. rubens	red brome*
Bromus tectorum	downy brome*
Cylindropuntia echinocarpa	silver cholla
Ericameria nauseosa	rubber rabbitbrush
Eriogonum fasciculatum	California buckwheat
Erodium cicutarium	red-stemmed filaree*
Festuca myuros	rattail sixweeks grass*
Hirschfeldia incana	field mustard*
Larrea tridentata	creosote bush
Salsola tragus	Russian thistle*
Schismus arabicus	Arabian schismus grass*
Schismus barbatus	common Mediterranean grass*
Ulmus parviflora	Chinese elm*
Yucca brevifolia	Joshua tree
*Nonnative species	

# **APPENDIX C**

Wildlife Species Observed

SCIENTIFIC NAME	COMMON NAME					
Canus lupus familiaris	domestic dog*					
Corvus corax	common raven					
Haemorhous mexicanus	house finch					
Sturnus vulgaris	European starling*					
Tyrannus verticalis	western kingbird					
Uta stansburiana	side-blotched lizard					
Zonotrichia leucophrys	white-crowned sparrow					
*Nonnative species						

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# APPENDIX D

Special-Status Plant Species Potential to Occur

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# Special-Status Plant Species Potential to Occur

Scientific Name Common Name	Scientific Name Common Name Status		Bloom Period & Elevation (meters)	Habitat	Potential for Occurrence
<b>Abronia nana var. covillei</b> Coville's dwarf abronia	Fed: Ca: CNPS:	none none 4.2	May-August 1524-3100	Occurs in various types of great Basin scrub, Joshua tree woodland, pinyon and juniper woodland, subalpine coniferous forest, and upper montane coniferous forest in carbonate sandy soils.	<b>Presumed Absent.</b> The Project site is outside of the elevation range for this species. No suitable habitat is present.
Acanthoscyphus parishii var. goodmaniana Cushenbury oxytheca	Fed: Ca: CNPS:	END none 1B.1	May-October 1219-2377	Occurs in pinyon and juniper woodland in sandy, talus, carbonate soils.	Presumed Absent. The Project site is outside of the elevation range for this species. No suitable habitat is present.
<b>Acanthoscyphus parishii</b> <b>var. parishii</b> Parish's oxytheca	Fed: Ca: CNPS:	none none 4.2	June- September 1220-2600	Occurs in chaparral and lower montane coniferous forest habitats in sandy or gravelly soils.	Presumed Absent. The Project site is outside of the elevation range for this species. No suitable habitat is present.
<b>Allium howellii var.</b> clokeyi Mt. Pinos onion	Fed: Ca: CNPS:	none none 1B.3	April-June 1300-1850	Occurs in Great Basin scrub, along the edges of meadows and seeps, and in pinyon and juniper woodland	Presumed Absent. The Project site is outside of the elevation range for this species. No suitable habitat is present.
Androsace elongata ssp. acuta California androsace	Fed: Ca: CNPS:	none none 4.2	March-June 150-1305	Occurs in chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon and juniper woodland, and valley and foothill grassland habitats	<b>Presumed Absent.</b> There is no suitable habitat for this species present on the Project site.
<b>Astragalus lentiginosus var. sierra</b> Big Bear Valley milk-vetch	Fed: Ca: CNPS:	none none 1B.2	April-August 1800-2600	Occurs in Mojavean desert scrub, meadows and seeps, pinyon and juniper woodland, and upper montane coniferous forest habitats in gravelly or rocky soils	<b>Presumed Absent.</b> The Project site is outside of the elevation range for this species. No suitable habitat is present.
Astragalus leucolobus Big Bear Valley woollypod	Fed: Ca: CNPS:	none none 1B.2	May-July 1100-2885	Occurs in lower montane coniferous forest, pebble plain, pinyon and juniper woodland, and upper montane coniferous forest habitats in rocky soils.	<b>Presumed Absent.</b> The Project site is outside of the elevation range for this species. No suitable habitat is present.
Azolla microphylla Mexican mosquito fern	Fed: Ca: CNPS:	none none 4.2	August 30-100	Occurs in marshes and swamps, near ponds with slow water	Presumed Absent. The Project site is outside of the elevation range for this species. No suitable habitat is present.

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat	Potential for Occurrence
Boechera dispar pinyon rockcress	Fed: Ca: CNPS:	none none 2B.3	March-June 1200-2540	Occurs in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats in granitic, gravelly soils.	Presumed Absent. The Project site is outside of the elevation range for this species. No suitable habitat is present.
<i>Boechera parishii</i> Parish's rockcress	Fed: Ca: CNPS:	none none 1B.2	April-May 1770-2990	Occurs in pebble plain, pinyon and juniper woodland, and upper montane coniferous forest habitats in rocky, quartzite on clay, or sometimes carbonate soils	<b>Presumed Absent.</b> The Project site is outside of the elevation range for this species. No suitable habitat is present.
Boechera shockleyi Shockley's rockcress	Fed: Ca: CNPS:	none none 2B.2	May-June 875-2310	Occurs in pinyon and juniper woodland habitats in carbonate or quartzite, rocky or gravelly soils	<b>Presumed Absent.</b> There is no suitable habitat for this species present on the Project site.
<b>Calochortus palmeri var.</b> palmeri Palmer's mariposa lily	Fed: Ca: CNPS:	none none 1B.2	April-June 710-2390	Occurs in chaparral, lower montane coniferous forest, and meadows and seeps habitats in mesic soils.	<b>Presumed Absent.</b> There is no suitable habitat for this species present on the Project site.
Calochortus plummerae Plummer's mariposa lily	Fed: Ca: CNPS:	none none 4.2	May-July 100-1700	Occurs in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland habitats in granitic, rocky soils	<b>Presumed Absent</b> . There is no suitable habitat for this species present on the Project site.
Canbya candida white pygmy-poppy	Fed: Ca: CNPS:	none none 4.2	March-June 600-1460	Occurs in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats in gravelly, sandy, granitic soils.	Low. Marginally suitable habitat occurs in the disturbed creosote bush scrub on site, but no records of this species have been documented within five miles of the site.
<b>Castilleja lasiorhyncha</b> San Bernardino Mountains owl's-clover	Fed: Ca: CNPS:	none none 1B.2	May-August 1300-2390	Occurs in chaparral, meadows and seeps, pebble plain, riparian woodland, and upper montane coniferous forest habitats in mesic soils.	<b>Presumed Absent.</b> The Project site is outside of the elevation range for this species. No suitable habitat is present.
<i>Chorizanthe spinosa</i> Mojave spineflower	Fed: Ca: CNPS:	none none 4.2	March-July 6-1300	Occurs in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and playas, sometimes in alkaline soils	Low. Marginally suitable habitat occurs in the disturbed creosote bush scrub on site, but no records of this species have been documented within five miles of the site.
Chorizanthe xanti var. leucotheca white-bracted spineflower	Fed: Ca: CNPS:	none none 1B.2	April-June 300-1200	Occurs on alluvial fans in coastal scrub habitat, Mojavean desert scrub, and pinyon and juniper woodland. Often found in sandy or gravelly soils.	Presumed Absent. There is no suitable habitat for this species present on the Project site.

Scientific Name Common Name	Status		Bloem Period & Elevation (meters)	Habitat	Potential for Occurrence	
Cymopterus deserticola desert cymopterus	Fed: Ca: CNPS:	none none 1B.2	March-May 630-1500	Occurs in Joshua tree woodland and Mojavean desert scrub habitats in sandy soils	Low. Marginally suitable habitat occurs in the disturbed creosote bush scrub on site, but only historic records of this species have been documented within five miles of the site.	
Cymopterus multinervatus purple-nerve cymopterus	Fed: Ca: CNPS:	none none 1B.2	March-April- 790-1800	Occurs in Mojavean desert scrub and pinyon and juniper woodland habitats in sandy or gravelly soils.	Low. Marginally suitable habitat occurs in the disturbed creosote bush scrub on site, but no records of this species have been documented within five miles of the site.	
<b>Deinandra mohavensis</b> Mojave tarplant	Fed: Ca: CNPS:	none CAN 1B.3	(May) June- October (Jan) 640-1600	Occurs in chaparral, coastal scrub, and riparian scrub habitats in mesic soils.	<b>Presumed Absent.</b> There is no suitable habitat for this species present on the Project site.	
<i>Diplacus mohavensis</i> Mojave monkeyflower	Fed: Ca: CNPS:	none none 1B.2	April-June 600-1200	Occurs in Joshua tree woodland and Mojavean desert scrub habitats in sandy or gravelly soils, often found in washes.	Low. Marginally suitable habitat occurs in the disturbed creosote bush scrub on site, but no records of this species have been documented within five miles of the site.	
<i>Dudleya abramsii</i> ssp. <i>affinis</i> San Bernardino Mountains dudleya	Fed: Ca: CNPS:	none none 1B.2	April-July 1250-2600	Occurs in pebble (pavement) plain, pinyon and juniper woodland, and upper montane coniferous forest habitats in granitic, quartzite, or carbonate soils.	<b>Presumed Absent.</b> The Project site is outside of the elevation range for this species. No suitable habitat is present.	
<i>Eremogone ursina</i> Big Bear Valley sandwort	Fed: Ca: CNPS:	THR none 1B.2	May-August 1800-2900	Occurs in meadows and seeps, pebble (pavement) plain, and pinyon and juniper woodland habitats in mesic, rocky soils.	<b>Presumed Absent.</b> The Project site is outside of the elevation range for this species. No suitable habitat is present.	
<i>Eremothera boothii</i> ssp. <i>boothii</i> Booth's evening-primrose	Fed: Ca: CNPS:	none none 2B.3	April- September 815-2400	Occurs in Joshua tree woodland and pinyon and juniper woodland habitats.	Presumed Absent. There is no suitable habitat for this species present on the Project site.	
<i>Erigeron parishii</i> Parish's daisy	Fed: Ca: CNPS:	THR none 1B.1	May-August 800-2000	Occurs in Mojavean desert scrub and pinyon and juniper woodland habitats usually in carbonate soils, sometimes in granitic soils.	Low. Marginally suitable habitat occurs in the disturbed creosote bush scrub on site, but no records of this species have been documented within five miles of the site.	

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Scientific Name Common Name	Stat	US	Bloom Period & Elevation (meters)	Habitat	Potential for Occurrence
<i>Eriogonum kennedyi var.</i> <i>austromontanum</i> southern mountain buckwheat	Fed: Ca: CNPS:	THR none 1B.2	June- September 1770-2890	Occur sin lower montane coniferous forest in gravely soils and in pebble (pavement) plain habitats	<b>Presumed Absent.</b> The Project site is outside of the elevation range for this species. No suitable habitat is present.
<i>Eriogonum ovalifolium</i> var. <i>vineum</i> Cushenbury buckwheat	Fed: Ca: CNPS:	END none 1B.1	May-August 1400-2400	Occurs in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats in carbonate soils.	<b>Presumed Absent.</b> The Project site is outside of the elevation range for this species. No suitable habitat is present.
<i>Erythranthe purpurea</i> little purple monkeyflower	Fed: Ca: CNPS:	none none 1B.2	May-June 1900-2300	Occurs in meadows and seeps, pebble (pavement) plain, and upper montane coniferous forest habitats	<b>Presumed Absent.</b> The Project site is outside of the elevation range for this species. No suitable habitat is present.
<i>Heuchera parishii</i> Parish's alumroot	Fed: Ca: CNPS:	none none 1B.3	June-August 1500-3800	Occurs in alpine boulder and rock field, lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest habitats in rocky, sometimes carbonate soils.	<b>Presumed Absent.</b> The Project site is outside of the elevation range for this species. No suitable habitat is present.
lvesia argyrocoma var. argyrocoma silver-haired ivesia	Fed: Ca: CNPS:	none none 1B.2	(May) June- August 1463-2960	Occurs in alkaline meadows and seeps, pebble (pavement) plain, and upper montane coniferous forest habitats	<b>Presumed Absent.</b> The Project site is outside of the elevation range for this species. No suitable habitat is present.
<i>Lilium humboldtii</i> ssp. ocellatum ocellated Humboldt lily	Fed: Ca: CNPS:	none none 4.2	March-July (August) 30-1800	Occurs in openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland habitats.	<b>Presumed Absent.</b> There is no suitable habitat for this species present on the Project site.
<i>Lilium parryi</i> lemon lily	Fed: Ca: CNPS:	none none 1B.2	Juły-August 1200-2745	Occurs in mesic soils in lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forest habitats	<b>Presumed Absent.</b> The Project site is outside of the elevation range for this species. No suitable habitat is present.
<i>Symphyotrichum defoliatum</i> San Bernardino aster	Fed: Ca: CNPS:	none none 1B.2	July- November 2-2040	Occurs in meadows and seeps, marshes, and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, grassland. Disturbed areas. Near ditches, streams, springs.	<b>Presumed Absent.</b> There is no suitable habitat for this species present on the Project site.
<i>Lycium parishii</i> Parish's desert-thorn	Fed: Ca: CNPS:	none none 2B.3	March-April 135-1000	Occurs in coastal scrub and Sonoran desert scrub habitats.	Presumed Absent. There is no suitable habitat for this species present on the Project site.

Scientific Name Common Name	Stat	us	Bloom Period & Elevation (meters)	Habitat	Potential for Occurrence
<i>Lycium torreyi</i> Torrey's box-thorn	Fed: Ca: CNPS:	none none 4.2	(Jan-Feb) March-June (Sep-Nov) -50-1220	Occurs in Mojavean desert scrub and Sonoran desert scrub habitats in sandy, rocky soils in washes, streambanks, and desert valleys.	Presumed Absent. There is no suitable habitat for this species present on the Project site.
<i>Muilla coronate</i> crowned muilla	Fed: Ca: CNPS:	none none 4.2	March-April (May) 670-1960	Occurs in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats	Low. Marginally suitable habitat occurs in the disturbed creosote bush scrub on site, but no records of this species have been documented within five miles of the site.
<i>Navarretia peninsularis</i> Baja navarretia	Fed: Ca: CNPS:	none none 1B.2	(May)June- August 1500-2300	Occurs in openings in chaparral, lower montane coniferous forest, meadows and seeps, and pinyon and juniper woodland habitats in mesic soils.	<b>Presumed Absent.</b> The Project site is outside of the elevation range for this species. No suitable habitat is present.
<i>Opuntia basilaris var. brachyclada</i> short-joint beavertail	Fed: Ca: CNPS:	none none 1B.2	April-June (Aug) 425-1800	Occurs in chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats	Low. Marginally suitable habitat occurs in the disturbed creosote bush scrub on site, but no records of this species have been documented within five miles of the site.
Packera bernardina San Bernardino ragwort	Fed: Ca: CNPS:	none none 1B.2	May-July 1800-2300	Occurs in mesic, sometimes alkaline meadows and seeps, pebble (pavement) plain, and upper montane coniferous forest habitats	Presumed Absent. The Project site is outside of the elevation range for this species. No suitable habitat is present.
<i>Pediomelum castoreum</i> Beaver Dam breadroot	Fed: Ca: CNPS:	none none 1B.2	April-May 610-1525	Occurs in Joshua tree woodland and Mojavean desert scrub habitats in sandy washes and roadcuts	Low. Marginally suitable habitat occurs in the disturbed creosote bush scrub on site, but no records of this species have been documented within five miles of the site.
<b>Perideridia parishii ssp.</b> <b>parishii</b> Parish's yampah	Fed: Ca: CNPS:	none none 2B.2	June-August 1465-3000	Occurs in lower montane coniferous forest, meadows and seeps, and upper montane coniferous forest habitats	<b>Presumed Absent.</b> The Project site is outside of the elevation range for this species. No suitable habitat is present.
<i>Phlox dolichantha</i> Big Bear Valley phlox	Fed: Ca: CNPS:	none none 1B.2	May-July 1830-2970	Occurs in pebble (pavement) plain and openings of upper montane coniferous forest habitats.	Presumed Absent. The Project site is outside of the elevation range for this species. No suitable habitat is present.

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Scientific Name Common Name	Stat	us	Bloom Period & Elevation (meters)	Habitat	Potential for Occurrence
<b>Saltugilia latimeri</b> Latimer's woodland-gilia	Fed: Ca: CNPS:	none none 1B.2	March-June 400-1900	Occurs in chaparral, Mojavean desert scrub, and pinyon and juniper woodland habitats in rocky or sandy soils, often granitic soils, and sometimes in washes.	Low. Marginally suitable habitat occurs in the disturbed creosote bush scrub on site, but no records of this species have been documented within five miles of the site.
<b>Sclerocactus polyancistrus</b> Mojave fish-hook cactus	Fed: Ca: CNPS:	none none 4.2	April-July 640-2320	Occurs in Great Basin scrub, Joshua tree woodland, and Mojavean desert scrub habitats, usually in carbonate soils	Low. Marginally suitable habitat occurs in the disturbed creosote bush scrub on site, but no records of this species have been documented within five miles of the site.
Scutellaria bolanderi ssp. austromontana southern mountains skullcap	Fed: Ca: CNPS:	none none 1B.2	June-August 425-2000	Occurs in chaparral, cismontane woodland, and lower montane coniferous forest habitats in mesic soils.	Presumed Absent. There is no suitable habitat for this species present on the Project site.
<b>Sidalcea hickmanii ssp.</b> parishii Parish's checkerbloom	Fed: Ca: CNPS:	RAR none 1B.2	(May) June- August 1000-2499	Occurs in chaparral, cismontane woodland, and lower montane coniferous forest habitats	<b>Presumed Absent.</b> There is no suitable habitat for this species present on the Project site.
<i>Symphyotrichum defoliatum</i> San Bernardino aster	Fed: Ca: CNPS:	none none 1B.2	July - November (Dec) 2-2040	Occurs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and vernally mesic valley and foothill grassland habitats near ditches, streams, and springs	<b>Presumed Absent.</b> There is no suitable habitat for this species present on the Project site.
Federal Designations:    State designations:      (Federal Endangered Species Act, USFWS)    (California Endangered Species Act, CDFW)      END:    federally listed, endangered      THR:    federally listed, threatened      Source:    California Natural Diversity Data Base (CNDDB) California Native Plant Society Electronic Inventory (CNPSEI)					

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# APPENDIX E

Special-Status Wildlife Species Potential to Occur

### Special-Status Wildlife Species Potential to Occur

Scientific Name Common Name	Status		Habitat	Potential for Occurrence
INVERTEBRATES				
Bombus crotchii Crotch bumble bee	Fed: Ca:	none CAN	Open grassland and scrub habitats in most of southwestern California.	Low. The Project Site contains some ruderal grassland. Most of the site is disturbed. No recent records within 5 miles.
Euphydryas editha quino Quino checkerspot butterfly	Fed: Ca:	END none	Chaparral and coastal sage scrublands in Riverside and San Diego counties.	<b>Presumed Absent.</b> No suitable habitat on site. No recent records within 5 miles.
OSTEICTHYES				
<i>Gila orcuttii</i> arroyo chub	Fed: Ca:	none SSC	Creeks, streams, and rivers with areas of slow-moving water with sand or mud bottoms. Ranges from San Diego to San Luis Obispo county.	Presumed Absent. No suitable habitat on site. No recent records within 5 miles.
Siphateles bicolor mohavensis Mojave tui chub	Fed: Ca:	END END/FP	Shallow outflow streams or deep pools with alkaline waters in the Mohave River basin.	<b>Presumed Absent.</b> No suitable habitat on site. One recent record approximately 4 miles to the northwest.
AMPHIBIA				
Anaxyrus californicus arroyo toad	Fed: Ca:	END SSC	Sandy banks of rivers, arroyos, and streams with shallow sandy pools. Also found in riparian woodlands or uplands adjacent to arroyos.	Presumed Absent. No suitable habitat on site. No recent records within 5 miles.
<b>Rana draytonii</b> California red-legged frog	Fed: Ca:	THR SSC	Found near water features such as ponds or streams in humid forests, grasslands, coastal scrub, and woodlands.	<b>Presumed Absent.</b> No suitable habitat on site. No recent records, only one historic record approximately 4 miles to the northwest.
Rana muscosa southern mountain yellow- legged frog	Fed: Ca:	END END	Ponds, streams, lakes, and isolated pools in southern Sierra Nevada Mountains and rocky streams within narrow canyons and the chaparral belt in Southern California mountains.	Presumed Absent. No suitable habitat on site. No recent records within 5 miles.

Scientific Name Common Name	Status		Habitat	Potential for Occurrence
REPTILIA		Enter March		the Alago II and the second
<b>Anniella stebbinsi</b> southern California legless lizard	Fed: Ca:	none SSC	Typically occurs in moist warm loose soil with plant cover or leaf litter in sparsely vegetated beach dunes, pine-oak woodlands, desert scrub, chaparral, alluvial fans, sandy washes, and stream terraces with sycamores, oaks, or cottonwoods. Sometimes found in suburban gardens.	<b>Presumed Absent.</b> No suitable habitat on site. No recent records within 5 miles.
Charina umbratica southern rubber boa	Fed: Ca:	none THR	Under rocks, woody debris, or in crevices in conifer or conifer-mixed semi-open forests and woodlands, patchy chaparral/shrublands, and meadows.	<b>Presumed Absent.</b> No suitable habitat on site. No recent records within 5 miles.
<i>Emys marmorata</i> western pond turtle	Fed: Ca:	none SSC	Rivers, creeks, small lakes and ponds, marshes, unlined irrigation canals, and reservoirs; including both permanent and intermittent waters and occasionally brackish waters. Often bask on logs, vegetation mats or rocks.	Presumed Absent. No suitable habitat on site. No recent records within 5 miles.
Gopherus agassizii desert tortoise	Fed: Ca:	THR THR	Desert valleys with vegetation communities such as alluvial fan, saltbush, creosote bush, desert scrub, and tree yuccas. Burrows in soil, under rocks, and along washes.	Low. Project Site is mostly disturbed with some ruderal grassland and scattered rabbitbrush. No recent records within 5 miles.
<i>Phrynosoma blainvillii</i> Blainville's horned lizard	Fed: Ca:	none SSC	Frequents a wide variety of habitats (Open areas of valleys, foothills, and semiarid mountains with sandy soil and low vegetation including chaparral, woodlands, and grasslands), most common in lowlands along sandy washes with scattered low bushes. Prefers open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of harvester ants and other insects.	Low. The Project Site contains some ruderal grassland. Most of the site is disturbed. One historical record approximately 5 miles to the west.

Scientific Name Common Name		Status	Habitat	Potential for Occurrence
Thamnophis hammondii two-striped gartersnake	Fed: Ca:	none SSC	Typically occurs near permanent or semi- permanent water in a variety of habitats including chaparral and oak woodland.	Presumed Absent. No suitable habitat on site. No recent records within 5 miles
AVES				
<i>Agelaius tricolor</i> <i>t</i> ri-color blackbird (nesting colony)	Fed: Ca:	none SSC	Freshwater marshes with dense cattails, bulrushes, and sedges, and tule. Forages in open habitat such as cultivated fields and pastures.	Presumed Absent. No suitable habitat on site. No recent records within 5 miles
Aquila chrysaetos golden eagle (Nesting & wintering)	Fed: Ca:	none FP	Open country including prairies, sagebrush, savannah or sparse woodlands, and barren hills or mountainous areas. Nests on rocky cliff edges or in large trees such as eucalyptus or oak.	Presumed Absent. No suitable habitat on site.
Asio otus long-eared owl (nesting)	Fed: Ca:	none SSC	Dense wooded areas such as deciduous and evergreen forests near water.	<b>Presumed Absent</b> . No suitable habitat on site. No recent records within 5 miles.
Athene cunicularia burrowing owl (burrow sites and some wintering sites)	Fed: Ca:	none SSC	Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation. Also uses vacant lots or airports when prey and suitable burrow sites are available. Nests in abandoned dirt burrows.	<b>Moderate</b> . The Project Site contains some ruderal grassland. Most of the site is disturbed. Fourteen recent records within 5 miles of the site.
<b>Buteo swainsoni</b> Swainson's hawk (nesting)	Fed: Ca:	none THR	Open pine-oak woodland, savannah, and agricultural fields with scattered trees. Nests in solitary bush or tree, or in small groves.	Presumed Absent. No suitable habitat on site. No recent records within 5 miles.
Coccyzus americanus occidentalis western yellow-billed cuckoo (nesting)	Fed: Ca:	THR END	Riparian forest nester, typically along the broad, lower flood-bottoms of larger river systems. Prefers dense understory and second- growth stands of willow and cottonwood that are often streamside.	Presumed Absent. No suitable habitat on site.

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Scientific Name Common Name		Status	Habitat	Potential for Occurrence
Empidonax traillii extimus southwestern willow flycatcher (nesting)	Fed: Ca:	END END	Breeds in riparian forests. Nests are often placed in dense vegetation along streams or rivers including willow.	Presumed Absent. No suitable habitat on site. No recent records within 5 miles
Haliaeetus leucocephalus bald eagle (nesting & wintering)	Fed: Ca:	DL END/FP	Forested areas, and sometimes dry open uplands, along the coast or near large open bodies of water including lakes. Nests in tall trees or on cliffs or pinnacles near open water.	Presumed Absent. No suitable habitat on site. No recent records within 5 miles
Icteria virens yellow-breasted chat (nesting)	Fed: Ca:	none SSC	Riparian and upland thickets, and dry overgrown pastures. Prefers to nest in dense scrub along streams or at the edges of ponds or swamps.	Presumed Absent. No suitable habitat on site. No recent records within 5 miles
Lanius ludovicianus loggerhead shrike (nesting)	Fed: Ca:	none SSC	Open country, with scattered shrubs and trees or other perches for hunting; includes agricultural fields, riparian areas, deserts, grasslands, savanna, and chaparral. Breeds in variety of semi-open terrain.	<b>Moderate.</b> The Project Site contains some ruderal grassland with minimal trees. Most of the site is disturbed. One recent record approximately 5 miles to the north west.
Piranga rubra summer tanager (nesting)	Fed: Ca:	none SSC	Low elevation cottonwood- willow forests along streams and higher elevation mesquite and saltcedar stands.	Presumed Absent. No suitable habitat on site.
Dendroica petechia yellow warbler (nesting)	Fed: Ca:	none SSC	Riparian woodlands especially with willows, open scrub, gardens, and thickets often near water.	Presumed Absent. No suitable habitat on site. No recent records within 5 miles
<i>Toxostoma bendirei</i> Bendire's thrasher	Fed: Ca:	none SSC	Dry and semi-open desert habitats, particularly with tall shrubs or cacti. May also be found in juniper woodlands or near farmlands with dense shrubs.	Presumed Absent. No suitable habitat on site. No recent records within 5 miles
<b>Toxostoma lecontei</b> Le Conte's thrasher (San Joaquin population only)	Fed: Ca:	none SSC	Desert flats, dunes, and scrub with sparse saltbush and sometimes creosote bush.	<b>Presumed Absent.</b> Project site is outside of the range of the San Joaquin population of this species. No recent records within 5 miles.

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Scientific Name Common Name	Sta	itus	Habitat	Potential for Occurrence
<i>Vireo bellii pusillus</i> least Bell's vireo (nesting)	Fed: Ca:	END END	Summer resident of southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Riparian woodlands and willow-cottonwood forests particularly with streamside thickets and dense brush. Usually nests in willow, mulefat, mesquite.	Presumed Absent. No suitable habitat on site.
Vireo vicinior gray vireo (nesting)	Fed: Ca:	none SSC	Chaparral often dominated by chamise, desert scrub, and pinyon-juniper pine scrub.	<b>Presumed Absent.</b> No suitable habitat on site. No recent records within 5 miles.
MAMMALIA	The second second		and a start and a set of the	
<b>Antrozous pallidus</b> pallid bat	Fed: Ca:	none SSC	Generally in mountainous areas, lowland desert scrub, arid grasslands near water and rocky outcrops, and open woodlands. Forages along the edges between shrubs and small open areas. Roosts in rock crevices, caves, mines, buildings, bridges, and in hollow trees.	Presumed Absent. No suitable roosting habitat on site.
Chaetodipus fallax pallidus pallid San Diego pocket mouse	Fed: Ca:	none SSC	Desert washes, desert scrub, and succulent scrub in areas bordering eastern San Diego county.	<b>Presumed Absent.</b> No suitable habitat on site. No recent records within 5 miles.
Corynorhinus townsendii Townsend's big-eared bat	Fed: Ca:	none SSC	Western desert scrub and dry uplands, but also pine and deciduous forests along the Pacific coast. Forages in a wide variety of habitats including forested and edge habitats, and riparian areas. Requires spacious areas with broad and open surfaces for roosting. Mainly roosts in abandoned mines or caves with little to no disturbance but may also use abandoned buildings, bridges, or other crevices	Presumed Absent. No suitable roosting habitat on site.

Scientific Name Common Name	Sta	tus	Habitat	Potential for Occurrence
<i>Glaucomys sabrinus californicus</i> San Bernardino flying squirrel	Fed: Ca:	none SSC	Mixed conifer forests of white fir, Jeffery pine, and black oak with many snags and fallen logs. Prefers forests with a relatively closed canopy and open or sparse undergrowth.	<b>Presumed Absent.</b> No suitable habitat on site. No recent records within 5 miles.
<i>Microtus californicus mohavensis</i> Mohave river vole	Fed: Ca:	none SSC	Meadows, freshwater marshes, irrigated fields, and other moist habitats along the Mojave River.	Presumed Absent. No suitable habitat on site.
<i>Taxidea taxus</i> American badger	Fed: Ca:	none SSC	Open habitats with friable soil such as grasslands, brushlands with sparse ground cover, open chaparral, and sometimes riparian zones.	Low. The Project Site contains some ruderal grassland. Most of the site is disturbed. No recent records within 5 miles.
Xerospermophilus mohavensis Mohave ground squirrel	Fed: Ca:	none THR	Flat or moderately sloped desert habitats with deep sandy or gravelly friable soils. Found in habitats with abundant annual herbaceous vegetation, alluvial fans, desert sink shrublands, and creosote bush scrub.	<b>Presumed Absent.</b> No suitable habitat for this species is present on site. The site is highly disturbed and surrounded by development. Only one historic record for this species occurs within 5 miles.
Federal Designations (Federal Endangered Species Act,			State designations: (Californi	a Endangered Species Act, CDFW)

Federal I USFWS) signations (Federal Endangered Species Act,

END:	federally listed, endangered
TUD	fodorolly listed throatopod

THR: federally listed, threatened

DL: federally delisted END: state-listed, endangered

THR: state-listed, threatened

CAN: Candidate for state-listing

SSC: California Species of Special Concern

Fully Protected species FP:

Source: California Natural Diversity Data Base (CNDDB) California Native Plant Society Electronic Inventory (CNPSEI) Victorville, Apple Valley North, Fairview Valley, Hesperia, Apple Valley South, Fifteenmile Valley, Silverwood Lake, Lake Arrowhead, and Butler Peak .7.5-minute topographic quadrangles.