# Biological Technical Report

## Victorville Wellness Center Campus Project
## (APNs 0478-041-01, 15, 16, 25, 26, 0473-181-05, and 0473-163-02)

San Bernardino County, California

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## LIST OF ACRONYMS AND ABBREVIATIONS

| Term | Definition |
|---|---|
| CDFG | California Department of Fish and Game |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CFR | Code of Federal Regulations |
| CNDDB | California Natural Diversity Database |
| CNPSEI | California Native Plant Society's Electronic Inventory |
| County | County of San Bernardino |
| CRPR | California Rare Plant Rank |
| ESA | Endangered Species Act |
| GPS | Global Positioning System |
| HCP | Habitat Conservation Plan |
| I-15 | Interstate 15 |
| ITP | Incidental Take Permit |
| MBTA | Migratory Bird Treaty Act |
| MOU | Memorandum of Understanding |
| MSHCP | Multi-Species Habitat Conservation Plan |
| msl | Mean sea level |
| NEPA | National Environmental Policy Act |
| NPPA | Native Plant Protection Act |

## LIST OF ACRONYMS AND ABBREVIATIONS

| Term | Definition |
|---|---|
| NRCS | Natural Resources Conservation Service |
| OHV | Off-highway vehicle |
| PCE | Primary Constituent Element |
| Procedures | Procedures for Discharges of Dredged or Fill Material to Waters of the State |
| Project | Victorville Wellness Center Campus Project |
| RWQCB | Regional Water Quality Control Board |
| SAA | Streambed Alteration Agreement |
| SSAR | Society for the Study of Amphibians and Reptiles |
| SSC | Species of Special Concern |
| USC | U.S. Code |
| USFWS | U.S. Fish and Wildlife Service |
| USGS | U.S. Geological Survey |

# 1.0 INTRODUCTION

ECORP Consulting, Inc. conducted a biological reconnaissance survey and habitat assessment at an approximately 13.65-acre property (Assessor Parcel Numbers 0478-041-01, 15, 16, 25, 26, 0473-181-05, and 0473-163-02) in the city of Victorville, San Bernardino County, California. The survey was conducted to identify any potential biological resources that could be affected by the proposed Victorville Wellness Center Campus Project (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 proposed 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 Project Description and Location

The Project site is located north of State Route 18 and east of Interstate 15 (I-15) within the city of Victorville, San Bernardino County, California (Figure 1). The Project site is bounded by disturbed vacant land and the I-15 to the north, residential development to the west, residential development and Eva Dell Park to the south, and the Mojave River to the east. Surrounding land uses consist mainly of residential development and undeveloped land. The Project site, as depicted on the U.S. Geological Survey (USGS) 7.5-minute Victorville topographic quadrangle, lies within Sections 3, 4, 9, and 10 of Township 5 North, and Range 4 West (USGS 2021; Figure 2). The elevation of the Project site is approximately 2,710 feet above mean sea level (msl).

The City of Victorville proposes to construct a Wellness Center. The Wellness Center Campus will offer a low-barrier, emergency shelter with life-changing services such as income stabilization, housing navigation, mental health counseling, and much more to help homeless individuals break the cycle of homelessness and improve their quality of life. An onsite medical clinic will be available to shelter residents and the broader community. This 168-unit facility will be located on City-owned land at 16902 First Street. Unlike traditional congregate shelters, the Wellness Center is being designed as a non-congregate facility, providing guests the privacy and dignity of their own private room/unit. In addition, permanent supportive housing units will be a component of the campus allowing some guests to transfer from the emergency shelter, that provides interim housing for approximately 180 days, to the abutting 30-unit permanent supportive housing area, called the Wellness Cottages.

# 2.0 SPECIAL-STATUS SPECIES REGULATIONS

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


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Map Date: 9/1/2021

*Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community*

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**Figure 1. Project Vicinity**

*2021-230 Victorville Wellness Center*

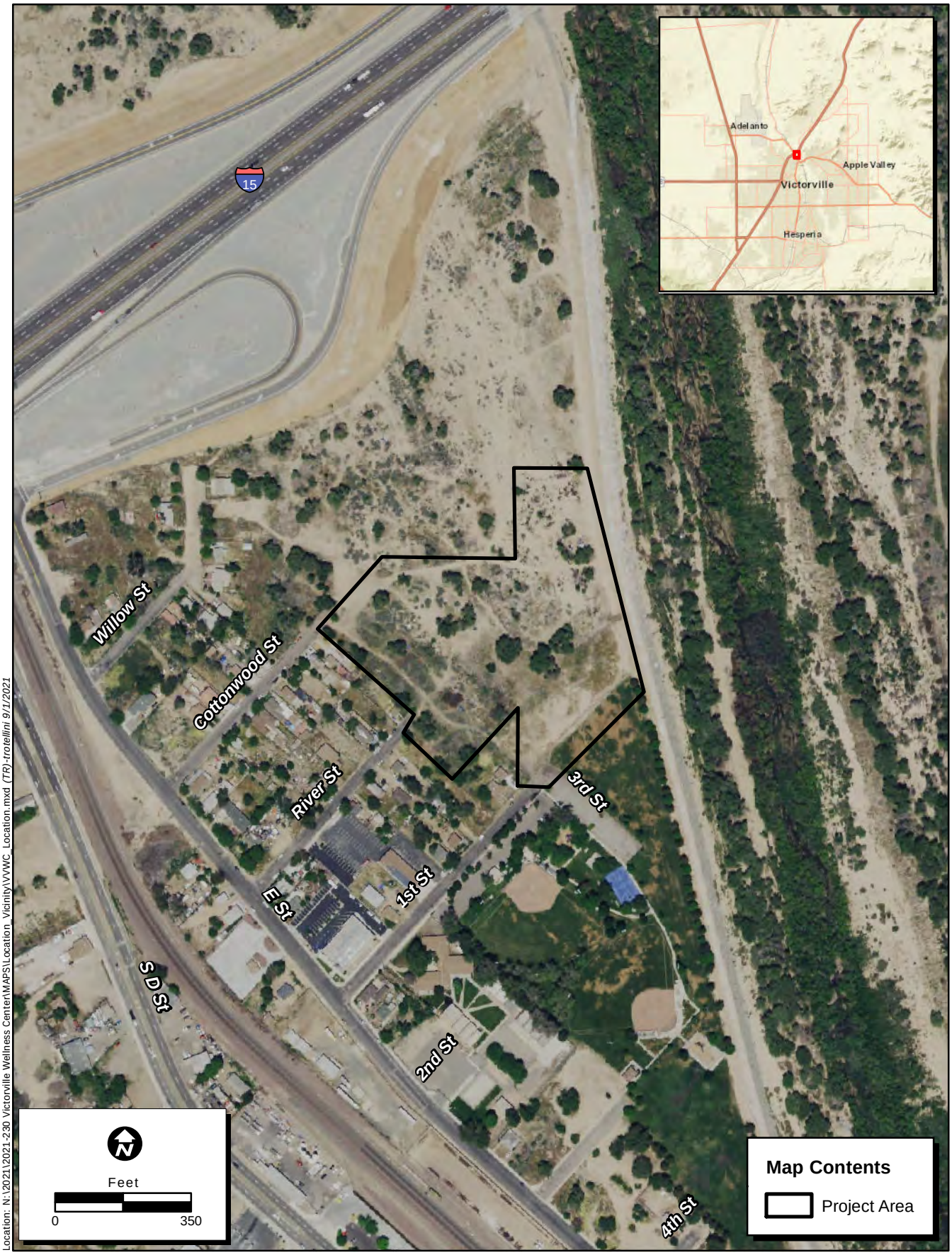


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**Figure 2. Project Location**

*2021-230 Victorville Wellness Center*

## 2.1 Federal Regulations

### 2.1.1 The Federal Endangered Species Act

The federal Endangered Species Act (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 [USC] 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 (ITPs) where no other federal actions are necessary provided a habitat conservation plan (HCP) is developed.

### 2.1.2 National Environmental Policy Act

Signed into law on January 1, 1970, the National Environmental Policy Act (NEPA) requires all federal agencies to analyze the environmental impacts related to their proposed actions prior to making and implementing decisions or actions. This framework for evaluation of environmental and associated economic and social effects of proposed actions, described in 42 USC 4321, also provides the public opportunity to review and comment. Actions that are covered by NEPA include decision-making related to publicly-owned facilities such as highways, permit applications, and federal land management.

### 2.1.3 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.

### 2.1.4 Federal Clean Water Act

The USACE regulates discharge of dredged or fill material into Waters of the U.S. under Section 404 of the CWA. "Discharges of fill material" is defined as the addition of fill material into Waters of the U.S., including, but not limited to the following: placement of fill necessary for the construction of any

structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes, and subaqueous utility lines [33 CFR § 328.2(f)]. In addition, Section 401 of the CWA (33 USC 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into Waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Substantial impacts to wetland and non-wetland Waters of the U.S., over 0.5 acre of impact, may require an individual permit. Projects that only minimally affect Waters of the U.S., less than 0.5 acre of impact, 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. In California, this certification or waiver is typically issued by the Regional Water Quality Control Board (RWQCB). However, in the case of tribal lands that are held in trust, this certification or waiver is issued by the Waters of the U.S..

According to the Navigable Waters Protection Rule, which came into effect June 22, 2020, the agencies interpret the term "waters of the United States" to encompass:

- The territorial seas and traditional navigable waters;
- Perennial and intermittent tributaries that contribute surface water flow to such waters;
- Certain lakes, ponds, and impoundments of jurisdictional waters; and
- Wetlands adjacent to other jurisdictional waters.

This latest Rule also excludes several waters and other features not mentioned in the above definition, including "ephemeral features that flow only in direct response to precipitation, including ephemeral streams, swales, gullies, rills, and pools."

## 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 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 ITPs 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 California Fish and Game 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

#### *2.2.4.1 Streambed Alteration Agreement*

Pursuant to Section 1602 of the California Fish and Game Code, a Streambed Alteration Agreement (SAA) application must be submitted 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" (CDFW 2021d). In Title 14 of the CCR, Section 1.72, the CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation."

The CDFW's jurisdiction includes drainages with a definable bed, bank, or channel with the jurisdictional limit being the top-of-bank. It also includes areas that support intermittent, perennial, or subsurface flows; supports fish or other aquatic life; or supports riparian or hydrophytic vegetation. It also includes areas that have a hydrologic source.

The CDFW will determine if the proposed actions will result in diversion, obstruction, or change of the natural flow, bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. The CDFW will submit a SAA that includes measures to protect affected fish and wildlife resources; this SAA is the final proposal agreed upon by the CDFW and the applicant.

#### *2.2.4.2 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 (USFWS 1918).

### 2.2.5 Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act requires "any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the State to file a report of discharge" with the RWQCB through State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures) (California Code of Regulations [CCR], title 23, § 3855) (RWQCB 2019). "Waters of the State" is defined as any surface water or groundwater, including saline waters, within the boundaries of the State (California Water Code § 13050[e]). Pollution is defined as an alteration of the quality of the waters of the state by waste to a degree that unreasonably affects its beneficial uses (California Water Code § 13050) and includes filling in waters of the State. Note that CCR, title 23, § 3855 applies only to individual water quality certifications, but the new Procedures extend the application of § 3855 to individual waste discharge requirements for discharges of dredged or fill material to Waters of the State and waivers thereof.

Regardless if a CWA Section 404 permit is not required for the project, a permit for impacts to Waters of the State may still be required under the Porter-Cologne Water Quality Control Act. To determine whether a project should be regulated pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB considers whether project activities could impact the quality of Waters of the State.

### 2.2.6 California Environmental Quality Act Significance Criteria

Section 15064.7 of the California Environmental Quality Act (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 CEQA 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;

- 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, 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 2021a) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI; CNPS 2021) 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 Victorville topographic quadrangle, plus the surrounding eight topographic quadrangles including Adelanto, Victorville NW, Helendale, Turtle Valley, Apple Valley North, Apple Valley South, Hesperia, and Baldy Mesa. The CNDDB and CNPSEI contain records of reported occurrences of federally and/or state-listed endangered, threatened, proposed endangered or threatened species, California Species of Special Concern (SSC), 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 2021b);
- *Special Animals List* (CDFW 2021c);
- *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012);
- *The Manual of California Vegetation*, 2nd Edition (Sawyer et al. 2009);
- Countywide – All Biotic Resources Overlay Map (County of San Bernardino 2012); and
- various online websites (e.g., Calflora 2021).

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, or are protected under either the federal ESA or California ESA;
- 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; 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 5 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 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project site; or a recently documented observation occurs within 5 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 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 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 and a 500-foot buffer to determine the vegetation communities and wildlife habitats present on the site. Areas that were not accessible by foot were scanned using binoculars for suitable habitat. 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, 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 biologists 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 2017), *Check-list of North American Birds* (Chesser et al. 2020), 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 Special-Status Plant Species Habitat Assessment

Concurrent with the biological reconnaissance survey, the special-status plant species habitat assessment was conducted by walking the entire Project site and a 100-foot buffer to determine if the Project site supports or has the potential to support special-status plants. Data were recorded on a GPS unit, field notebooks, and datasheet. Photographs were taken during the habitat assessment to provide visual representation of the habitat within the Project site. The purpose of the special-status plant species habitat assessment was to determine if the Project site supports or has the potential to support special-status plant species. The survey was conducted outside of the appropriate blooming periods for many of the targeted special-status plants (generally March/April – May/June). During the habitat assessment, the biologist assessed the soils, disturbances, elevation, and other abiotic factors. Common plant species were identified and recorded in order to maintain a compendium of plant species that occur on site. Vegetation communities were also documented to assess their potential for harboring special-status plant species.

### 3.2.3 Joshua Tree Assessment

The survey methods of the Joshua tree (*Yucca brevifolia*) assessment were similar to those described in Section 3.2.2 of this report. The purpose of the Joshua tree habitat assessment was to determine if the Project site supports or has the potential to support Joshua trees. During the habitat assessment, the biologists looked for presence of Joshua trees in all life stages, including dead or apparent dead

specimens. If a Joshua tree is detected, its location will be documented using Field Maps software enhanced with an external GPS device and photographs of any detected individuals were taken.

### 3.2.4 California Red-Legged Frog Habitat Assessment

The California red-legged frog (*Rana draytonii*) habitat assessment was conducted with similar methods to those described in Section 3.2.2 of this report. The purpose of the California red-legged frog habitat assessment was to determine if the Project site supports or has the potential to support California red-legged frog. The habitat assessment was conducted by a biologist who has been previously approved by the agencies to handle California red-legged frog as an authorized biologist. The habitat assessment performed for the Project followed the protocols described in the USFWS's *Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frogs* (USFWS 2005a) and was conducted within 1 mile of the Project site. During the habitat assessment, all potential habitats were evaluated to assess in-water habitats, shoreline structure, and adjacent uplands. Aquatic habitats and adjacent uplands were evaluated relative to their potential to support breeding activities, foraging activities, refugia and hibernacula, and as dispersal corridors. Prior to the site visit, CDFW's CNDDB (CDFW 2021a) was queried for nearby occurrences and a literature review was completed to determine historic status of California red-legged frogs in and around the Project vicinity. The Mojave River was surveyed on foot, where accessible, from the I-15 bridge to the area adjacent to Eva Dell Park. Due to areas of unknown property ownership and multiple homeless encampments located within the Mojave River channel, the areas downstream of the I-15 and those upstream of Eva Dell Park were not surveyed. Photographs were taken during the site visit to document current site conditions.

### 3.2.5 Desert Tortoise Habitat Assessment

The desert tortoise (*Gopherus agassizii*) habitat assessment was conducted with methods similar to those described in Section 3.2.2 of this report. The purpose of the desert tortoise habitat assessment was to determine if the Project site supports or has the potential to support desert tortoise. The habitat assessment was conducted by a biologist who has been previously approved by the agencies to handle tortoises as an authorized desert tortoise handler. Survey methods were consistent with the recommended habitat assessment methods found in *Preparing for Any Action That May Occur within the Range of the Mojave Desert Tortoise* (USFWS 2019). During the habitat assessment of the Project site and 500-foot buffer, the biologists visually evaluated specific features including topography, substrate texture, plant species diversity, vegetation composition and cover, presence of washes, and presence of potential forage plants that help identify suitable desert tortoise habitat. Additionally, the biologists noted potential disturbances including, but not limited to, off-highway vehicle (OHV) use, unauthorized trash dumping other anthropogenic features, and evidence of predators (e.g., common ravens [*Corvus corax*], canids).

### 3.2.6 Coast Horned Lizard Habitat Assessment

The survey methods of the coast horned lizard (*Phrynosoma blainvillii*) habitat assessment were similar to those described in Section 3.2.2 of this report. The purpose of the coast horned lizard habitat assessment was to determine if the Project site supports or has the potential to support coast horned lizard. The Project site and a 500-foot buffer were also assessed for its potential to support ample prey base for this

species, as the coast horned lizard feeds primarily on native ant species. The presence of nonnative ant species can eliminate native harvester ant species which the coast horned lizard preys on. During the habitat assessment, biologists looked around shrubs, rocks, and harvester ant mounds for horned lizards and their sign including tracks and scat.

### 3.2.7 Western Pond Turtle Habitat Assessment

The western pond turtle (*Emys marmorata*) habitat assessment was conducted with methods similar to those described in Section 3.2.2 of this report. The purpose of the western pond turtle habitat assessment was to determine if the Project site supports or has the potential to support western pond turtle. During the habitat assessment, the biologist searched the Project site and a 500-foot buffer for aquatic habitats and adjacent uplands relative to their potential to support pond turtle basking and foraging activities, refugia, and dispersal corridors. Within the Mojave River in the survey buffer areas, a visual survey was conducted using binoculars to scan potential basking locations for the presence of turtles.

### 3.2.8 Burrowing Owl Habitat Assessment

The habitat assessment for the burrowing owl (*Athene cunicularia*) was conducted with methods similar to those described in Section 3.2.2 of this report. The purpose of the burrowing owl habitat assessment was to determine if the Project site supports or has the potential to support burrowing owl. During the habitat assessment of the Project site and 500-foot buffer, biologists looked for mammal burrows and inspected them for signs of burrowing owl occupation (e.g., whitewash, feathers, pellets, bones of prey). Biologists documented other factors characteristic of burrowing owl habitat including vegetation cover and presence of prey animals (i.e., California ground squirrels).

### 3.2.9 Southwestern Willow Flycatcher Habitat Assessment

The survey methods of the southwestern willow flycatcher (*Empidonax traillii extimus*) habitat assessment were similar to those described in Section 3.2.2 of this report. The purpose of the southwestern willow flycatcher habitat assessment was to determine if the Project site supports or has the potential to support southwestern willow flycatcher. An ECORP biologist experienced with special-status avian species habitat, identification, behavior, sign, and vocalizations conducted the habitat assessment, of the Project site and 500-foot buffer, for southwestern willow flycatcher. During the habitat assessment, the biologist looked for areas of dense riparian vegetation such as cottonwood (*Populus* spp.), willow (*Salix* spp.), or salt cedar (*Tamarix* spp.) vegetation communities near sources of water or saturated soil. Photographs were taken during the assessment to provide visual representation of the various vegetation communities within the Project site.

### 3.2.10 Least Bell's Vireo Habitat Assessment

The least Bell's vireo (*Vireo bellii pusillus*) habitat assessment was conducted with methods similar to those described in Section 3.2.2 of this report. The purpose of the least Bell's vireo habitat assessment was to determine if the Project site supports or has the potential to support least Bell's vireo. An ECORP biologist experienced with special-status avian species habitat, identification, behavior, sign, and vocalizations conducted the habitat assessment for least Bell's vireo on the Project site and a 500-foot buffer. During

the habitat assessment, the biologist looked for dense, shrubby riparian vegetation suitable for least Bell's vireo breeding. Photographs were taken during the assessment to provide visual representation of the various vegetation communities within the Project site.

### 3.2.11 Bat Habitat Assessment

The habitat assessment for bat was conducted with methods similar to those described in Section 3.2.2 of this report. The purpose of the bat habitat assessment was to determine if the Project site supports or has the potential to support bats. During the habitat assessment of the Project site and a 500-foot buffer, the biologists looked for potential roost sites including trees with dense foliage, crevices, cavities, or exfoliating bark as well as manmade structures including bridges, culverts, and buildings. Potential roost sites were observed and inspected for signs of roosting bats including guano, staining, and chatter.

### 3.2.12 Mohave Ground Squirrel Habitat Assessment

The habitat assessment for Mohave ground squirrel (*Xerospermophilus mohavensis*) was conducted with methods similar to those described in Section 3.2.2 of this report. The purpose of the Mohave ground squirrel habitat assessment was to determine if the Project site supports or has the potential to support Mohave ground squirrels. An ECORP biologist who holds Memorandum of Understanding (MOU) with CDFW for performing Mohave ground squirrel studies conducted the Mohave ground squirrel habitat suitability assessment for the Project. The Mohave ground squirrel's most active period above ground is between March and April, which is optimal for conducting a Mohave ground squirrel habitat assessment, as designated in the *Mohave Ground Squirrel Survey Guidelines* (California Department of Fish and Game [CDFG] 2010). In addition to using the currently documented Mohave ground squirrel range boundaries, the biologist determined habitat suitability based on the natural history and habitat requirements of the Mohave ground squirrel. During the habitat assessment, the biologist surveyed areas on foot to characterize and identify if any suitable habitat for Mohave ground squirrel was present on the Project site and within a 500-foot buffer. Photographs were taken during the survey to provide visual representation of the various vegetation communities within the Project boundaries.

## 4.0 RESULTS

Summarized below are the results of the literature review and field surveys, 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 searches identified 10 special-status plant species and 25 special-status 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. The Project site is located within the San Bernardino County biotic overlay for Mohave ground squirrel, burrowing owl, and desert tortoise – sparse population.

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

The eastern edge of the Project site is located within USFWS-designated critical habitat for southwestern willow flycatcher (Figure 3). The Project site is not located within or adjacent to other areas of designated critical habitat for any federally listed species.

## 4.2 Biological Reconnaissance Survey

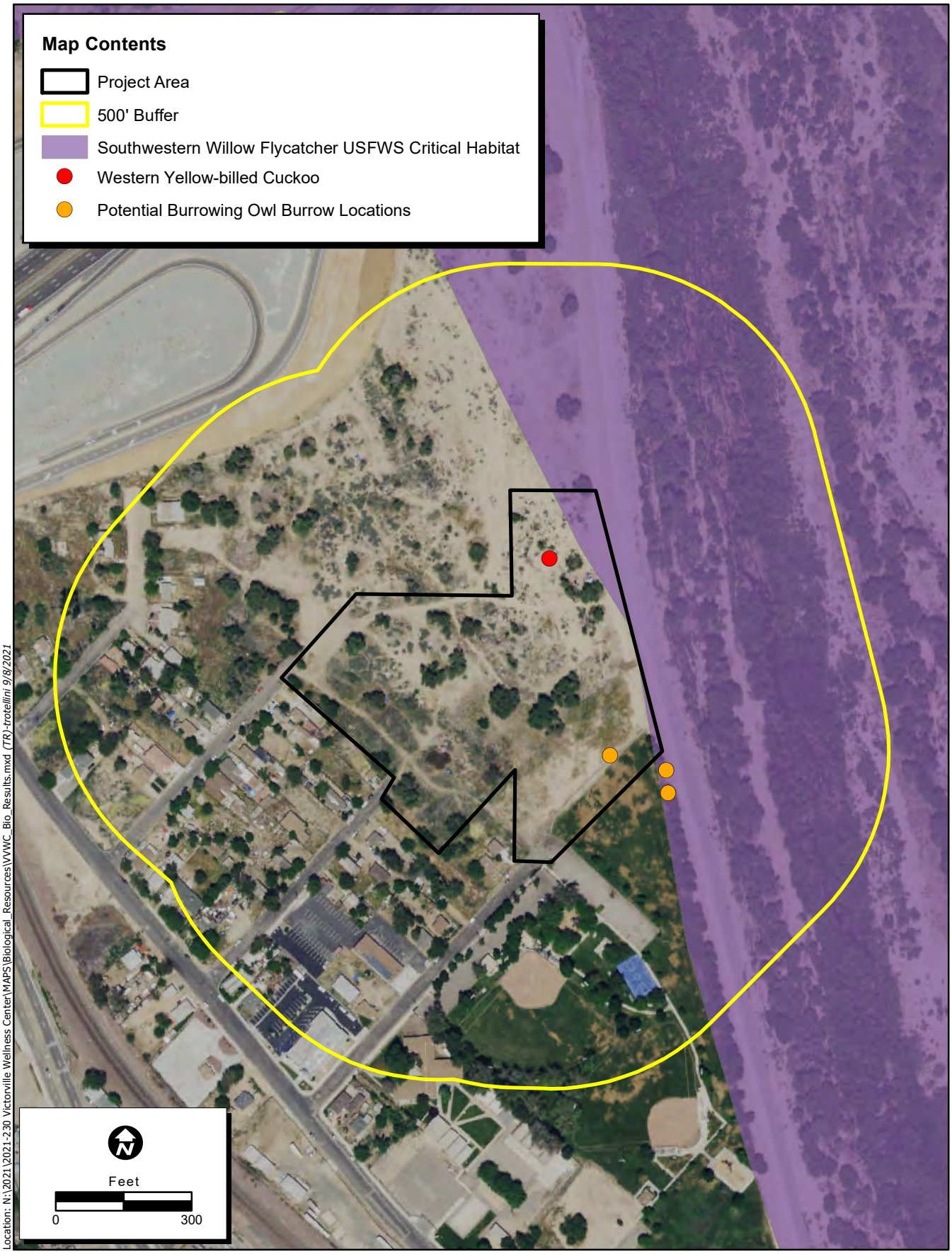
The biological reconnaissance survey was conducted by ECORP biologists with extensive experience conducting reconnaissance- and protocol-level surveys for desert wildlife and plant species. Summarized below are the results of the biological reconnaissance survey, including site characteristics, plant communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors). Dates of surveys, names of biologists, and weather conditions are summarized in Table 1.

**Table 1. Weather Conditions During the Survey**

| Date | Surveyors | Time | | Temperature (˚F) | | Cloud Cover (%) | | Wind Speed (mph) | |
|---|---|---|---|---|---|---|---|---|---|
| | | start | end | min | max | min | max | min | max |
| 8/17/2021 | Adam Schroeder<br>Taylor Dee | 0630 | 1045 | 75 | 91 | 0 | 0 | 0-1 | 2-5 |
| 8/31/2021 | Phillip Wasz | 0730 | 0800 | 73 | 74 | 0 | 0 | 0-3 | 0-3 |

### 4.2.1 Property Characteristics

The Project site consists of a vacant property with an open canopy composed of mature Fremont cottonwoods (*Populus fremontii)* and a shrub layer that is primarily composed of fourwing saltbush (*Atriplex canescens)* and rubber rabbitbrush (*Ericameria nauseosa*) shrubs. The entire Project site is heavily disturbed by unauthorized trash dumping, off-leash dogs, evidence of previous fire activity, train noise, illegal camping activity, and dirt roads with evidence of previous grading along the eastern edge of the Project site. The nearby I-15 provides additional disturbance in the form of increased noise and frequent human and vehicular activity. The Project site is bounded by disturbed vacant land and I-15 to the north, residential development to the west, and residential development and Eva Dell Park to the south. The Mojave River is located approximately 70 feet to the east with a levee and paved path separating the Project site from the river. Soils on the Project site consisted of Cajon sand (2 to 9 percent slopes) throughout (NRCS 2021). Representative site photographs are presented in Appendix A.




Map Date: 9/2/2021

*Service Layer Credits:* Photo Source: NAIP (2020)

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**Figure 3. Biological Survey Results**

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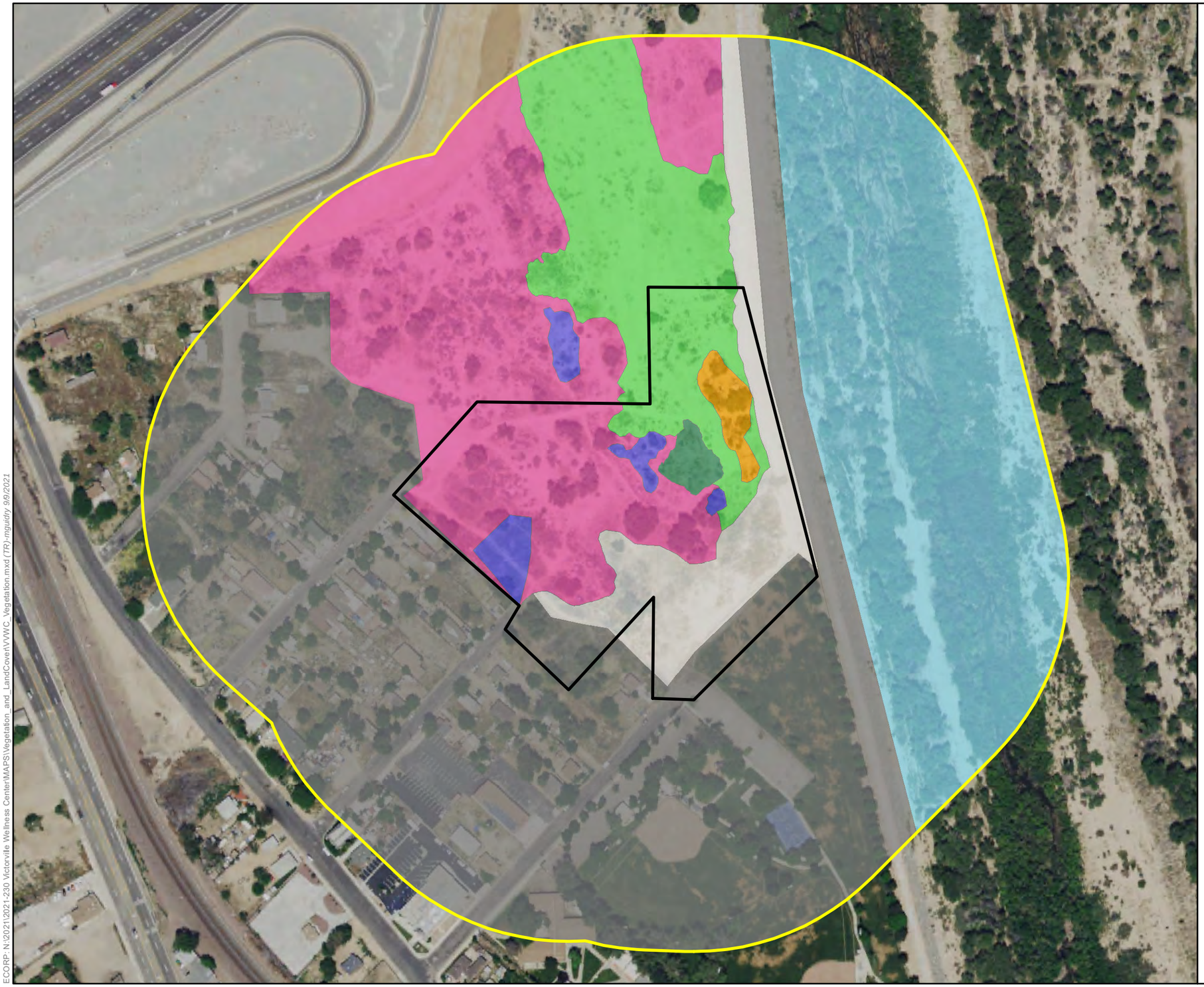
### 4.2.2 Vegetation Communities

Six native vegetation communities were documented during the habitat assessment (Figure 4). The Project site, including all vegetation communities, was generally classified as disturbed due to the high volume of trash and evidence of dumping, multiple dirt roads, illegal camping activity, and the prevalence of nonnative vegetation throughout the site. Native vegetation communities included disturbed scale broom scrub (*Lepidospartum squamatum* Shrubland Alliance), disturbed fourwing saltbush scrub (*Atriplex canescens* Shrubland Alliance), disturbed rubber rabbitbrush scrub (*Ericameria nauseosa* Shrubland Alliance), disturbed yerba mansa – sedge (*Anemopsis californica* – *Carex* sp.) alkaline flats, and disturbed Fremont cottonwood forest and woodland (*Populus fremontii - Fraxinus velutina - Salix gooddingii* Forest & Woodland Alliance). All vegetation communities were present within the boundaries of Project site with the exception of the Fremont cottonwood forest and woodland, which was present only within the 500-foot buffer along the Mojave River north and northeast of the levee and the Project site.

Two land cover types, disturbed areas and developed/landscaped areas, were mapped within the Project site and in the surrounding 500-foot buffer. Table 2 lists the associated acreage for vegetation communities and land cover that occurs on the Project site. Figure 4 shows the locations of the vegetation communities and land cover on and adjacent to the Project site. Classification of the vegetation communities on the site generally follows the Manual of California Vegetation (Sawyer et al. 2009) and is described in detail below. Two sensitive vegetation communities are present on the Project site, disturbed scale broom scrub, which has a CDFW State Rarity Rank of S3 (rankings of S1 through S3 are considered sensitive by CDFW: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities), and yerba mansa – sedge alkaline flats, which has a State Rarity Rank of S2. Both communities are described in more detail below.

**Table 2. Vegetation Communities and Land Cover Acreage**

| Land cover type | Acreage on Site | Acreage within 500-foot buffer |
|---|---|---|
| Disturbed scale broom scrub | 1.33 | 3.77 |
| Disturbed fourwing saltbush scrub | 3.33 | 7.00 |
| Disturbed rubber rabbitbrush scrub | 0.24 | 0 |
| Disturbed yerba mansa – sedge alkaline flats | 0.44 | 0.16 |
| Sparse mulefat thickets | 0.33 | 0 |
| Disturbed | 2.13 | 0.79 |
| Developed/landscaped | 1.09 | 24.28 |
| **TOTAL** | 8.89 | 36 |



**Map Features**

- Project Area
- 500' Buffer

Vegetation Communities and Land Cover Type

- Disturbed Fourwing Saltbush Scrub
- Disturbed Fremont Cottonwood Forest and Woodland
- Disturbed Rubber Rabbitbrush Scrub
- Disturbed Scale Broom Scrub
- Disturbed Yerba Mansa – Sedge Alkaline Flats
- Sparse Mulefat Thickets
- Disturbed
- Developed/Landscaped

Sources: NAIP (2020)

*Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community*


ECORP: N:\2021\2021-230 Victorville Wellness Center\MAPS\Vegetation_and_LandCover\VVWC_Vegetation.mxd (TR) mguidry 9/9/2021

Map Date: 9/8/2021

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Scale in Feet
0 200

**Figure 4. Vegetation Communities and Land Cover Type**

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#### *4.2.2.1 Disturbed Scale Broom Scrub (Lepidospartum squamatum Shrubland Alliance)*

Disturbed scale broom scrub is a vegetation type consisting of shrubs less than 6.5 feet in height with an open to continuous canopy and a variable herbaceous layer that may be grassy. Disturbed scale broom scrub occurs at elevations between 164 feet above msl and 4,921 feet above msl. Scale broom scrub is considered a state-sensitive vegetation community and has a State Rarity Rank of S3, indicating that it is vulnerable (Sawyer et al. 2009). This community occurs on the central northern side of the Project site and 500-foot buffer. Disturbances within scale broom scrub included large amounts of trash, illegal camping activity, and vehicular tracks. Within the Project boundaries, plant species that are associated with this vegetation community include scale broom (*Lepidospartum squamatum*), giant woollystar (*Eriastrum densifolium*), yerba santa (*Eriodictyon californicum*), as well as Fremont cottonwoods at low cover scattered throughout the community.

#### *4.2.2.2 Disturbed Fourwing Saltbush Scrub (Atriplex canescens Shrubland Alliance)*

Disturbed fourwing saltbush scrub is a vegetation community characterized by shrubs less than 9.8 feet in height with an open to intermittent canopy and a variable herbaceous layer with non-native grasses and seasonal herbs. Disturbed fourwing saltbush scrub occurs at elevations between 246 feet below msl and 4,921 feet above msl. Disturbed fourwing saltbush scrub was present throughout the Project site, especially on the northwestern half of the site and within the 500-foot buffer to the west and north. This vegetation type was determined to be disturbed due to the nonnative vegetation, presence of multiple dump sites, vehicular tracks, and illegal camping activity. Within the Project boundaries, plant species that are associated with this vegetation community include fourwing saltbush, rubber rabbitbrush, Russian thistle (*Salsola tragus*), and Bermuda grass (*Cynodon dactylon*), as well as Fremont cottonwoods at low cover scattered throughout the community.

#### *4.2.2.3 Disturbed Rubber Rabbitbrush Scrub (Ericameria nauseosa Shrubland Alliance)*

Disturbed rubber rabbitbrush scrub is a vegetation type consisting of shrubs less than 9.8 feet in height with an open to continuous shrub canopy where rubber rabbitbrush is dominate or co-dominate. The herbaceous layer is sparse or composed of grasses. Disturbed rubber rabbitbrush scrub occurs at elevations between 0 and 10,499 feet above msl. Disturbed rubber rabbitbrush scrub was present in area in the north central portion the Project site. This community was disturbed primarily due to the large quantities of trash and dirt roads. Within the Project boundaries, plant species that are associated with this vegetation community include rubber rabbitbrush, Russian thistle, and Bermuda grass.

#### *4.2.2.4 Disturbed Yerba Mansa - Sedge (Anemopsis californica – Carex sp.) Alkaline Flats*

Disturbed yerba mansa – sedge alkaline flats (yerba mansa alkaline flats) was mapped on and adjacent to the Project site as a subset of the yerba mansa – Nuttall's sunflower – Nevada goldenrod alkaline wet meadows (*Anemopsis californica – Helianthus nuttallii – Solidago spectabilis* Herbaceous Alliance); however, the community present on the Project site does not contain the same characteristics as the

herbaceous alliance as described in Sawyer et al. 2009 and is thus included as a modified subset of that community. The disturbed yerba mansa alkaline flats community occurred on the Project site in three different areas across the northern half of the site and in one location north of the site within the 500-foot buffer. This community was identified by the presence of yerba mansa (*Anemopsis californica*) and sedge (*Carex* sp.) on the Project site and was associated with apparent depressions or changes in the topography of the site that indicated these areas receive water on a more frequent basis than the rest of the site. Additional plant species observed in this community include Bermuda grass, rubber rabbitbrush, fourwing saltbush, and Fremont cottonwood at low cover in the form of several scattered trees. This community was extremely disturbed on the Project site due to high volume of trash, the presence of multiple dump sites, and dirt roads.

The yerba mansa – Nuttall's sunflower – Nevada goldenrod alkaline wet meadows has a State Rarity Ranking of S2, meaning it is imperiled in California. Due to the association of the community on the Project site to this vegetation community, it is presumed that the yerba mansa – sedge alkaline flats is also considered to have a State Rarity Ranking of S2.

#### *4.2.2.5 Sparse Mulefat Thickets – (Baccharis salicifolia Shrubland Alliance)*

Sparse mulefat thickets is a vegetation type characterized by a continuous shrub canopy with two layers where mulefat (*Baccharis salicifolia*) is dominant or co-dominant in the shrub canopy. The herbaceous layer in sparse mulefat thickets occurs at elevations between 0 and 4,101 feet above msl. This community was present in one very small patch in the central eastern portion of the Project site. The mulefat thickets consisted mainly of mulefat and narrowleaf willow (*Salix exigua*) and were classified as sparse due to their patchiness and low quantity of shrubs. Additionally, the limited size, lack of a contiguous tree and shrub canopy, and high level of disturbance caused by a large unauthorized trash dumping site and vehicular tracks of this community further contributed to its low quality of habitat. Other plant species associated with this community include Fremont cottonwood in low cover in the form of several scattered trees.

#### *4.2.2.6 Disturbed*

Disturbed is not a vegetation classification, but rather a land cover type. The area mapped as disturbed was largely devoid of native vegetation, were dominated by open areas or non-native weedy and ruderal vegetation. The eastern half of the Project site was classified as disturbed. The disturbed designation indicates a location that has experienced disturbances, typically associated with human activities. Disturbed areas may be actively maintained to be free of vegetation or have been compacted or disked to such a degree that native vegetation is very sparse. Plants present in this land cover type within the Project site included non-native weedy species such as Russian thistle, Sahara mustard (*Brassica tournefortii*), redstem filaree (*Erodium cicutarium*), wild licorice (*Glycyrrhiza lepidota*), tamarisk (*Tamarix ramosissima*), and Bermuda grass but also included one native species, Goodding's black willow (*Salix gooddingii*) in the form of one small tree. Several nonnative and ornamental trees including elm (*Ulmus* sp.) and velvet ash (*Fraxinus velutina*) were also interspersed throughout the southwest portion of the disturbed area on the Project site where the site was adjacent to residential developments. The southeastern portion of the disturbed area, adjacent to Eva Dell Park, appeared the most disturbed based

on the large areas of bare ground and prevalence of weedy vegetation characteristic of disturbed places (i.e., Russian thistle, Sahara mustard) and it appeared the area had been cleared and graded in the past.

#### *4.2.2.7 Developed/Landscaped*

Developed/landscaped areas are not a vegetation classification, but rather a land cover type. A developed/landscaped area was present within the Project Site along the southeastern boundary and within the surrounding vicinity (500-foot buffer) to the west, southwest, south, and along the levee to the northeast. This land cover type consisted of three different areas. The first was a paved parking lot and landscaped areas (i.e., mowed grassy field, ornamental trees) associated with Eva Dell Park inside the Project site along the southeastern boundary and within the 500-foot buffer to the south and southeast. The second area included the levee inside the Project site along the northeastern boundary immediately southwest of the Mojave River. The third area was composed of the neighboring residential developments outside the Project site and inside the 500-foot buffer to the west and southwest.

### 4.2.3 Plants

Plant species observed on the Project site were generally characteristic of disturbed native vegetation communities. Dominant species included Fremont cottonwood and fourwing saltbush. Nonnative species observed on the Project site included Saharan mustard, Bermuda grass, Russian thistle, and tamarisk. Due to the disturbed nature of the entire Project site, the property represents relatively low-quality habitat for most plant species, including common ones. A full list of plant species observed on and 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 the vegetation communities present on the Project site on the Project site and the time of the year in which the survey was conducted. One mammal species was observed in the vicinity of the Project site: North American beaver (*Castor canadensis*). Eighteen bird species were detected on or in the vicinity of the Project site; commonly observed species included verdin (*Auriparus flaviceps*), red-shouldered hawk (*Buteo lineatus*), Anna's hummingbird (*Calypte anna*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), and northern mockingbird (*Mimus polyglottos*). One federally and state-listed bird species was observed during the survey, the western yellow-billed cuckoo (*Coccyzus americanus occidentalis*). Two reptile species were also detected on and in the vicinity of the Project site, including western fence lizard (*Sceloporus occidentalis*) and western side-blotched lizard (*Uta stansburiana elegans*). One amphibian species was also detected in the vicinity of the Project site, American bullfrog (*Lithobates catesbeianus*). Due to the level of human activity, development in the area, and the disturbed nature of the Project site, the property represents relatively low-quality habitat for most wildlife species, including common ones. 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 10 special-status plant species and 25 special-status 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.

#### *4.2.5.1 Special-Status Plants*

There were 10 special-status plant species that appeared in the literature review and database searches for the Project site (CDFW 2021a; CNPS 2021). 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 Rare Plant Rank (CRPR) designations are found in Table 3. Of the 10 special-status plants identified, one was found to have a moderate potential to occur and two were found to have a low potential to occur. The remaining seven species identified in the literature review are presumed absent from the Project site. The potential to occur for plant species can be found in Appendix D.

**Table 3. CRPR 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 | Plants Presumed Extirpated in California, But Common Elsewhere |
| 2B | Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere |
| 3 | Plants about which more information is needed; a review list |
| 4 | Plants of limited distribution; a watch list |
| List .1, .2 and .3 extension meanings: | |
| .1 | Seriously threatened in California (over 80 percent of occurrences threatened / high degree and immediacy of threat) |
| .2 | Moderately threatened in California (20 to 80 percent occurrences threatened / moderate degree and immediacy of threat) |
| .3 | Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known) |

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 (CDFG 1984). This interpretation is inconsistent with other definitions.

For the purposes of this study, the results of the literature review were limited to plant species occurring within a nine-quadrangle search of the Project site. With various habitat types occurring within the nine-

quadrangle search, several species appeared in the literature review results that had no potential to occur on or near the Project site. Additionally, for the purposes of this study, plant species with a CRPR of 1A species were eliminated from the analysis because they are presumed to be extirpated from California. Additionally, CRPR 3 or 4 species were eliminated from the analysis because these rankings are considered a review list and a watch list, respectively.

#### *4.2.5.2 Plant Species with a Moderate Potential to Occur*

The following species has 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 5 miles of the site; a historic documented observation was recorded within 5 miles of the Project site; or a known recently documented occurrence has been reported within 5 miles of the site and marginal or limited amounts of habitat occur onsite.

**San Bernardino Aster (*Symphyotrichum defoliatum*)**

San Bernardino aster is not a federally or state-listed species but does have a CRPR status of 1B.2 (plants rare, threatened, or endangered in California; CNPS 2021). It is a perennial rhizomatous herb that is endemic to California. This species is typically found in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and valley and foothill grassland (vernally mesic) habitat. The species is often found in disturbed areas and near ditches, streams, or springs. Marginally suitable habitat is present on the Project site in the scattered disturbed yerba mansa – sedge alkaline flats and sparse mule fat thickets communities. This species was documented 1.6 miles southeast of the Project site in 1991 (Occurrence # 39; CDFW 2021a). Based on the presence of marginally suitable habitat and the documented record of the species within 5 miles of the Project site, this species has a moderate potential to occur on the Project site.

#### *4.2.5.3 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 these species occurs within the disturbed scale broom scrub and disturbed fourwing saltbush scrub on the Project site and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project site; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search. The existing disturbances in the disturbed scale broom scrub and disturbed fourwing saltbush scrub on the Project site likely preclude these species from occurring.

- Booth's evening-primrose (*Eremothera boothii* ssp. *Boothii*), CRPR 2B.3; and
- Beaver dam breadroot (*Pediomelum castoreum*), CRPR 1B.2.

#### *4.2.5.4 Plant Species Presumed Absent*

The following species were presumed absent from the Project site due to the lack of suitable habitat (including elevation and soils) on the Project site or because the Project is located outside of the known range for the species:

- Pinyon rockcress (*Boechera dispar*), CRPR 2B.3;
- Desert cymopterus (*Cymopterus deserticola*), CRPR 1B.2;
- Mojave monkeyflower (*Diplacus mohavensis*), CRPR 1B.2;
- Sagebrush loeflingia (*Loeflingia squarrosa* var. *artemisiarum*), CRPR 2B.2;
- Short-joint beavertail (*Opuntia basilaris* var. *brachyclada*), CRPR 1B.2;
- Latimer's woodland-gilia (*Saltugilia latimeri*), CRPR 1B.2; and
- Southern mountains skullcap (*Scutellaria bolanderi* ssp. *austromontana*), CRPR 1B.2.

#### *4.2.5.5 Special-Status Wildlife*

Of the 25 special-status wildlife species identified in the literature review, one was present on the Project site, two have moderate potential to occur, and nine have a low potential to occur. The remaining 13 species are presumed absent from the Project site. The potential to occur for wildlife species can be found in Appendix E.

#### *4.2.5.6 Wildlife Species that are Present*

**Western Yellow-Billed Cuckoo**

Western yellow-billed cuckoo is a federally listed (threatened) species and a state-listed (endangered) species. The western yellow-billed cuckoo is found in riparian forest habitat. The species frequently nests along the broad (greater than or equal to 12.4 acres) patches of multi-layered riparian woodland, often dominated by willows and cottonwoods of lower flood bottoms of larger river systems. The bird feeds on caterpillars when available and other insects such as cicadas, beetles, katydids, and grasshoppers. Marginally suitable foraging habitat is present on the Project site; however, it is of low quality compared to the foraging habitat located adjacent to the Project site, approximately 70 feet east in the Mojave River, which provides much higher quality foraging habitat for this species. No suitable nesting habitat is present on the Project site, but some suitable nesting habitat is located in the Mojave River adjacent to the eastern boundary of the site. The literature review identified one historical record that occurred 1.2 miles southwest from 1978 (Occurrence # 138; CDFW 2021a).

During the biological reconnaissance survey, one western yellow-billed cuckoo individual was observed perched along the eastern boundary of the Project site and then flew into the dense canopy of a Fremont cottonwood also on the Project site. Although there is no breeding habitat on the Project site, the adjacent Mojave River provides suitable nesting habitat approximately 70 feet east of the Project site. The location of the western yellow-billed cuckoo observation is depicted in Figure 4.

### *4.2.5.7 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 5 miles of the site; a historic documented observation was recorded within 5 miles of the Project site; or a known recently documented occurrence has been reported within 5 miles of the site and marginal or limited amounts of habitat occurs onsite.

#### **Burrowing Owl**

Burrowing owl is a CDFW SSC. Burrowing owls historically occurred throughout much of California and the western United States; however, many former California populations have been extirpated. The burrowing owl inhabits open habitats, primarily grasslands and deserts. Burrowing owls require burrows for roosting and nesting cover. Although they often nest in abandoned California ground squirrel (*Otospermophilus beecheyi*) burrows, they will also use other small mammal burrows, pipes, culverts, and nest boxes, particularly where burrows are scarce (Zeiner et al. 1990). Twenty-two recent records of the species occur within 5 miles of the Project site, with the closest being approximately 2 miles southwest of the Project site and documented in 2006 (CDFW 2021a). During the biological survey, two potential burrowing owl burrows were observed at one location on the Project site and four potential burrowing owl burrows were found at two locations immediately south of the Project site within the 500-foot buffer. The locations of the potential burrowing owl burrows are depicted on Figure 4. The soil on the Project site is friable and sandy, which is suitable for burrowing. There are California ground squirrel burrows along the levee on the eastern boundary and on the southern boundary which could be used by this species for burrowing. Other small mammal burrows and rabbit burrows are present less frequently throughout the northern portion of the Project site and within the 500-foot buffer to the north. Although evidence was present of small mammals and ground squirrels, there was not enough of an abundance of prey present at the time of the survey typical of occupied burrowing owl habitat. The Project site has a high level of disturbance including unauthorized trash dumping, dirt roads, and illegal camping activity which lowers the suitability of the habitat for this species. Based on the marginally suitable burrowing habitat present on the Project site, including the two potential burrowing owl burrows within the Project boundaries, and the recent records of the species within 5 miles of the Project site, this species has a moderate potential to occur on the Project site.

#### **Pallid Bat (*Antrozous pallidus*)**

Pallid bat is a CDFW SSC. The pallid bat is found in chaparral, coastal scrub, desert wash, Great Basin grassland and scrub, Mojavean desert scrub, riparian woodland, Sonoran desert scrub, upper montane coniferous forest, and valley and foothill grassland habitats. The species is most commonly found in open, dry habitats with rocky areas for roosting. Although the species prefers rocky outcrops for roost, they are crevice roosters that can also roost in live trees and snags that have holes and cavities, in crevices formed by exfoliating tree bark, caves, rock crevices, mines, and buildings. The pallid bat is very sensitive to disturbance of roosting sites. The diet of the species consists mainly of large flying and ground-dwelling insects, moths, spiders, scorpions, and centipedes and will sometimes eat small lizards and mice. The cottonwood trees and snags observed on the Project site during the biological survey provide suitable

roosting habitat for the species. One record of the species was documented approximately 5.6 miles southeast of the Project site in 2016 (Occurrence # 429; CDFW 2021a). Based on the suitable roosting habitat present on the Project site and the recent record of the species a little over 5 miles from the Project site, this species has a moderate potential to occur on the Project site.

#### *4.2.5.8 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 site and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project site; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search.

- Long-eared owl (*Asio otus*), CDFW SSC;
- Swainson's hawk (*Buteo swainsoni*), state-listed (threatened);
- Southwestern willow flycatcher, federally listed (endangered), state-listed (endangered);
- Yellow-breasted chat (*Icteria virens*), CDFW SSC;
- Loggerhead shrike (*Lanius ludovicianus*), CDFW SSC;
- Summer tanager (*Piranga rubra*), CDFW SSC;
- Yellow warbler (*Setophaga petechia*), CDFW SSC;
- Least Bell's vireo, federally listed (endangered), state-listed (endangered); and
- Townsend's big-eared bat (*Corynorhinus townsendii*), CDFW SSC.

#### *4.2.5.9 Wildlife Species Presumed Absent*

The following species were presumed absent from the Project site due to lack or suitable habitat and absence of species records in the vicinity of the Project site:

- Crotch bumble bee (*Bombus crotchii*), candidate for state-listing;
- Mohave tui chub (*Siphateles bicolor mohavensis*), federally listed (endangered), state-listed (endangered), CDFW FP;
- Arroyo toad (*Anaxyrus californicus*), federally listed (endangered), CDFW SSC;
- California red-legged frog, federally listed (threatened), CDFW SSC;
- Western pond turtle, CDFW SSC;
- Desert tortoise, federally listed (threatened), state-listed (threatened);
- Coast horned lizard, CDFW SSC;

- Tricolored blackbird (*Agelaius tricolor*), state-listed (threatened), CDFW SSC;
- Golden eagle (*Aquila chrysaetos*), CDFW Fully Protected;
- Gray vireo (*Vireo vicinior*), CDFW SSC;
- Pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*), CDFW SSC;
- Mohave River vole (*Microtus californicus mohavensis*), CDFW SSC; and
- Mohave ground squirrel, state-listed (threatened).

### 4.2.6 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 throughout the Project site, including in the Fremont cottonwoods and some of the larger shrubs. Ground nesters, such as mourning dove (*Zenaida macroura*), may use the areas underneath and between shrubs for nesting. Raptors could use the Fremont cottonwoods on the Project site as nesting substrates; however, raptors would be expected to primarily nest adjacent to the site within the Mojave River due to the presence of higher quality habitat and likely abundance of prey items. Additionally, suitable nesting habitat is present within the 500-buffer in the Mojave River where there is a thick understory and dense tree canopy. Therefore, nesting birds could use the Project site during the nesting bird season (typically February 1 through August 31).

### 4.2.7 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 minimal wildlife movement opportunities. Rural residential development borders the Project site to the west and a paved walkway and levee with rip-rap border the Project site to the east. The I-15 on ramp is located approximately 520 feet north of the Project site and Eva Dell Park borders the Project site to the south. The Mojave River, a major drainage, is located approximately 70 feet east of the Project site and is more likely to be used by wildlife as a movement corridor. The undeveloped Project site is also isolated from large, contiguous blocks of native habitat, further limiting its capability to provide wildlife movement

opportunities in the area. Additionally, the disturbances from off-highway vehicles using the dirt roads as well as the lack of vegetative cover would likely deter wildlife from moving through the area using the Project site. The Project site is not considered a linkage or corridor between natural habitat areas. However, the Mojave River adjacent to the Project site is considered a wildlife movement corridor.

### 4.2.8 Special-Status Plant Species Habitat Assessment

The Project site was found to not provide suitable habitat for most special-status plant species due to the presence of various anthropogenic disturbances throughout the site. The disturbed scale broom scrub, disturbed fourwing saltbush scrub, and disturbed rubber rabbitbrush scrub communities on the site do not provide suitable habitat for the special-status plant species. However, one special-status plant species, San Bernardino aster, was found to have a moderate potential to occur on the Project site in the scattered disturbed yerba mansa – sedge alkaline flats and sparse mule fat thickets communities. Although a focused rare plant survey was not conducted and the survey was conducted outside the blooming period for many special-status plant species, no special-status plant species or evidence of presence (i.e., dried skeletons) of special-status plant species were observed during the habitat assessment.

### 4.2.9 Joshua Tree Habitat Assessment

No live or dead Joshua trees were observed within the Project site or 500-foot buffer during the Joshua tree habitat assessment.

### 4.2.10 California Red-Legged Frog Habitat Assessment

The Project site falls within the historic range of the California red-legged frog but is not within the current range of the species. The Project site is within the USFWS Southern Transverse and Peninsular Ranges Recovery Unit 8 (USFWS 2002) but is not located within or adjacent to designated California red-legged frog critical habitat. The closest critical habitat unit (Critical Habitat Unit LOS-1) is located approximately 65 miles to the west in Los Angeles County. A literature review turned up one documented occurrence of CRLF located approximately 0.8 mile southeast of the Project site, however this occurrence is listed as a historical location with an unknown observation date (Occurrence # 13). No suitable aquatic habitat including ponded water or other water bodies were identified within the Project site. The Mojave River is directly adjacent to the Project site to the east and contains suitable habitat consisting of some area with surface water and emergent aquatic vegetation. The entire Mojave River channel is low gradient and consists of small open water pools (less than 20 feet across) surrounded by thick vegetation consisting of willow (*Salix* sp.), cattail (*Typha* sp.), and tamarisk with some stands of Arundo (*Arundo donax*) also present. The surface water in the river appeared to be stagnant at the time of the survey, and the substrate was made up of fine sediment. The banks throughout the river were heavily vegetated with grasses, shrubs, and a mature riparian woodland canopy (e.g., sycamore and willow). Incidental observations included western mosquitofish (*Gambusia affinis*), old wood chews from North American beaver, and American bullfrog vocalizations. The Project site does not provide suitable habitat for California red-legged frog.

### 4.2.11 Coast Horned Lizard Habitat Assessment

The Project site contains some pockets of marginally suitable habitat in sandy areas adjacent to shrubs and small boulders where the loose, sandy soils are ideal for horned lizards to bury themselves. Harvester ants, main prey item for the horned lizard, were also observed on the Project site. While there are small pockets of habitat that occur on the Project site, these pockets are intermixed with heavy disturbance in the form of vehicle tracks, unauthorized trash dumping, illegal camping activity, and evidence of fire. Additionally, the areas surrounding the Project site are not suitable for coast horned lizard and essentially isolate the Project site from surrounding areas that may provide suitable habitat for the species. These unsuitable habitat areas within the survey buffer include the I-15 and associated on/offramps to the north and northwest, residential homes to the west and southwest, a park to the south, and a levee to the east. Beyond the levee, the Mojave River channel provides marginal habitat for the species due to heavy vegetation cover. There may be some areas in the channel with better habitat, but the levee is likely to form a barrier to movement due to large rip rap boulder that make up the eastern edge of the levee wall. Although a focused survey was not performed, no individual horned lizards or sign (i.e. tracks, scat) were observed on the Project site or in the 500-foot buffer during the habitat assessment. Overall, the Project site provides marginally suitable habitat for the coast horned lizard.

### 4.2.12 Desert Tortoise Habitat Assessment

Based on site disturbances, soil characteristics, vegetation composition and cover, habitat fragmentation, and topography, the Project site and 500-foot buffer were determined to be unsuitable as desert tortoise habitat. Anthropogenic disturbances within the Project site included dirt roads, unauthorized trash dumping, off-leash dogs, and illegal camping activity. Furthermore, the vegetation communities present on the site were not desert scrub-type communities that typically support desert tortoise presence. Although a focused survey was not performed, neither desert tortoises nor their sign (e.g., burrows, tracks, scat) were detected on the Project site or within the 500-foot buffer during the habitat assessment. The Project site does not provide suitable habitat for desert tortoise.

### 4.2.13 Western Pond Turtle Habitat Assessment

No suitable ponded water or other water bodies were identified within the Project site. Although the Mojave River is directly adjacent to the Project site to the east and contains suitable habitat consisting of surface water, aquatic vegetation, and locations for basking, the presence of the levee lined with rip rap provides a physical barrier that would prevent individuals from accessing the Project site. Although a focused survey was not performed, no western pond turtles were detected on the Project site or within the 500-foot buffer during the habitat assessment. The project site does not provide suitable habitat for western pond turtle.

### 4.2.14 Burrowing Owl Habitat Assessment

Some suitable open, desert scrub habitat was present on the Project site and there are California ground squirrel burrows present along the levee on the eastern boundary and on the southern boundary which could be used by this species for burrowing. Other small mammal burrows and rabbit burrows are present less frequently throughout the northern portion of the Project site and within the 500-foot buffer to the

north. The Project site has a high level of disturbance including unauthorized trash dumping, off-leash dogs, and illegal camping activity which lowers the suitability of the habitat for this species. Soil is friable and sandy which is suitable for burrowing. Although there was evidence of small mammals and ground squirrels, at the time of the survey there was not enough of an abundance of prey present to be typical of occupied burrowing owl habitat. During the burrowing owl habitat assessment, two potential burrowing owl burrows were observed at one location in the southeast portion of the Project site. An additional four potential burrowing owl burrows were found at two locations in the 500-foot buffer south of the Project site. The locations of the potential burrowing owl burrows are depicted on Figure 4. No burrowing owl sign was observed at any of the potential burrow locations. A representative photo of potential burrowing owl burrows present on the Project site is presented in Appendix A. Overall, the Project site provides marginally suitable habitat for the burrowing owl.

### 4.2.15 Least Bell's Vireo Habitat Assessment

The least Bell's vireo breeds in dense, shrubby riparian vegetation, often dominated by willows (Franzreb 1989). During the habitat assessment, no suitable nesting habitat for least Bell's vireo was observed on the Project site. Marginally suitable foraging and dispersal habitat is present on the Project site; however, it is of low quality compared to the foraging and dispersal habitat located adjacent to the Project site, approximately 70 feet east in the Mojave River, which provides much higher quality foraging and dispersal habitat for the least Bell's vireo. The Project site consists of an open canopy composed of scattered large cottonwood trees but no vegetative understory and does not have the habitat characteristics to support least Bell's vireo breeding activities.

### 4.2.16 Southwestern Willow Flycatcher Habitat Assessment

Habitat requirements for the southwestern willow flycatcher includes dense riparian vegetation near permanent or semi-permanent sources of water or saturated soil, such as cottonwood, willow, and salt cedar vegetation communities along rivers and streams below 8,500 feet above msl. The southwestern willow flycatcher typically breeds within dense tree or shrubby riparian vegetation that is equal to or greater than 10 feet tall (Allison et al. 2003). Additional migration habitat occurs along major drainages in the southwest, and may include riparian habitats without an understory, non-riparian areas with high food concentrations, or within linear patches that may typically be considered too small or short (USFWS 2013, 2014). During the habitat assessment, no suitable nesting habitat for southwestern willow flycatcher was observed on the Project site. The Project site does contain marginally suitable foraging and dispersal habitat and is of low quality compared to the high-quality foraging and dispersal habitat located adjacent to the Project site, approximately 70 feet east in the Mojave River.

### 4.2.17 Bat Habitat Assessment

Potential roosting habitat for tree roosting bat species is present in the form of the dense foliage of the Fremont cottonwood trees, crevices and cracks in the broken branches of the Fremont cottonwoods, and a few snags. The Project site and the adjacent Mojave River will likely provide strong foraging habitat for bat species. Although a focused survey was not conducted, no bats or bat sign were detected during the bat habitat assessment. A representative photo of suitable bat habitat present on the Project site is

presented in Appendix A. The Project site provides suitable foraging habitat for bat species and suitable roosting habitat for tree roosting bat species.

### 4.2.18 Mohave Ground Squirrel Habitat Assessment

ECORP biologist Phillip Wasz, Authorized Field Investigator under CDFW MOU for Mohave Ground Squirrel trapping studies, conducted the Mohave ground squirrel habitat assessment within the Project boundaries on August 31, 2021. The species prefers relatively undisturbed native desert scrub vegetation, often associated with winterfat (*Krascheninnikovia lanata*) and spiny hopsage (*Grayia spinosa*). The Project site does not contain the suitable desert scrub habitat, nor is it located adjacent to areas that contain suitable desert scrub habitat. The Project site contained significant disturbance consisting of unauthorized trash dumping, dirt roads, nonnative vegetation, and illegal camping activity. Mohave ground squirrel was neither observed nor detected during the survey; however, the survey was conducted during a time when the animal may already be underground and preparing for fall and winter hibernation. The Project site does not provide suitable habitat for Mohave ground squirrel.

# 5.0 IMPACT ANALYSIS

## 5.1 Special-Status Species

The Project site is generally classified as disturbed desert land with sparsely vegetated disturbed scale broom scrub, disturbed fourwing saltbush scrub, disturbed rubber rabbitbrush scrub communities, disturbed yerba mansa – sedge alkaline flats, and sparse mule fat thickets habitat. Disturbances observed on the site were mainly associated with off-highway vehicle use, unauthorized trash dumping, and illegal camping activity. The literature review and database searches identified 10 special-status plant species that have been documented in the vicinity of the Project site. One species (San Bernardino aster, CRPR 1B.2) was determined to have a moderate potential to occur due to the presence of suitable habitat in the scattered disturbed yerba mansa – sedge alkaline flats and sparse mule fat thickets and a previously documented occurrence of this species just over 5 miles from the site. Two species (Booth's evening-primrose [CRPR 2B.3] and beaver dam breadroot [CRPR 1B.2]) were determined to have low potential to occur due to the presence of marginally suitable scrub habitat throughout the site. Potential Project-related impacts may occur to the three special-status plant species in the form of direct take (mortality) and would be considered significant due to their CRPR ranking of being rare, threatened, or endangered in California. Implementation of Mitigation Measure BIO-1 would reduce potential Project-related impacts to less than significant (recommended mitigation measures are included in Section 6.0).

The literature review and database searches identified 25 special-status wildlife species that occur in the vicinity of the Project site. One federally and state-listed wildlife species, western yellow-billed cuckoo, was observed during the biological survey in the northeastern portion of the Project site. Based on the condition of the site and the available habitat, only two species (burrowing owl and pallid bat) were found to have a moderate potential to occur. Nine species (long-eared owl, Swainson's hawk, southwestern willow flycatcher, yellow-breasted chat, loggerhead shrike, summer tanager, yellow warbler, least Bell's vireo, and Townsend's big-eared bat) were determined to have a low potential to occur. The Project site

does not provide suitable habitat for the following special-status species and impacts to these species are not expected as a result of the Project:

- Crotch bumble bee, candidate for state-listing;
- Mohave tui chub, federally listed (endangered), state-listed (endangered), CDFW FP;
- Arroyo toad, federally listed (endangered)
- California red-legged frog, federally listed (threatened), CDFW SSC;
- Western pond turtle, CDFW SSC
- Desert tortoise, federally listed (threatened), state-listed (threatened);
- Coast horned lizard, CDFW SSC;
- Tricolored blackbird, state-listed (threatened), CDFW SSC;
- Golden eagle, CDFW Fully Protected;
- Gray vireo, CDFW SSC;
- Pallid San Diego pocket mouse, CDFW SSC;
- Mohave River vole, CDFW SSC; and
- Mohave ground squirrel, state-listed (threatened).

Western yellow-billed cuckoo was observed during the biological survey perched in a cottonwood located within the Project site. The individual was perched along the eastern side of the Project site and then flew into the dense canopy of a Fremont cottonwood on the Project site. Due to timing (end of nesting season and beginning of migration) and characteristics of the Project site including the small size of the site, lack of riparian understory, and high-level of anthropogenic disturbances, it's likely this was a migrating bird heading south for the fall and winter. The Project site lacks suitable nesting habitat and therefore breeding activities are not expected to occur on the Project site. The Project site provides marginally suitable habitat for foraging and dispersal activities in the Fremont cottonwoods scattered throughout the site and in the scattered disturbed yerba mansa – sedge alkaline flats and sparse mule fat thickets vegetation. However, the suitable riparian habitat located approximately 70 feet east of the site in the Mojave River provides larger and higher quality habitat for these activities. Although an individual was observed on the Project site, it is not likely the western yellow-billed cuckoo regularly uses the disturbed habitat on the Project site, nor is the species expected to rely on the habitat on the Project site for survival. The literature review and database search identified one historic record in the vicinity of the Project site documented in 1978 (Occurrence # 138). The Project site does provide marginally suitable foraging and dispersal habitat for this species. Indirect Project-related impacts may occur to this species during the nesting bird season (typically February 1 through August 31) when the cuckoo is known to be present in the adjacent Mojave River in the form of construction noise, increased human and vehicular activity, and ground vibrations may occur. No direct impacts to this species are expected due to the lack

of nesting habitat on the Project site. Indirect impacts to western yellow-billed cuckoo would be less than significant with the implementation of Mitigation Measure BIO-2.

Burrowing owl has a moderate potential to occur on the Project site due to the presence of suitable open scrub habitat. Although no burrowing owls were observed during the survey, two potential burrowing owl burrows (without sign of burrowing owl use) were identified at one location within the Project boundaries, and the literature review and database search identified multiple records in the vicinity of the Project site. Burrowing owls are a CDFW SSC species and are also protected by the MBTA and California Fish and Game Code. The Project site did not appear to have been currently or recently used by burrowing owl at the time of the survey; however, the species is mobile and if the conditions were to change on the Project site, burrowing owl could take up residence on the Project site. If burrowing owl were to occupy the site prior to construction, direct impacts to burrowing owl by mortality and habitat loss during ground disturbance and indirect impacts from construction noise, increased human and vehicular activity, and vibrations may occur. Impacts to burrowing owl would be less than significant with the implementation of Mitigation Measure BIO-3.

Pallid bat, an SSC, has a moderate potential to occur and Townsend's big-eared bat, also an SSC, has a low potential to occur on the Project site. The Project site contains suitable roosting and foraging habitat for pallid bat and suitable foraging habitat for Townsend's big-eared bat. Direct impacts to bat species by mortality and habitat loss from tree removal and indirect impacts from construction noise, human activity, and vibrations may occur as a result of the Project. Impacts to special-status bat species would be less than significant with the implementation of Mitigation Measure BIO-4.

Although not expected to occur on the Project site, both the southwestern willow flycatcher (federally and state-listed as endangered) and the least Bell's vireo (federally and state-listed as endangered) have a low potential to occur on the Project site. Similar to the western yellow-billed cuckoo, the Project site does not provide suitable nesting habitat for these species but does provide marginally suitable foraging and dispersal habitat in the Fremont cottonwoods scattered throughout the site and in the scattered disturbed yerba mansa – sedge alkaline flats and sparse mule fat thickets. Suitable, higher quality riparian habitat is present approximately 70 feet from the Project site in the Mojave River that supports nesting, foraging, and dispersal activities for both species and previously documented observations of both species have been recorded there. It is possible, due to the Project's site's proximity to the Mojave River, for both species to utilize the site for foraging and dispersal activities; however, it is not likely the southwestern willow flycatcher or the least Bell's vireo regularly use the disturbed habitat on the Project site, nor are either of the species expected to rely on the habitat on the Project site for survival. The Project site does provide marginally suitable foraging and dispersal habitat for these species. Indirect Project-related impacts may occur to these species during the nesting bird season (typically February 1 through August 31) when both species are known to be present in the adjacent Mojave River in the form of construction noise, increased human and vehicular activity, and ground vibrations may occur. No direct impacts to southwestern willow flycatcher or least Bell's vireo are expected due to the lack of nesting habitat on the Project site. Indirect impacts to southwestern willow flycatcher and least Bell's vireo would be less than significant with the implementation of Mitigation Measure BIO-2.

The Project site provides limited nesting habitat for the state-listed (threatened) Swainson's hawk in the mature cottonwoods and snags scattered throughout the site. However, the high levels of disturbances, presumed lack of abundant prey items based on the low numbers of small mammal burrows present, and because the Project site is almost completely surrounded by development, Swainson's hawk is not expected to nest on or adjacent to the Project site. Furthermore, no Swainson's hawks have been documented, either foraging or nesting, on or near the site in over 100 years (CDFW 2021a). Although the Project is not expected to result in impacts to Swainson's hawk or their habitat, it is possible that, due to their highly mobile nature, the species may be observed on or near the site prior to the start of ground-breaking activities. In order to avoid potentially significant impacts occurring to Swainson's hawk in this rare event, it is recommended that Mitigation Measure BIO-2 be implemented.

Similar to other special-status avian species previously discussed, the Project site does not provide suitable nesting habitat for long-eared owl, summer tanager, yellow-breasted chat, or yellow warbler, all SSC riparian bird species. The Project site may provide marginally suitable foraging and dispersal habitat for these species. Due to the Project site's proximity to the Mojave River, indirect impacts to these riparian bird species may occur as those described for western yellow-billed cuckoo, southwestern willow flycatcher, and least Bell's vireo. Impacts to long-eared owl, summer tanager, yellow-breasted chat, and yellow warbler would be less than significant with the implementation of Mitigation Measure BIO-2.

Loggerhead shrike, a SSC, has a low potential to occur on the Project site due to the presence of the desert scrub communities. However, the shrubs present are not large enough and are not dense enough to provide suitable nesting habitat for the loggerhead shrike. Several large trees and snags do provide perching opportunities for scanning but the site overall likely provides low quality foraging/hunting habitat for this species due to the high levels of disturbances present. If loggerhead shrike is present on the Project site, it is expected to occur in a very low density due to the highly disturbed nature of the Project site and it is not expected to nest on the Project site. Furthermore, the loss of the Project site as low-quality foraging/hunting habitat as a result of the Project is not likely to contribute to the overall decline of this species. Potential Project-related impacts to the loggerhead shrike are not expected to be significant.

The Project site also contained suitable nesting habitat for bird species protected under the MBTA. 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 nesting bird 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 special-status bird species with potential to nest on or near the Project site may also occur as a result of the Project as well. Impacts to nesting birds would be less than significant with the implementation of Mitigation Measure BIO-2.

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

A portion along the eastern boundary of the Project site is mapped as designated critical habitat for southwestern willow flycatcher. No other designated critical habitat for federally listed species is present within or adjacent to the Project site.

Approximately 0.43 acre of southwestern willow flycatcher critical habitat overlaps the eastern edge of the Project site; however, the mapped critical habitat within the Project site does not provide any suitable habitat for the species due to the lack of riparian vegetation.

The Primary Constituent Elements (PCEs) outlined in the *Determination of Critical Habitat for Southwestern Willow Flycatcher* (USFWS 2005b) are based on the biological and ecological needs for the flycatcher to succeed in the designated critical habitat. These elements include, but are not limited to, breeding sites, the biological needs of the animal (reproductive, dietary, and habitat needs), physiological requirements (water, air, light, etc.), and space required for normal behavior of the animal or for individual and population growth. Specifically, two PCEs were identified for southwestern willow flycatcher in the Final Rule of the Designation of Critical Habitat for the Southwestern Willow Flycatcher (USFWS 2005b). These include riparian habitat and insect prey populations.

Riparian habitat located in "dynamic successional riverine environments" is imperative to the survival of southwestern willow flycatcher because the flycatcher utilizes riparian habitat during all life stages, including foraging, migration, nesting, shelter, and dispersal (USFWS 2005b). Researchers have found that southwestern willow flycatchers do not appear to have a preference between native and nonnative tree and shrub species; however, density of these stands is a limiting factor (USFWS 2005b). Dense areas of vegetation interspersed with smaller openings of sparser vegetation or open water or marsh are utilized by southwestern willow flycatchers from ground level to approximately 13 feet above the ground. A dense tree or shrub canopy is imperative for breeding sites (areas with 50 to 100 percent coverage).

Invertebrate prey comprises the majority of the southwestern willow flycatcher's diet and this prey base must be plentiful for the success of the flycatcher as a species. As an insect generalist several different types of species are consumed, ranging from beetles (*Coleoptera*), to butterflies and moths (*Lepidoptera*), wasps and bees (*Heteroptera*), and dragonflies (*Anisoptera*). Prey availability can be influenced by quality of vegetation present in the habitat, presence of and proximity to water, and microclimate features such as humidity and temperature.

Although cottonwood trees, typically associated with riparian vegetation, are located within the area on the Project site mapped as designated critical habitat for southwestern willow flycatcher, the dispersal of the trees do not provide the necessary vegetative structure that the southwestern willow flycatcher requires. Furthermore, the Project site is very disturbed due to OHV use, unauthorized trash dumping, and illegal camping activity. Large cottonwood and willow trees located on the Project site are widely spaced with little to no dense riparian shrub understory. Habitat located adjacent to the Project site, approximately 70 feet east of the site in the Mojave River, provides much higher quality and less disturbed habitat for southwestern willow flycatchers. The cottonwoods located within the Mojave River are more dense and contain a substantial understory of willow and other riparian shrubs, providing adequate shelter and nesting habitat for the species.

Approximately 0.43 acre of mapped designated critical habitat for the southwestern willow flycatcher is present on the eastern edge of the Project site; however, the habitat in this area does not contain the appropriate riparian vegetation PCE (including structure and density) that is required for the species to

occupy this area of the Project site. No impacts to occupiable southwestern willow flycatcher habitat within designated critical habitat are expected as a result of the Project.

## 5.2 Sensitive Natural Communities

The Project site contains two sensitive natural communities as defined by CDFW: disturbed scale broom scrub ranked as S3 and disturbed yerba mansa – sedge alkaline flats, ranked as S2. Both communities are associated with the presence of water, either in the water table or due to periodic inundation. Due to the Project's location adjacent to the Mojave River and within the historic floodplain of the river, it is likely that the water table is high in this area, which likely supports the growth of the riparian plant species associated with the communities listed above. Both communities on the Project site are subject to frequent and consistent disturbances and do not provide high value or function to plant and wildlife species occurring on or adjacent to the Project site. Furthermore, the loss of approximately 1.33 acres of disturbed scale broom scrub and approximately 0.44 acre of disturbed yerba mansa – sedge alkaline flats is not expected to contribute to the overall decline of these sensitive natural communities in the region or the State of California. Impacts to these disturbed vegetation communities would not be considered significant.

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

An aquatic resources delineation was not performed as part of this assessment. Based on communication with the City of Victorville (S. Webb, personal communication) and the aquatic resources delineation that was performed in the vicinity of the site approximately 20 years ago in support of the Mojave River West Levee Improvement Project, the Project site does not contain aquatic resources potentially jurisdictional to USACE or CDFW and no impacts are expected.

## 5.4 Wildlife Corridors and Nursery Sites

The Project site is located within and adjacent to areas containing existing disturbances (e.g., dirt roads, trash, unauthorized trash dumping, evidence of previous fire activity, illegal camping activity, paved walkway, levee), a park, and residential development. The Project site is heavily disturbed and isolated from large, contiguous blocks of native habitat. The Project site contains little vegetative cover that is not typically conducive to wildlife travel or movement throughout the area. No migratory wildlife corridors or native wildlife nursery sites were identified within the Project site. The Mojave River is located approximately 70 feet east of the Project site and is generally considered a movement corridor for wildlife; however, no Project-related impacts are expected to occur within the Mojave River. Therefore, no impacts to wildlife corridors or nursery sites are expected to occur during the development of the Project site.

# 6.0 RECOMMENDATIONS

The following mitigation measures are recommended prior to Project implementation:

**BIO-1 – Protocol Preconstruction Rare Plant Survey:** It is recommended that a protocol-level preconstruction survey be conducted for the three special-status plant species that have a moderate or

low potential to occur on the Project site, including San Bernardino aster, Booth's evening-primrose, and beaver dam breadroot. The protocol-level survey should occur during the typical blooming period for these species the season or the year prior to the start of ground-breaking Project activities. The survey should be performed by a qualified botanist or biologist experienced with surveying for and identifying desert flora and should follow the guidelines listed in the CNPS Botanical Survey Guidelines (CNPS 2001). If special-status plant species are observed on the Project site during the survey, then a non-disturbance buffer shall be established around the location(s) of the individuals or population. The size of the non-disturbance buffer shall be determined by the qualified botanist or biologist based on location of special-status species and expected construction activities. If one or more special-status plants is found on the Project site and avoidance of the location(s) is not feasible during Project construction, then additional mitigation measures will need to be implemented. Mitigation measures could include, but are not limited to, biological monitoring, seasonal work avoidance, seed collection, or transplanting. Coordination with CDFW may need to occur prior to or during mitigation implementation.

**BIO-2 – Preconstruction Nesting Bird Survey:** If construction or other Project activities are scheduled to occur during the nesting bird season (February 1 through August 31), a pre-construction nesting bird survey shall be conducted by a qualified avian biologist to ensure that active bird nests, including nests belonging to special-status avian species, 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 (including in the Mojave River) where Project activities have the potential to affect active nests, either directly or indirectly, due to construction activity, noise, human activity or ground disturbance. If an active nest is identified, a qualified avian biologist shall establish an appropriately sized non-disturbance buffer around the nest using flagging or staking. Construction activities shall not occur within any non-disturbance buffer zones until the nest is deemed inactive by the qualified avian biologist. If initial ground-disturbing activities are scheduled to occur during the nesting bird season, then a biological monitor shall be present during all vegetation removal activities to ensure no impacts to nesting birds occur.

If Project-related impacts to nests belonging to federally and/or state-listed avian species (yellow-billed cuckoo, southwestern willow flycatcher, least Bell's vireo, and Swainson's hawk) are unavoidable, then coordination with USFWS and/or CDFW will be required to develop a mitigation plan to offset impacts to the species and their nests. Obtaining the necessary permits may also be required. Mitigation for impacts to federally and/or state-listed avian species may include seasonal work limitations, non-disturbance buffers around nests, offsite habitat acquisition and preservation, or biological monitoring.

**BIO-3 – Preconstruction Burrowing Owl Survey:** 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 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-4 – Preconstruction Bat Surveys:** Prior to tree removal, a preconstruction bat survey shall be conducted by a qualified bat biologist to assess potential bat roosting trees. The survey shall be conducted within 30 days prior to tree removal. During the assessment, a qualified bat biologist will assess the potential of each tree to house a maternity colony.

If crevice and/or cavity features are present, summer night-time surveys shall be conducted to determine if a maternity colony is present. If a maternity colony is present, tree removal or modification must occur in the fall (after flightless young have become volant) and under the supervision of a qualified bat biologist.

If no crevice and/or cavity features are present, the bat biologist shall supervise the two-step process of tree removal to avoid direct mortality of foliage-roosting species. The two-step process involves tree removal over two consecutive days. On the first day, the smaller outer limbs and branches will be removed using chain saws or non-mechanized hand tools under the direct supervision of the qualified bat biologist. On the second day, the remainder of the tree or shrub will be removed.

## 6.1 Additional Recommendations

The following best management practices are not mitigation measures pursuant to CEQA but are recommended to further reduce impacts to 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 the construction or Project site.
- Use of rodenticides and herbicides on the Project site should be restricted. This is necessary to prevent primary or secondary poisoning of wildlife, 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 predatory wildlife.

## 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.

SIGNED: Chelsie Brown DATE: 9/9/2021

Chelsie Brown
Associate Biologist
ECORP Consulting, Inc.

**Under the direction of:**

SIGNED: Kristen Wasz DATE: 9/9/2021

Kristen (Mobraaten) Wasz
Senior Biologist
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## LIST OF APPENDICES

# APPENDIX A

Representative Site Photographs

Photo 1. Aerial view of Project site as well as paved walkway and levee along eastern border, facing north toward I-15.

Photo 2. Disturbed area of Project site and Eva Dell Park bordering Project to the south.

Photo 3. Project site in the foreground and Mojave River with riparian habitat in the distance, facing east.

Photo 4. Mojave River, with suitable habitat for riparian birds, approximately 70 feet east of the Project site.

Photo 5. Suitable bat roosting habitat within the crevices of a Fremont cottonwood within the Project site.

Photo 6. Potential burrowing owl burrows observed in the southeast portion of the Project site.

Photo 7. Representative willow present on the Project site.

Photo 8. Small stand of riparian species including Fremont's cottonwood and mulefat thickets south of levee along northeastern boundary of Project site.

Photo 9. Representative yerba santa shrubs in scale broom scrub habitat on Project site.

Photo 10. Yerba mansa identified in scattered disturbed yerba mansa – Nuttall's sunflower – Nevada goldenrod alkaline wet meadows vegetation on Project site.

Photo 11. Representative photo of disturbed rubber rabbitbrush scrub vegetation within Project site.

Photo 12. Representative sandy soils and vegetation within disturbed area on Project site.

Photo 13. Representative vegetation and trash on Project site.

Photo 14. Sparse vegetation, trash, and dirt roads present on Project site, facing north.

Photo 15. Representative unauthorized trash dumping in disturbed fourwing saltbush scrub within Project site.

Photo 16. Disturbed Project site with vehicle tracks and sparse vegetation, facing east. Levee, paved walkway, and Mojave River are in the distance.

Photo 17. Friable, sandy soil and vehicle tracks throughout Project site.

Photo 18. Representative disturbed area dominated by nonnative weedy vegetation on Project site.

Photo 19: A view of a small pool in the mainstem of the Mojave River adjacent to the Project site.

Photo 20: View of the bank of a small pool in the mainstem of the Mojave River adjacent to the Project site.

Photo 21: A view of a small pool in the mainstem of the Mojave River adjacent to the Project site.

Photo 20: A view of the Mojave River Channel from atop the levee between the Project site and the River.

# APPENDIX B

Plant Species Observed

| SCIENTIFIC NAME | COMMON NAME |
|---|---|
| *Arundo donax** | Giant reed |
| *Ambrosia acanthicarpa* | Annual bursage |
| *Anemopsis californica* | Yerba mansa |
| *Atriplex canescens* | Fourwing saltbush |
| *Baccharis salicifolia* | Mule fat |
| *Brassica tournefortii** | Sahara mustard |
| *Carex* sp. | Sedge sp. |
| *Cynodon dactylon** | Bermuda grass |
| *Eriastrum densifolium* | Giant woollystar |
| *Ericameria nauseosa* | Rubber rabbitbrush |
| *Eriodictyon californicum* | Yerba santa |
| *Fraxinus* sp. | Ash |
| *Fraxinus velutina* | Velvet ash |
| *Glycyrrhiza lepidota* | American licorice |
| *Heliotropium* sp. | Heliotrope |
| *Lepidospartum squamatum* | Scale broom |
| *Platanus* sp. | Sycamore |
| *Populus fremontii* | Fremont cottonwood |
| *Salix exigua* | Narrowleaf willow |
| *Salix laevigata* | Red willow |
| *Salix* sp. | Willow |
| *Salsola tragus** | Russian thistle |
| *Tamarix* sp.* | Tamarisk |
| *Typha* sp. | Cattail |
| *Ulmus* sp. | Elm sp. |
| **Nonnative species* | |

# APPENDIX C

Wildlife Species Observed

| SCIENTIFIC NAME | COMMON NAME |
|---|---|
| AMPHIBIA | AMPHIBIANS |
| *Lithobates catesbeianus* | American bullfrog |
| REPTILIA | REPTILES |
| *Sceloporus occidentalis* | Western fence lizard |
| *Uta stansburiana elegans* | Western side-blotched lizard |
| AVES | BIRDS |
| *Auriparus flaviceps* | Verdin |
| *Buteo lineatus* | Red-shouldered hawk |
| *Calypte anna* | Anna's hummingbird |
| *Cistothorus palustris* | Marsh wren |
| *Coccyzus americanus occidentalis* | Western yellow-billed cuckoo |
| *Colaptes auratus* | Northern flicker |
| *Corvus corax* | Common raven |
| *Dryobates nuttallii* | Nuttall's woodpecker |
| *Geococcyx californianus* | Greater roadrunner |
| *Haemorhous mexicanus* | House finch |
| *Mimus polyglottos* | Northern mockingbird |
| *Pheucticus melanocephalus* | Black-headed grosbeak |
| *Sayornis nigricans* | Black phoebe |
| *Setophaga petechia* | Yellow warbler |
| *Spinus psaltria* | Lesser goldfinch |
| *Streptopelia decaocto* | Eurasian collared-dove |
| *Sturnus vulgaris* | European starling |
| *Thryomanes bewickii* | Bewick's wren |
| MAMMALIA | MAMMALS |
| *Castor canadensis* | North American beaver |

# APPENDIX D

Special-Status Plant Species Potential for Occurrence

| *Scientific Name*<br>Common Name | Status | | Bloom Period & Elevation (meters) | Habitat Requirements | Potential for Occurrence |
|---|---|---|---|---|---|
| *Symphyotrichum defoliatum*<br>San Bernardino aster | Fed:<br>Ca:<br>CRPR: | none<br>none<br>1B.2 | Jul-Nov<br>2-2040 | Occurs in meadows and seeps, marshes, and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, and vernally mesic valley and foothill grassland. Often found in disturbed areas and near ditches, streams, and springs. | Moderate Potential to occur: Project site contains suitable disturbed habitat for this species and there is potentially jurisdictional habitat present. One record occurs 1.6 miles southeast of the Project site from 1991 (Occ #39). |
| *Eremothera boothii* ssp. *Boothii*<br>Booth's evening-primrose | Fed:<br>Ca:<br>CRPR: | none<br>none<br>2B.3 | Apr-Sep<br>815-2400 | Occurs in Joshua tree woodland and pinyon and juniper woodland habitats. Often found in sandy flats and steep loose slopes. | Low Potential to occur: Although Joshua tree woodland and pinyon and juniper woodland habitats are not present on the Project site, the site contains sandy soils that the species could find suitable and 5 records occur within 5 miles of the Project site with 2 of them being within the past 20 years. |
| *Pediomelum castoreum*<br>Beaver Dam breadroot | Fed:<br>Ca:<br>CRPR: | none<br>none<br>1B.2 | Apr-May<br>610-1525 | Occurs in Joshua tree woodland and Mojavean desert scrub habitats. Often found in sandy soil in washes and roadcut habitats. | Low Potential to occur: Limited suitable sandy habitat occur on the Project site and one recent record within 5 miles from 2008 (Occ # 9). |
| *Boechera dispar*<br>pinyon rockcress | Fed:<br>Ca:<br>CRPR: | none<br>none<br>2B.3 | Mar-June<br>1200-2540 | Occurs in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats. Often found in granitic, gravelly soils. | Presumed Absent: Suitable habitat was not present within the Project area. Typically occurs in granitic, gravelly soils and soil on site was loamy fine sand. There are no records within 5 miles of the Project site. |
| *Cymopterus deserticola*<br>desert cymopterus | Fed:<br>Ca:<br>CRPR: | none<br>none<br>1B.2 | Mar-May<br>630-1500 | Occurs in Joshua tree woodland and Mojavean desert scrub habitats. Often found in sandy soil. | Presumed Absent: No suitable Joshua tree woodland or Mojavean desert scrub habitat exist on the Project site. One record occurs within 5 miles of the Project site but is more than 20 years old. |
| *Diplacus mohavensis*<br>Mojave monkeyflower | Fed:<br>Ca:<br>CRPR: | none<br>none<br>1B.2 | Apr-Jun<br>600-1200 | Occurs in Joshua tree woodland and Mojavean desert scrub habitats. Often found in sandy and gravelly soil, often in washes. | Presumed Absent: Although the Project site contains sandy soil, there is no Joshua tree woodland or Mojavean desert scrub habitat present. Could occur adjacent to Project site where there is a waterway. One historic record occurs within 5 miles of the Project site from 1998. |
| *Loeflingia squarrosa* var. *artemisiarum*<br>sagebrush loeflingia | Fed:<br>Ca:<br>CRPR: | none<br>none<br>2B.2 | Apr-May<br>700-1615 | Occurs in desert dunes, Great Basin scrub, and Sonoran desert scrub habitats. Occurs in sandy soils. | Presumed Absent: No suitable habitat was present on the Project site. Typically occurs in desert dunes, Great Basin scrub, and Sonoran desert scrub habitats. There are no records within 5 miles. |
| *Opuntia basilaris* var. *brachyclada*<br>short-joint beavertail | Fed:<br>Ca:<br>CRPR: | none<br>none<br>1B.2 | Apr-Jun(Aug)<br>425-1800 | Occurs in chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats. Often found in sandy soil or coarse, granitic loam. | Presumed Absent: No suitable Joshua tree woodland, chaparral, Mojavean desert scrub, or pinyon and juniper woodland present on Project site. There are no records within 5 miles of the Project site. |
| *Saltugilia latimeri*<br>Latimer's woodland-gilia | Fed:<br>Ca:<br>CRPR: | none<br>none<br>1B.2 | Mar-Jun<br>400-1900 | Occurs in chaparral, Mojavean desert scrub, and pinyon and juniper woodland habitats. Usually found in rocky or sandy soil, often granitic and sometimes in washes. | Presumed Absent: Most commonly found in dry, desert slopes that are undisturbed. Project site is flat and contains disturbances including dumping and dirt roads. No chaparral, Mojavean desert scrub, and pinyon and juniper woodland habitats occur and no records exist within 5 miles of the Project site. |
| *Scutellaria bolanderi* ssp. *austromontana*<br>southern mountains skullcap | Fed:<br>Ca:<br>CRPR: | none<br>none<br>1B.2 | Jun-Aug<br>425-2000 | Occurs in chaparral, cismontane woodland, and lower montane coniferous forest habitats. Often found in mesic soils. | Presumed Absent: No suitable habitat was present on the Project site. Typically occurs in chaparral, cismontane woodland, and lower montane coniferous forest habitats. One record occurs within 5 miles but it is over 100 years old. |

Federal Designations:

(Federal Endangered Species Act, USFWS)

END: federally listed, endangered

THR: federally listed, threatened

State designations:

(California Endangered Species Act, CDFG)

END: state-listed, endangered

THR: state-listed, threatened

CAN: Candidate for state listing

FP: Fully Protected Species

SSC: Species of Special Concern

CNPS Ranking

1A: Presumed extinct

1B: Rare, threatened, or endangered in California and elsewhere

2B: Rare, threatened, or endangered in California, but more common elsewhere

3: Review list of plants requiring more study

4: Plants of limited distribution watch list

CNPS Threat Code

0.1: Seriously threatened in California

0.2: Fairly threatened in California

0.3: Not very threatened in California

Source: California Natural Diversity Data Base (CNDDB) California Native Plant Society Electronic Inventory (CNPSEI) Victorville, Adelanto, Victorville NW, Helendale, Turtle Valley, Apple Valley North, Apple Valley South, Hesperia, and Baldy Mesa 7.5-minute quads.

# APPENDIX E

Special-Status Wildlife Species Potential for Occurrence

| *Scientific Name*<br>Common Name | Status | | Habitat Requirements | Potential for Occurrence |
|---|---|---|---|---|
| *Bombus crotchii*<br>Crotch bumble bee | Fed:<br>CA: | none<br>CAN | Found in coastal California east to the Sierra-Cascade crest and south into Mexico. Occurs in open grassland and scrub habitats. Prefers a diet consisting of certain plant species including milkweeds, dusty maidens, lupines, medics, phacelias, sages, clarkias, poppies, and wild buckwheats. Nests are often located underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. | Presumed Absent. Although the Project site contained small mammal burrows which could provide nesting habitat for the Crotch bumble bee, limited scrub habitat is present on the Project site. Project site lacks preferred diet of plant species for Crotch bumble bee. One record occurs 6.4 miles from the Project site but is over 75 years old. |
| *Siphateles bicolor mohavensis*<br>Mohave tui chub | Fed:<br>CA: | END<br>END/FP | Occurs in aquatic, artificial flowing waters, and artificial standing waters habitat. Endemic to the Mojave River basin, adapted to alkaline, mineralized waters. Needs deep pools, ponds, or slough-like areas. Needs vegetation for spawning. | Presumed Absent: No suitable habitat was present on the Project site. Typically occurs in aquatic environment and requires deep pools, ponds, or slough-like areas. |
| *Anaxyrus californicus*<br>arroyo toad | Fed:<br>CA: | END<br>SSC | Occurs in desert wash, riparian scrub, riparian woodland, south coast flowing waters, and south coast standing waters habitat. Found in semi-arid regions near washes or intermittent streams. Prefers rivers with sandy banks, willows, cottonwoods, and sycamores. Often found in loose, gravelly areas of streams. | Presumed Absent: There is no aquatic habitat on the Project site. Although the Mojave River adjacent to the Project site appears to offer suitable habitat for the arroyo toad, the species has not been documented in this stretch of the Mojave River since the 1970s. The habitat within the stretch of Mojave River adjacent to the Project site contains dense vegetation and has few open water pools, both of which are limiting habitat features for arroyo toad presence. Furthermore, it is widely known that this section of the Mojave River supports numerous exotic aquatic species that either predate on or outcompete the arroyo toad. This species is not expected to occur on or adjacent to the Project site. |
| *Rana draytonii*<br>California red-legged frog | Fed:<br>CA: | THR<br>SSC | Occurs in aquatic, artificial flowing waters, artificial standing waters, freshwater marsh, marsh & swamp, riparian forest, riparian scrub, riparian woodland, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, south coast flowing waters, south coast standing waters, and wetland habitats. Requires 11-20 weeks of permanent water for larval development. Often found in lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. | Presumed Absent. Although suitable riparian habitat occurs adjacent to the Project site in the Mojave River, no suitable freshwater marsh or artificial standing water were present on the Project Site. |
| *Emys marmorata*<br>western pond turtle | Fed:<br>CA: | none<br>SSC | Occurs in aquatic, artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, south coast flowing waters, south coast standing waters, and wetland habitats. Needs basking sites (logs, rocks, and exposed banks) and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying. | Presumed Absent: There is no aquatic habitat on the Project site. Although the Mojave River adjacent to the Project site offers suitable habitat for the western pond turtle, the levee with rip-rap and paved walkway act as a physical barrier that limits the species' accessibility to the Project site. |
| *Gopherus agassizii*<br>desert tortoise | Fed:<br>CA: | THR<br>THR | Occurs in Joshua tree woodland, Mojavean desert scrub, and Sonoran desert scrub habitats. Most commonly found in desert scrub, desert wash, and Joshua tree habitats. Requires friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred. | Presumed Absent: Project site contains desert wash vegetation including Atriplex canescens and rabbitbrush, however the conditions were not typical of typical desert was habitats desert tortoises are found to occupy. There is no creosote bush scrub or similar vegetation communities. Although there is friable soil on the Project site, there is also a lot of riparian vegetation and evidence of wetlands and wetland vegetation. Additionally, the site has such a large degree of anthropogenic disturbances and it is completely surrounded by development. Potential forage plants were also minimal to non-existent. Five records occur within 5 miles within the last 20 years. |
| *Phrynosoma blainvillii*<br>coast horned lizard | Fed:<br>CA: | none<br>SSC | Occurs in chaparral, cismontane woodland, coastal bluff scrub, coastal scrub, desert wash, pinon & juniper woodlands, riparian scrub, riparian woodland, and valley & foothill grassland habitats. Requires open areas for sunning, bushes to provide cover, and loose soil for burial. Diet consists mainly of ants and also small invertebrates. Most commonly found in lowlands along sandy washes with scattered low bushes. | Low Potential to occur: Project site does not contain suitable cismontane woodland, coastal bluff scrub or desert wash habitat. Site contains open areas suitable for sunning, some bushes to provide cover, and loose sandy soil that suitable for burrowing. A few active harvester ant hills were found during the biological survey which could provide foraging habitat. Project site is highly disturbed which reduces the likelihood of this species finding suitable habitat. Riparian woodlands are present adjacent to Project site and could provide suitable habitat. Two records occur within 5 miles but have unknown dates of occurrence. |
| *Coccyzus americanus occidentalis*<br>western yellow-billed cuckoo (nesting) | Fed:<br>CA: | THR<br>END | Occurs in riparian forest habitat. Nests along the broad (≥ 12.4 acres) patches of multi-layered riparian woodland, often dominated by willows and cottonwoods of lower flood bottoms of larger river systems. | Present: No suitable nesting habitat is present on the Project site but some suitable habitat is located in the Mojave River adjacent to the northern boundary of the site and where this species was observed near during the biological survey. Limited suitable foraging habitat is present in the The species was present during the biological survey but it was likely a migrant based on timing of the biological survey, at the end of the breeding season, and characteristics of the site including the small size of the site, lack of a riparian understory, and high-level of anthropogenic disturbances. One historical record occurs 1.2 miles southwest from 1978 (Occ # 138). |

| *Scientific Name*<br>Common Name | Status | | Habitat Requirements | Potential for Occurrence |
|---|---|---|---|---|
| *Athene cunicularia*<br>burrowing owl (burrow & some wintering sites) | Fed:<br>CA: | none<br>SSC | Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Occurs in coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, and valley & foothill grassland habitats. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel. Also found in vacant lots and airports. | Moderate Potential to occur: Some suitable open, scrub habitat was present on the Project site and there are California ground squirrel burrows along the levee on the eastern boundary and within the 500-foot buffer to the northwest which could be used by this species for burrowing. The Project site has a high level of disturbance including dump sites, trash, off-leash dogs, and illegal camping activity which lowers the suitability of the habitat for this species. Although there was evidence of small mammals and ground squirrels, at the time of the survey there was not enough of an abundance of prey present to support this species. Soil is friable and sandy which is suitable for burrowing. During during the biological survey, two potential burrowing owl burrows were observed on the Project site and four potential burrowing owl burrows were found immediately south of the Project site within the 500-foot buffer. The species is mobile and can fly over the Project site at any time. There are 22 recent records within five miles with the closest being 2.0 miles southwest in 2006. |
| *Agelaius tricolor*<br>tricolored blackbird (nesting colony) | Fed:<br>CA: | none<br>THR/SSC | Occurs in freshwater marsh, swamp, and wetland habitats. Largely endemic to California. Highly colonial species, most numerous in Central Valley & vicinity. Requires open water, protected nesting substrate, and foraging area with insect prep within a few kilometers of the colony. Forages in open habitat such as cultivated fields and pastures. | Presumed Absent: Although one record occurs approximately 2.0 miles northwest of the Project site in 2003, no suitable habitat is present. No freshwater marshes for nesting are present on the Project site and foraging habitat in the form of cultivated fields or pastures are within a few kilometers. |
| *Asio otus*<br>long-eared owl | Fed:<br>CA: | none<br>SSC | Occurs in cismontane woodland, Great Basin scrub, riparian forest, riparian woodland, and upper montane coniferous forest habitats. Found in riparian bottomlands grown to tall willows and cottonwoods. Also found in belts of live oak paralleling stream courses. Require adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding. | Low Potential to occur: No suitable riparian forest or riparian woodland was present on site. Suitable riparian woodland habitat is present adjacent to the Project site. The site likely offers poor quality foraging habitat due to the high level of anthropogenic disturbances. One historic record occurs more than 5 miles away in 1948. |
| *Aquila chrysaetos*<br>golden eagle (nesting & wintering) | Fed:<br>CA: | none<br>FP | Occurs in broadleaved upland forest, cismontane woodland, coastal prairie, Great Basin grassland, Great Basin scrub, lower montane coniferous forest, pinon & juniper woodlands, upper montane coniferous forest, and valley & foothill grassland habitats. Found in rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also large trees such as eucalyptus or oak in open areas. | Presumed Absent: No forest, woodland, prairie, grassland, & rolling foothill habitat occurs on the Project site. Nesting activities are not expected on this site because no cliff-walled canyons are located on the Project site. The site likely offers poor quality foraging habitat due to the high level of anthropogenic disturbances. Although one record occurs within 5 miles of the Project site, it is considered historic and was in 1927 (Occ # 317). |
| *Buteo swainsoni*<br>Swainson's hawk (nesting) | Fed:<br>CA: | none<br>THR | Occurs in Great Basin grassland, riparian forest, riparian woodland, and valley & foothill grassland habitats. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Nests in solitary bush or tree, or in small groves. Requires adjacent suitable foraging areas such as grasslands or alfalfa/grain fields supporting rodent populations. | Low Potential to occur: Although riparian woodland is present adjacent to the Project site in the Mojave River, no suitable riparian forest or woodlands are present within the Project Site. Project site provides limited nesting habitat in the trees present. One record occurs within five miles but is over 100 years old. |
| *Empidonax traillii extimus*<br>southwestern willow flycatcher (nesting) | Fed:<br>CA: | END<br>END | Occurs in riparian woodland habitat in Southern California. Nests in densest areas of riparian tree and shrub communities associated with rivers, swamps, and other wetlands, including lakes and reservoirs. Nests are often in nonnative tamarisk (*Tamarisk* spp.) and native willow (*Salix* spp.), typically in vegetation stands of 4-7 m in height. | Low Potential to occur: Although the eastern edge of the Project site located within USFWS designated critical habitat for southwestern willow flycatcher, the habitat is of poor quality in comparison to habitat adjacent to the Project site within the Mojave River. Habitat in the Project site is very disturbed due to OHV use, trash dumping, and illegal camping activity. The species is mobile and can fly over the Project site at any time. Although tamarisk and willow are present within the Project site, they are spaced out and not dense enough to provide suitable habitat for this species to nest. There is no riparian understory or areas of closed canopy. Marginally suitable foraging and dispersal habiat occurs on the Project site of low quality. The Mojave River is adjacent to the Project site and provides suitable foraging, dispersal, and nesting habitat for the species. One record occurs within 5 miles of the Project site but is over 20 years old. |
| *Icteria virens*<br>yellow-breasted chat | Fed:<br>CA: | none<br>SSC | Occurs in riparian forest, riparian scrub, and riparian woodland habitats. Nests in low, dense riparian, consisting of willow, blackberry, wild grape along streams or at the edges of ponds or swamps. Forages and nests within 10 ft of ground. | Low Potential to occur: No suitable habitat was present on the Project Site. Suitable riparian woodlands and scrub occur adjacent to Project site. Yellow-breasted chat could forage within the Project site. One record occurs within 5 miles but is over 20 years old. |
| *Lanius ludovicianus*<br>loggerhead shrike (nesting) | Fed:<br>CA: | none<br>SSC | Occurs in broadleaved upland forest, desert wash, Joshua tree woodland, Mojavean desert scrub, pinon & juniper woodlands, riparian woodland, and Sonoran desert scrub habitats. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting. | Low Potential to occur: Some suitable habitat was present on the Project site with the desert scrub. Shrub habitat on the Project site isn't dense enough for nesting. Project site has suitable perches for scanning and the loggerhead shrike could use the site for hunting. Three records occur within 5 miles of the Project site from 2006 & 2005. |

| *Scientific Name*<br>Common Name | Status | | Habitat Requirements | Potential for Occurrence |
|---|---|---|---|---|
| *Piranga rubra*<br>summer tanager | Fed:<br>CA: | none<br>SSC | Occurs in riparian forest habitat. Summer resident of desert riparian along lower Colorado River and locally elsewhere in California deserts. Requires cottonwood-willow riparian for nesting and foraging. Prefers older, dense strands along stream. | Low Potential to occur: Willows were present and provide limited nesting habitat within the Project site. Riparian habitat occurs adjacent to Project site which could be used for nesting and foraging. Two records were identified within 5 miles of the Project site, however, both are over 20 years old. |
| *Setophaga petechia*<br>yellow warbler (nesting) | Fed:<br>CA: | none<br>SSC | Occurs in riparian forest, riparian scrub, and riparian woodland habitats. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders. Diet consists primarily of insects. | Low Potential to occur: Project site contains cottonwoods and willows which could provide marginal nesting and foraging habitat. One recent record occurs within 5 miles from 2016. |
| *Vireo bellii pusillus*<br>least Bell's vireo (nesting) | Fed:<br>CA: | END<br>END | Occurs in riparian forest, riparian scrub, and riparian woodland habitats. Summer resident of Southern California in low riparian vegetation in the vicinity of water or in dry river bottoms, below 2,000 ft msl. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, mule fat, and mesquite. | Low Potential to occur: Although the Project site contains a few small narrow-leaf willows and mule fat shrubs, they were too small for this species to nest in. The Fremont cottonwoods were mature and the individual trees had a dense canopy, however, this species prefers an understory and canopy of riparian woodland vegetation for nesting. Marginally suitable foraging & dispersal habitat is present but is of low quality. The Mojave River which is adjacent to the Project site has suitable foraging habitat and a dense understory suitable for least Bell's vireo nesting. There have been 5 occurrences within 5 miles of the Project site in the past 20 years. |
| *Vireo vicinior*<br>gray vireo | Fed:<br>CA: | none<br>SSC | Occurs in dry, chaparral habitat. Found west of desert, in chamise-dominated habitat in the mountains of the Mojave Desert, associated with juniper and artemisia. Forage, nest, and sing in areas formed by a continuous growth of twigs, 1-5 ft above ground. | Presumed Absent: No suitable chaparral habitat was present on the Project Site. There are no records within 5 miles of the Project site. |
| *Antrozous pallidus*<br>pallid bat | Fed:<br>CA: | none<br>SSC | Occurs in chaparral, coastal scrub, desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, riparian woodland, Sonoran desert scrub, upper montane coniferous forest, and valley & foothill grassland habitats. Most commonly found in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Frequently roost in live trees and snags that have holes and cavities or crevices formed by exfoliating bark. Very sensitive to disturbance of roosting sites. | Moderate Potential to occur: The cottonwood trees and snags observed on the Project site during the biological survey provide suitable roosting habitat for this species. One recent record occurs 5.6 miles southeast from 2016 (Occ # 429). |
| *Chaetodipus fallax pallidus*<br>pallid San Diego pocket mouse | Fed:<br>CA: | none<br>SSC | Occurs in desert wash, pinon & juniper woodlands, and Sonoran desert scrub habitats. Found in desert border areas in eastern San Diego County in desert wash, desert scrub, desert succulent scrub, and pinyon-juniper. Prefer sandy, herbaceous areas usually in association with rocks or coarse gravel. | Presumed absent: No suitable herbaceous habitat occurs on the Project site and the Project site is outside the current range of this species. There have been 2 occurrences within 5 miles of the Project site but both are over 100 years old and the location data are questionable. |
| *Corynorhinus townsendii*<br>Townsend's big-eared bat | Fed:<br>CA: | none<br>SSC | Occurs in broadleaved upland forest, chaparral, chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, lower montane coniferous forest, meadow and seep, Mojavean desert scrub, riparian forest, riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, upper montane coniferous forest, and valley & foothill grassland habitats. Found throughout California, most commonly in mesic sites. Roosts in the open, hanging from walls and ceilings or in large basal hollows of old growth forest trees. Extremely sensitive to human disturbance. | Low Potential to occur: Some suitable desert scrub habitat was present on the Project site. There was no mesic habitat on the Project site. Riparian woodland is present adjacent to Project site which could allow for foraging adjacent to the Project site. Roosting activities are not expected on this site because there are no structures and Townsend's big-eared bats are cavity roosting species that roost in large basal hollows of old growth forest trees, of which there are none on the project site. Townsend's big-eared bats are extremely sensitive to human disturbance and there are multiple disturbances present. One record was identified within 5 miles of the Project site but is almost 100 years old. |
| *Microtus californicus mohavensis*<br>Mohave River vole | Fed:<br>CA: | none<br>SSC | Occurs in riparian scrub habitat. Found only in weedy herbaceous growth in wet areas along the Mojave River. May be found in some irrigated pastures. Burrows in soft soil. Feeds on leafy parts of grasses, sedges, and herbs. Clips grasses to form runways from burrow. | Presumed Absent: No suitable riparian scrub habitat is present on the Project site. There is a berm located between the Mojave River and the Project site which would make it unlikely for the species to travel onto the Project site to burrow. |
| *Xerospermophilus mohavensis*<br>Mohave ground squirrel | Fed:<br>CA: | none<br>THR | Occurs in chenopod scrub, Joshua tree woodland, and Mojavean desert scrub habitats, often associated with winterfat (*Krascheninnikovia lanata* ), spiny hopsage (*Grayia spinosa* ). Restricted to the Mojave desert. Prefers sandy to gravelly soils, avoids rocky areas. Uses burrows at base of shrubs for cover. Nests are in burrows. | Presumed Absent: The species prefers relatively undisturbed native desert scrub vegetation often associated with winterfat and spiny hopsage. The Project site does not contain the suitable desert scrub habitat or preferred species such as winterfat and spiny hopsage. Although the Project site contains sandy soils and many small mammal burrows were found on the Project site during the biological survey, the Project site contained disturbed areas consisting of trash dumping and dirt roads. Four records occur within 5 miles but all are over 20 years old. |

Federal Designations:

(Federal Endangered Species Act, U.S. Fish and Wildlife Service)

END: Federally-listed, Endangered
THR: Federally-listed, Threatened
FC: Federal Candidate Species
DL: Federally-delisted

State designations:

(California Endangered Species Act, CDFW)

END: State-listed, Endangered
THR: State-listed, Threatened
CAN: Candidate for state listing
SSC: Species of Special Concern
FP: Fully Protected Species

| *Scientific Name*<br>Common Name | Status | Habitat Requirements | Potential for Occurrence |
|---|---|---|---|
| WL: Watch List Species | | | |
| Source: California Natural Diversity Data Base (CNDDB) Victorville, Adelanto, Victorville NW, Helendale, Turtle Valley, Apple Valley North, Apple Valley South, Hesperia, and Baldy Mesa 7.5-minute quads. | | | |