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# **Appendix C**

## Biological Resources Technical Report

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Biological Resources Technical Report

# Mojave Industrial Park Project

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**FEBRUARY 2024**

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# Acronyms and Abbreviations

Acronym	Definition
AgACIS	Agricultural Applied Climate Information System
amsl	above mean sea level
AQMD	Air Quality Management District
BLM	Bureau of Land Management
BMP	best management practice
BSA	biological survey area
CALGreen	California Green Building Standards Code
Cal-IPC	California Invasive Plant Council
CDFW	California Department of Fish and Wildlife
CDNPA	California Desert Native Plants Act
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County General Plan	San Bernardino County General Plan
CRPR	California Rare Plant Rank
CWA	Clean Water Act
CWHR	California Wildlife Habitat Relationships
EPA	U.S. Environmental Protection Agency
Esri	Environmental Systems Research Institute
FESA	federal Endangered Species Act
GIS	geographic information system
HUC	Hydrologic Unit Code
IPaC	Information for Planning and Consultation
ISA	International Society of Arboriculture
ITP	Incidental Take Permit
Joshua Tree Plan	Joshua Tree Preservation, Protection, and Relocation Plan
MBTA	Migratory Bird Treaty Act
MM	Mitigation Measure
NCCP/HCP	Natural Community Conservation Plan/Habitat Conservation Plan
NRCS	Natural Resources Conservation Service
OHWM	ordinary high water mark
ROW	right-of-way
RWQCB	Regional Water Quality Control Board
SSC	California Species of Special Concern
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
USACE	U.S. Army Corps of Engineers



USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VMC	City of Victorville Municipal Code
WEAP	Worker Environmental Awareness Program
WJTCA	Western Joshua Tree Conservation Act
WRCC	Western Regional Climate Center

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# 1 Introduction

This report documents the results of surveys conducted to identify potential biological resources constraints for the Mojave Industrial Park Project (project) located in the City of Victorville (City), San Bernardino County, California. The purpose of this report is to (1) describe the conditions of biological resources within the project site in terms of vegetation communities, plants, wildlife, wildlife habitats, and wetlands; (2) quantify potential direct and indirect impacts to special-status biological resources that would result from the project; (3) discuss those impacts in terms of biological significance in view of federal, state, and local laws; and (4) specify measures to avoid, minimize, and/or mitigate any significant impacts that would occur to special-status biological resources as a result of project implementation.

## 1.1 Project Location

The project is located in the northern portion of the City, which is located in the Victor Valley/High Desert region of western San Bernardino County. Figure 1, Project Location, shows the regional location of the project, as well as the site vicinity. The project is located immediately north of Mojave Drive and east of U.S. Highway 395 with proposed off-site improvements located along Mojave Drive, Cactus Road/Tawney Ridge Lane, Onyx Road, and Topaz Road. The project consists of Assessor's Parcel Numbers (APNs) 312-863-102, 312-863-103, and 312-863-104 and adjacent rights-of-way (ROWS). Off-site improvement areas associated with the project also include ROWs along Mojave Drive, Cactus Road/Tawney Ridge Lane, Onyx Road, and Topaz Road, as well as adjacent parcels comprised of APNs 045-505-392, 312-861-104, 312-862-102, 312-862-106, and 313-537-101. The project occurs in Sections 10 and 11, Township 5 North, Range 5 West of the Public Land Survey System, as depicted on the U.S. Geological Survey (USGS) Adelanto, California 7.5-minute topographic quadrangle map (USGS 2015a). Local access to the project is provided via Cactus Road/Tawney Ridge Lane or Mojave Drive.

## 1.2 Project Description

The project involves the construction of three industrial/warehouse buildings totaling 1,351,400 square feet on an approximately 81.1-acre site in Victorville (City), California (Figure 2, Project Site Plan), and 17.4 acres of off-site utility and street improvements, encompassing a total Project area of 98.5 acres. This report analyzes the biological resources present within the 98.5-acre Project area, as well as a 100-foot buffer comprised of 53.9 acres, resulting in a total Biological Study Area (BSA) of 152.4 acres. The on-site portion of the project consists of three parcels located north of Mojave Drive and east of Onyx Road and extends to the center line of the adjacent ROWs. Building 1, the southeast building, would be approximately 100,300 square feet, Building 2, the southwest building, would be approximately 91,100 square feet, and Building 3, the northern building, would be approximately 1,160,000 square feet. The project would include passenger vehicle parking spaces, trailer parking spaces, tractor-trailer loading docks, and other associated site improvements such as landscaping, sidewalks, and internal driveways.

### Off-Site Improvements

Given the vacant, undeveloped nature of the project site, both wet and dry utilities, including domestic water, sanitary sewer, storm drainage, and electricity, would need to be extended onto the project site. Additionally, the project would include street improvements along Onyx Road, Topaz Road, Mojave Road, and Cactus Road.

## Utility Improvements

Specifically, the project would involve extension of 1.75 miles of the water main within the new segments of road improvements that would be constructed as part of the Project: approximately 0.51 linear miles in Mojave Drive from Diamond Road to Onyx Road; approximately 0.50 linear miles in Onyx Road from Mojave Drive to Cactus Road; approximately 0.24 linear miles in Cactus Road from Onyx Road to Topaz Road; and approximately 0.50 mile in Topaz Road from Mojave Drive to Cactus Road. The project would also involve the extension of approximately 1.21 miles of sewer line within the new segments of road: approximately 0.74 linear miles in Cactus Road from east of Diamond Road to Onyx Road; and approximately 0.47 linear miles in Topaz Road from Cactus Road to south of Mojave Drive. In addition, the project involves approximately 2 miles of storm drain improvements: approximately 0.5 linear miles along Mojave Drive from east of Topaz Road to west of Onyx Road; approximately 0.5 linear miles along Cactus Road from Diamond road to Onyx Road; approximately 0.5 linear miles along Onyx Road from Cactus Road to north of Mojave Drive; and approximately 0.5 linear miles along Topaz Road from Cactus Road to north of Mojave Drive. Storm drain inlets and outlets would be built on adjacent parcels north of Cactus Road, approximately 210 feet east of Onyx Road; west of Onyx Road, approximately 100 feet south of Cactus Road and approximately 950 feet north of Mojave Drive; and north of Mojave Drive, approximately west of Diamond Road.

## Street Improvements

Street improvements involve widening Mojave Drive from east of Topaz Road to west of Onyx Road; extending the east half of Onyx Road from Mojave Drive to Cactus Road; extending the west half of Topaz Road from Mojave Drive to Cactus Road; extending the south half of Cactus Road from Topaz Road to Onyx Road; and extending a two-lane road along Cactus Road from Onyx Road to east of Highway 395.

## Site Access, Circulation, and Parking

Access to the Project site would be provided by seven driveways along Mojave Drive, Topaz Road, and Onyx Road. Local access to these points of entry would be provided via Cactus Road between Onyx Road and U.S. Highway 395, along which road improvements are to be completed as part of the project, and Mojave Drive, an existing paved road. Paved passenger vehicle parking areas would be provided within areas south of Building 3, southeast of Building 1 along Mojave Drive and Topaz Road, and southwest of Building 2 along Mojave Drive and Onyx Road. Tractor-trailer stalls would be surrounding Building 3 to the north, east and west. Loading docks would occur on the east and west sides of Building 3 and on the north side of Buildings 1 and 2. In total, the project would provide approximately 229 loading dock positions, approximately 580 tractor-trailer stalls, and approximately 851 passenger vehicle parking spaces.

## Construction Schedule and Post-Construction Operations

Construction of the project is anticipated to commence in October 2024, lasting approximately 12 months. Tenants for the proposed industrial warehouse buildings have not yet been identified, but the project would operate as a warehouse and/or distribution facility. It is anticipated that the facilities would be operated 24 hours a day, 7 days a week. Cold storage is not proposed as part of this project.

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## 2 Regulatory Setting

### 2.1 Federal

#### 2.1.1 Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS) for most plant and animal species, and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend and provide programs for the conservation of those species, thus preventing the extinction of plants and wildlife. FESA defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as “any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” Under FESA, it is unlawful to “take” any listed species; “take” is defined as to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”

FESA allows for the issuance of Incidental Take Permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans on private property without any other federal agency involvement.

#### 2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits the intentional and unintentional take of any migratory bird or any part, nest, or eggs of any such bird. Under the MBTA, “take” is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so (16 USC 703 et seq.). Currently, the Migratory Birds office considers nests that support eggs, nestlings, or juveniles to be active. Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). The Executive Order requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species.

#### 2.1.3 Clean Water Act

The Clean Water Act (CWA) provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation’s waters. Section 401 requires a project operator for a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the CWA. The Regional Water Quality Control Boards (RWQCBs) administer the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by the U.S. Army Corps of Engineers (USACE) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. USACE implementing regulations are found at 33 Code of Federal Regulations (CFR) Parts 320 through 332. Guidelines for implementation are referred to as the

Section 404(b)(1) Guidelines, which were developed by the U.S. Environmental Protection Agency (EPA) in conjunction with USACE (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

## Wetlands and Other Waters of the United States

The definition of waters of the United States establishes the geographic scope for authority under Section 404 of the CWA; however, the CWA does not specifically define waters of the United States, leaving the definition open to statutory interpretation and agency rulemaking. The definition of what constitutes “waters of the United States” (provided in 33 CFR Section 328.3(a)) has changed multiple times over the past few decades, starting with the *United States v. Riverside Bayview Homes Inc.* court ruling in 1985. Subsequent court proceedings, rule makings, and congressional acts in 2001 (*Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers*), 2006 (*Rapanos v. United States*), 2015 (Clean Water Rule), 2018 (suspension of the Clean Water Rule), 2019 (formal repeal of the Clean Water Rule), 2020 (Navigable Waters Protection Rule), and 2021 (*Pasqua Tribe et al v. EPA* resulting in remand and vacatur of the Navigable Waters Protection Rule and a return to “the pre-2015 regulatory regime”) have attempted to provide greater clarity to the term and its regulatory implementation.

On December 30, 2022, the agencies announced the final Revised Definition of “Waters of the United States” rule (Rule) (88 CFR 3004-3144). The Rule was published in the Federal Register on January 18, 2023, and became effective on March 20, 2023, restoring federal jurisdiction over waters that were protected prior to 2015 under the Clean Water Act for traditional navigable waters, the territorial seas, interstate waters, and upstream water resources that significantly affect those waters. The Rule re-expanded federal jurisdiction over certain water bodies and wetlands previously exempt pursuant to the 2020 Navigable Waters Protection Rule, reinstating the “Significant Nexus” test and adopting the “Relatively Permanent Standard” test. The Significant Nexus test refers to waters that either alone, or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of traditional navigable waters, interstate waters, or the territorial seas (86 FR 69372-69450). The Significant Nexus test attempts to establish a scientific connection between smaller water bodies, such as ephemeral or intermittent tributaries, and larger, more traditional navigable waters such as rivers. Significant Nexus evaluations take into consideration hydrologic and ecologic factors including, but not limited to, volume, duration, and frequency of surface water flow in the resource and its proximity to a traditional navigable water, and the functions performed by the resource on adjacent wetlands. To meet the Relatively Permanent Standard, water bodies must be relatively permanent, standing, or continuously flowing and have a continuous surface connection to such waters.

On May 25, 2023, the Supreme Court issued its long-anticipated decision in *Sackett v. EPA.*, in which it rejected the EPA's claim that “waters of the United States,” as defined in the CWA, includes wetlands with an ecologically significant nexus to traditional navigable waters. The Supreme Court held that only those wetlands with a continuous surface water connection to traditional navigable waterways would be afforded federal protection under the CWA. Specifically, to assert jurisdiction over an adjacent wetland under the CWA, a party must establish that (1) the adjacent body of water constitutes water[s] of the United States (i.e., a relatively permanent body of water connected to traditional interstate navigable waters), and (2) the wetland has a continuous surface connection with that water, making it difficult to determine where the water ends and the wetland begins. On August 29, 2023, the EPA and USACE announced the final rule amending the 2023 definition of “waters of the United States”, conforming with the *Sackett v. EPA* decision. Some of the key changes include removing the significant nexus test from consideration when identifying tributaries and other waters as federally protected and revising the adjacency test when identifying federally jurisdictional wetlands. Under the EPA's new definition, a “water of the United States” is

a relatively permanent, standing, or continuously flowing body of water that has an apparent surface connection to a “traditionally navigable water” to fall within federal purview. The new rule applies to wetlands and streams throughout the U.S. Although the Sackett opinion did not specifically reference streams, the EPA’s new rule extends the “continuous surface connection” standard to streams, thereby removing non-permanent, ephemeral streams that do not meet these standards from federal jurisdiction.

The term “wetlands” (a subset of waters of the United States) is defined in 33 CFR, Section 328.3(c)(16), as “areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the “ordinary high water mark,” which is defined in 33 CFR 328.3(c)(7) as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.”

## 2.2 State

### 2.2.1 California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Sections 2050–2068) provides protection and prohibits the take of plant, fish, and wildlife species listed by the State of California. Unlike FESA, under CESA, state-listed plants have the same degree of protection as wildlife, but insects and other invertebrates may not be listed. Take is defined similarly to FESA and is prohibited for both listed and candidate species. Take authorization may be obtained by a project applicant from the California Department of Fish and Wildlife (CDFW) under CESA Section 2081, which allows take of a listed species for educational, scientific, or management purposes. In this case, private developers consult with CDFW to develop a set of measures and standards for managing the listed species, including full mitigation for impacts, funding of mitigation implementation, and monitoring of mitigation measures.

#### Western Joshua Tree

On October 21, 2019, the California Fish and Game Commission (Commission) received a petition from the Center for Biological Diversity to list western Joshua tree (*Yucca brevifolia*). On November 1, 2019, the Commission referred the petition to CDFW for evaluation. CDFW evaluated the scientific information presented in the petition and other relevant information possessed by CDFW at the time of review and prepared a report for submittal to the Commission (CDFW 2020). The report states that CDFW recommended that the Commission accept the petition for further consideration of western Joshua tree under the CESA. On September 22, 2020, the Commission accepted the candidacy proposal for western Joshua tree, effective October 9, 2020. When a plant or wildlife species is granted candidacy under the CESA, the species is given the same protection as a threatened or endangered species while the Commission evaluates whether formal listing as threatened or endangered under the CESA is warranted.

In listing western Joshua tree as a candidate species under CESA, the Commission directed CDFW staff to evaluate whether the species should be formally listed under CESA. In March 2022, CDFW staff presented its findings to the Commission and recommended against the listing, citing the species widespread distribution and lack of data

regarding the extent to which climate changes are expected to affect the species. This information was presented to the Commission on June 15–16, 2022. The Commission voted on the proposed listing at this meeting, but the vote resulted in a 2–2 tie. The Commission discussed western Joshua tree’s listing status at its October 12–13, 2022 meeting; however, it was decided at this meeting to extend Joshua tree’s candidate status discussion until their February 23, 2023, meeting, which was anticipated to be the final meeting before a listing decision was made. On July 1, 2023, the Western Joshua Tree Conservation Act (WJTCA) was passed. While western Joshua tree is a candidate species, take for western Joshua tree can be received through payment of pre-determined mitigation fees.

The WJTCA introduces a streamlined permitting framework that applies to specific development activities and mandates the collection of mitigation fees. These fees are intended to facilitate the acquisition and preservation of western Joshua tree habitat, as well as to support conservation measures aimed at safeguarding the western Joshua tree. The underlying goal is to counterbalance the adverse impacts on western Joshua trees resulting from authorized projects and to promote species conservation on a landscape scale.

Under the WJTCA, CDFW is authorized to perform the following key functions:

- Issue permits for the trimming and removal of hazardous or deceased western Joshua trees.
- Grant permits for the incidental take of western Joshua trees, contingent upon the fulfillment of specific conditions.
- Establish agreements with counties or cities to delegate limited authority for the issuance of the aforementioned permits, provided that predetermined conditions are met.

Furthermore, the WJTCA instructs CDFW to develop a comprehensive conservation plan for the western Joshua tree by the conclusion of the year 2024.

The WJTCA institutes two categories of mitigation fees: reduced fees and standard fees, depending on the geographical location, as defined in the California Department of Fish and Game Code (Section 1927). It empowers the CDFW to issue permits for the incidental take of one or more western Joshua trees, subject to compliance with stipulated conditions. Permit holders may opt to remit specified fees in lieu of undertaking mitigation activities. Additionally, the WJTCA authorizes the CDFW to issue permits for the removal of deceased western Joshua trees and the trimming of live western Joshua trees under specific circumstances.

Notably, all in-lieu fees collected under the WJTCA are directed to the Western Joshua Tree Conservation Fund, with the explicit purpose of allocation to the CDFW. These funds are designated exclusively for the acquisition, conservation, and management of western Joshua tree conservation lands, as well as the execution of other initiatives designed to safeguard the western Joshua tree.

## Permitting

The initial step in the project permitting process necessitates the comprehensive survey and documentation of western Joshua trees located on the project site as well as within a 50-foot radius surrounding the project area. This census must adhere to precise specifications outlined on the CDFW’s official website.

Simultaneously, a permit application, available on the CDFW's website, must be completed. The application mandates that the applicant complies with the California Environmental Quality Act (CEQA). Notably, there are no

stipulated statutory deadlines governing the permitting process; however, CDFW is committed to expeditiously processing the applications upon receipt. Upon successful processing of the application by CDFW, the permittee will be issued an invoice for the mandatory mitigation fee. This fee is to be remitted via check or money order, with the invoice securely attached, following the precise instructions provided by CDFW.

## 2.2.2 California Fish and Game Code

### Fully Protected Species

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. Furthermore, it is the responsibility of CDFW to maintain viable populations of all native species. Toward that end, CDFW has designated certain vertebrate species as Species of Special Concern, because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

### Sections 1600–1616

Under California Fish and Game Code Sections 1600–1616, CDFW has the authority to regulate work that will substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake. CDFW also has the authority to regulate work that will deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement and is applicable to all projects. Applications to CDFW must include a complete, certified CEQA document.

CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses (including dry washes) and lakes characterized by the presence of definable bed and banks, and existing fish or wildlife resources. CDFW takes jurisdiction to the top of bank of the stream or the limit of the adjacent riparian vegetation, which may include oak woodlands in canyon bottoms. Historical court cases have further extended CDFW jurisdiction to include watercourses that seemingly disappear but reemerge elsewhere. Under the CDFW definition, a watercourse need not exhibit evidence of an ordinary high-water mark (OHWM) to be claimed as jurisdictional. CDFW does not have jurisdiction over ocean or shoreline resources.

### California Native Plant Protection Act

The Native Plant Protection Act of 1977 (Sections 1900 et seq. of the California Fish and Game Code) directed CDFW to carry out the Legislature’s intent to “preserve, protect and enhance rare and endangered plants in this State.” The Native Plant Protection Act gave the Commission the power to designate native plants as “endangered” or “rare,” and protect endangered and rare plants from take. CESA expanded on the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the California Fish and Game Code. To align with federal regulations, the categories of “threatened” and “endangered” species were added to CESA. All “rare” animals in CESA were converted to “threatened,” but this did not change for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Because rare



plants are not included in CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and project proponents.

## Nesting Birds

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 protects all birds of prey (raptors) and their eggs and nests. Section 3511 states that fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA.

## 2.2.3 California Environmental Quality Act

CEQA requires identification of a project's potentially significant impacts on biological resources, and ways that such impacts can be avoided, minimized, or mitigated. CEQA also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

The State of California CEQA Guidelines (CEQA Guidelines) Section 15380(b)(1) defines endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors." A rare animal or plant is defined in CEQA Guidelines Section 15380(b)(2) as a species that, although not presently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or ... [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines Section 15380(c).

CDFW has developed a list of "Special Species" as "a general term that refers to all of the taxa the California Natural Diversity Database (CNDDDB) is interested in tracking, regardless of their legal or protection status." This is a broader list than those species that are protected under FESA, CESA, and other California Fish and Game Code provisions, and includes lists developed by other organizations, including, for example, the Audubon Watch List. Guidance documents prepared by other agencies, including the Bureau of Land Management Sensitive Species and USFWS Birds of Special Concern, are also included on this CDFW Special Species list. Additionally, CDFW has concluded that plant species listed as California Rare Plant Rank (CRPR) 1 and 2 by the California Native Plant Society (CNPS), and potentially some CRPR 3 plants, are covered by CEQA Guidelines Section 15380.

Section IV, Appendix G, Environmental Checklist Form, of the CEQA Guidelines requires an evaluation of impacts to "any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or the USFWS."

## 2.2.4 Porter-Cologne Water Quality Control Act

Pursuant to provisions of the Porter-Cologne Act, the RWQCBs regulate discharging waste, or proposing to discharge waste, within any region that could affect a water of the state (California Water Code, Section 13260[a]). The State Water Resources Control Board (SWRCB) defines waters of the state as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code, Section 13050[e]). All waters of the United States are waters of the state. Waters of the state include wetlands, and the SWRCB definition of wetlands (SWRCB 2019) includes the following:

1. Natural wetlands.
2. Wetlands created by modification of a surface water of the state.
3. Artificial wetlands that meet any of the following criteria:
  - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration.
  - b. Specifically identified in a water quality control plan as a wetland or other water of the state.
  - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape.
  - d. Greater than or equal to 1 acre in size unless the artificial wetland was constructed and is currently used and maintained, primarily for one or more of the following purposes: industrial or municipal wastewater treatment or disposal; settling of sediment; detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial permitting program; treatment of surface waters; agricultural crop irrigation or stock watering; fire suppression; industrial processing or cooling water; active surface mining – even if the site is managed for interim wetlands functions and values; log storage; treatment, storage, or distribution of recycled water; maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or fields flooded for rice growing.

Wetlands that may not meet all of USACE’s wetland delineation criteria are considered wetland waters of the state if, “under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area’s vegetation is dominated by hydrophytes or the area lacks vegetation” (SWRCB 2019). Additionally, aquatic resources that USACE determines to not be waters of the United States because they lack a significant nexus to a traditional navigable water or are above the OHWM limit of federal jurisdiction, may also be considered waters of the state. If a CWA Section 404 permit is not required for a project, the RWQCB may still require a permit (waste discharge requirements) for impacts to waters of the state under the Porter-Cologne Act.

## 2.2.5 California Desert Native Plants Act

The purpose of the California Desert Native Plants Act (CDNPA) is to protect certain species of California desert native plants from unlawful harvesting on both public and privately owned lands. The CDNPA only applies within the boundaries of Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego Counties. Within these counties, the CDNPA prohibits the harvest, transport, sale, or possession of specific native desert plants

unless a person has a valid permit or wood receipt and the required tags and seals. The appropriate permits, tags and seals must be obtained from the sheriff or commissioner of the county where collecting will occur, and the county will charge a fee. More information on the CDNPA, including the species protected under the law, is available by reading the provisions of the law.

## 2.3 Local

### 2.3.1 San Bernardino County General Plan and Development Code

The County of San Bernardino General Plan (County General Plan) contains the goals and policies that guide future development within San Bernardino County (County of San Bernardino 2007a). San Bernardino County is broken into three distinct geographic planning regions: the Valley, the Mountains, and the Desert. The Project site occurs within the Desert Planning Region of San Bernardino County. The Desert Planning Region has two goals and policies: (1) to preserve open lands by working with Bureau of Land Management (BLM) and (2) to ensure that off-highway vehicle use is managed to protect environmentally sensitive resources.

The Project would also need to comply with the Development Code. The San Bernardino County Development Code (County of San Bernardino 2007b) implements the goals and policies of the County General Plan. Chapter 88.01.060, Desert Native Plant Protection, of the San Bernardino County Development Code is a subset of the Plant Protection and Management Code (Chapter 88.01 of the Development Code) and focuses on the conservation of specified desert tree species. This code ensures coordination with CNDPA and requires issuance of a Tree or Plant Removal Permit in compliance with Section 88.01.050 for the following species:

- (1) The following desert native plants 6 feet or greater in height or with stems 2 inches or greater in diameter:
  - a. Smoke tree (*Psoralea argophylla* [Synonym: *Dalea spinosa*])
  - b. All species of the genus *Prosopis* (mesquites)
- (2) All species of the family Agavaceae (century plants, nolin, yuccas)
- (3) Creosote (*Larrea tridentata*) rings, 10 feet or greater in diameter
- (4) All western Joshua trees
- (5) Any part of the following species, whether living or dead:
  - a. desert ironwood (*Oleina tesota*)
  - b. All species of the genus *Prosopis* (mesquites)
  - c. All species of the genera *Cercidium* or *Parkinsonia* (palos verdes)

### 2.3.2 City of Victorville General Plan

The City's Resource Element (City of Victorville 2008) addresses biological resources in Goal #4 (Conservation of Important Habitat), wherein objectives and policies are set forth to achieve the goal of preserving native vegetation that provides habitat for rare, threatened, and/or endangered plant and wildlife species. The following objectives and policies pertain to biological resources and are relevant to the project:

Objective 4.1. Preservation of natural communities that support rare, threatened, and or endangered plant and wildlife species throughout the planning area.

Policy 4.1.1. Encourage natural habitat that supports rare, threatened, or endangered plants and wildlife (i.e., “sensitive” species), or require restoration of the same type of impacted habitat within an existing, planned, or potential conservation area.

Policy 4.1.2. Support and participate in the West Mojave Plan.

Objective 4.2. Permanent Conservation of Mojave River Corridor Ecological Values.

Policy 4.2.1. Generally, prohibit private or public development projects or major infrastructure facilities on land within the Mojave River Corridor, where biological surveys have determined there is habitat that supports rare, threatened, and/or endangered plants or wildlife. Allow minor encroachments into such habitat for critical public facilities and recreational trails, where reliable assurances are provided that no loss of sensitive species would occur.

### 2.3.3 City of Victorville Municipal Code

The City of Victorville Municipal Code (VMC) provides some protections for western Joshua tree in Chapter 13.33 of the Code of Ordinances, titled Preservation and Removal of Joshua Trees.

Per Chapter 13.3 of the VMC (2023a), it is determined by the City council that proper and necessary steps be taken to protect and preserve, to the greatest extent possible, Joshua trees in all areas of the City to preserve the unique natural desert environment throughout the City and for the health, safety, and welfare of the community (VMC 13.33.010). The VMC continues to state that it is unlawful for any person to cut, damage, destroy, dig up, or harvest any Joshua tree without the prior written consent of the Director of Parks and Recreation or their designee (VMC 13.33.040).

Furthermore, Section 16-5.02.060 of the VMC states the following regarding western Joshua trees and as a requirement of the grading and permit requirements of Article 2, Grading Regulations VMC (2023b):

All Joshua trees, as per Chapter 13.33 of the Victorville Municipal Code, shall be indicated by showing the exact center of its trunk as established by a licensed surveyor. Its tag number, trunk diameter and height must be indicated. The health and proposed disposition of the tree must be indicated. Where a tree or trees are to be removed, the applicant shall meet all current requirements and standards as set forth by the California Department of Fish and Wildlife, and proof shall be submitted to the Building Department prior to issuance of a permit. Alternatively, the Applicant may provide a detailed report, from a licensed Arborist or Biologist, for protecting and preserving, the tree or trees in accordance with applicable California Department of Fish and Wildlife standards, which may be affected by the proposed grading.

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## 3 Methods

Data regarding biological resources present within the 152.4-acre biological survey area (BSA), which includes the 81.1-acre project site, 17.4 acres of off-site improvement areas, and a 100-foot buffer, were obtained through a review of pertinent literature, field reconnaissance, habitat assessments, and protocol/focused surveys, which are described in detail below.

### 3.1 Literature Review

Prior to conducting the field investigation, a literature search and database review were conducted by Dudek biologists to evaluate the natural resources found or potentially occurring within the BSA. The database review included queries of the most recent versions of the CDFW CNDDDB and the CNPS Inventory of Rare and Endangered Plants of California (CDFW 2023a ; CNPS 2023a). These databases were reviewed to identify sensitive biological resources present or potentially present for the U.S. Geological Survey 7.5-minute quadrangle on which the BSA is located (i.e., Adelanto) and the 8 surrounding quadrangles (i.e., Hesperia, Victorville, Shadow Mountains, Helendale, Victorville NW, Phelan, Baldy Mesa, and Shadow Mountains SE). The review also included the resource list returned in the USFWS Information for Planning and Consultation (IPaC) tool query for the BSA (USFWS 2023a).

Other literature reviewed included U.S. Department of Department and Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2023a); CDFW Biogeographic Information and Observation System (CDFW 2023b); A Manual of California Vegetation, Online Edition (CNPS 2023b); the California Natural Community list (CDFW 2023c); State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2023d); State and Federally Listed Endangered and Threatened Animals of California (CDFW 2023e); and the CDFW California Wildlife Habitat Relationships (CWHR) Life History Accounts and Range Maps (CDFW 2017).

The following available resources were reviewed to assess the potential for jurisdictional waters: aerial photographs (Google Earth 2023; Nationwide Environmental Title Research 2023); the subject USGS 7.5-minute topographic quadrangle maps (USGS 2015a); the National Hydrography Dataset and Watershed Boundary Dataset (USGS 2023); and the USFWS National Wetland Inventory (USFWS 2023b).

### 3.2 Special-Status Definitions

#### Special-Status Plant Species.

Endangered, rare, or threatened plant species as defined in Section 15380(b) of the CEQA Guidelines (14 CCR 15000 et seq.) are referred to as “special-status plant species” and, as used in this report, include (1) plant species listed or candidates for listing as endangered or threatened recognized in the context of CESA and FESA (CDFW 2023d); and/or (2) plant species with a CRPR 1 or 2 as designated by the CNPS (2023a). Species with CRPR 3 or 4 generally do not qualify for protection under CEQA; therefore, are not analyzed in this report.

#### Special-Status Wildlife Species

Endangered, rare, or threatened wildlife species as defined in CEQA Guidelines, Section 15380(b) (14 CCR 15000 et seq.), are referred to as “special-status wildlife species” and, as used in this report, include (1) wildlife species

listed or candidates for listing as endangered or threatened recognized in the context of CESA and FESA (CDFW 2023e); (2) California Species of Special Concern (SSC) as designated by CDFW (2023f); (3) mammals and birds that are fully protected species as described in the California Fish and Game Code, Sections 4700 and 3511 (CDFW 2023g); and (4) species designated by California Fish and Game Code Section 4000 as fur-bearing mammals.

### Special-Status Vegetation Communities

Special-status vegetation communities are those communities identified as high priority for inventory in the California Natural Communities List (CDFW 2023c) by a state rarity ranking of S1, S2, or S3. In addition, communities that are regulated by CDFW under California Fish and Game Code Sections 1600–1616, and/or that provide suitable habitat for special-status species may also be considered special status under CEQA. Areas regulated by CDFW under California Fish and Game Code Sections 1600–1616 are discussed under separate cover.

## 3.3 Special-Status Species Assessment

Dudek biologists performed a desktop review of literature, existing documentation, and geographical information system (GIS) data to evaluate the potential for special-status plant or wildlife species to occur within the BSA. Each special-status plant or wildlife species was assigned a rating of “not expected,” “low,” “moderate,” or “high” potential to occur based on relative location to known occurrences, vegetation communities and soils present, current site conditions, and each species’ known range, habitat associations, and/or elevation. Additional detail related to each rating is provided below:

- **Observed:** Species was documented within the BSA during field survey efforts
- **High:** Habitat within the BSA is suitable and species has been documented either within the BSA or immediately adjacent to project boundary in recent records (i.e., within 20 years).
- **Moderate:** Habitat within the BSA is suitable and species has been documented within 5 miles of BSA in recent records (i.e., within 20 years).
- **Low:** Habitat within the BSA is marginal and/or documented occurrences of species are historical (i.e., over 20 years old)
- **Not expected:** Habitat within the BSA is unsuitable or BSA is outside of the known geographic range of the species, or the species was confirmed absent from the BSA during protocol surveys for the species.

## 3.4 Resource Mapping

Dudek biologists Tracy Park and Shana Carey conducted an initial biological reconnaissance-level field survey of the project site to document biological resources and vegetation communities in September 2022. Additional field surveys conducted by Dudek included an aquatic resources jurisdictional delineation, a focused special-status plant survey and desert native plant survey, focused western Joshua tree mapping surveys, focused burrowing owl (*Athene cunicularia*), protocol surveys for Mojave desert tortoise (*Gopherus agassizii*), and protocol surveys for Mohave ground squirrel (*Xerospermophilus mohavensis*) surveys. Table 1 lists the dates, survey type, and personnel for each survey.

**Table 1. Survey Schedule**

Date	Personnel <sup>1</sup>	Survey Type	Survey Conditions <sup>2</sup>
9/13/2022	TP, SC	Biological Reconnaissance; Vegetation Mapping; Aquatic Resources Jurisdictional Delineation	8:00 AM–3:00 PM Air: 68–82 °F; 1–7 mph wind; 70–80% cc
9/14/2022	TP, SC		8:00 AM–4:30 PM Air: 64–80 °F; 1–3 mph wind; 10% cc
9/15/2022	TP, SC		8:00 AM–2:30 PM Air: 60–84 °F; 1–4 mph wind; 0% cc
3/22/2023	ST, AC	Focused Western Joshua Tree Mapping Survey	Air: 30–45 °F; windy
3/23/2023	ST, AC		Air: 30–45 °F; windy
3/23/2023	ES, CBD	Focused Burrowing Owl Survey Pass 1	6:21 AM–10:11 AM Air: 38–50 °F; 1–5 mph wind; 0–40% cc
3/24/2023	ES, CBD		6:24 AM–9:58 AM Air: 38–49 °F; 1–3 mph wind; 0% cc
4/12/2023	RS, CBD	Focused Mojave Desert Tortoise Survey	10:00 AM–2:35 PM Air: 60–70 °F; 50–90% cc
4/13/2023	TP, RS, CBD		9:15 AM–4:07 PM Air: 57–66 °F; 2–10 mph wind; 10% cc
4/18/2023	TP		10:03 AM–3:24 PM Air: 54–63 °F; 2–7 mph wind; 0% cc
4/18/2023	TP	Focused Burrowing Owl Survey Pass 2	8:31 AM–9:51 AM Air: 50–54 °F; 1–5 mph wind; 0% cc
4/20/2023	ES, RP	Special-Status Plant Survey; Desert Native Plant Survey	8:51 AM–7:10 PM Air: 50–68 °F; 1–2 mph wind; 0% cc
4/21/2023	Dipodomys Ecological Consulting	Focused Mohave Ground Squirrel Surveys Pass 1	Air: 63.4–82.2 °F; Soil: 59–77 °F; 3.3–4.2 mph wind; 0–2% cc
4/22/2023			Air: 69.3–88.6 °F; Soil: 64.4–68.9 °F; 2.6–3.4 mph wind; 10–20% cc
4/23/2023			Air: 67.8–88 °F; Soil: 63.8–68.9 °F; 2.4–6.7 mph wind; 0–5% cc
4/24/2023			Air: 63.5–82.7 °F; Soil: 64.1–80.6 °F; 12.2– 21.5 mph wind; 0–1% cc
4/25/2023			Air: 66.3–82.8 °F; Soil: 64.8–83.6 °F; 3.7–6.7 mph wind; 0–5% cc
4/28/2023	ST, AC	Focused Western Joshua Tree Mapping Survey	Air: 50–60 °F; sunny
5/27/2023	Dipodomys Ecological Consulting	Focused Mohave Ground Squirrel Surveys Pass 2	Air: 62.4–90 °F; Soil: 71.2–84.2 °F; 2.4–4.3 mph wind; 0–2% cc
5/28/2023			Air: 61.5–82.1 °F; Soil: 73.4–88.3 °F; 1.2– 21.3 mph wind; 0–2% cc
5/29/2023			Air: 64.2–78.6 °F; Soil: 70.2–82.9 °F; 6.3– 15.8 mph wind; 5% cc
5/30/2023			Air: 66.9–78.2 °F; Soil: 70.7–83.3 °F; 5.7– 17.8 mph wind; 15–50% cc
5/31/2023			Air: 71.5–82.3 °F; Soil: 67.1–77 °F; 5.1–7.5 mph wind; 2–5% cc



**Table 1. Survey Schedule**

Date	Personnel <sup>1</sup>	Survey Type	Survey Conditions <sup>2</sup>
6/1/2023	CBD	Focused Burrowing Owl Survey Pass 3	7:00 AM–9:00 AM Air: 55–65 °F; clear skies; 7 mph wind
6/23/2023	ES	Focused Burrowing Owl Survey Pass 4	7:56 AM–9:45 AM Air: 54–63 °F; 0–20% cc; 9 mph wind
7/4/2023	Dipodomys Ecological Consulting	Focused Mohave Ground Squirrel Surveys Pass 3	Air: 72.5–89.8 °F; Soil: 84.2–85.1 °F; 4.3–9.6 mph wind; 0% cc
7/5/2023			Air: 66.5–90 °F; Soil: 81.5–82.4 °F; 6.5–9 mph wind; 0% cc
7/6/2023			Air: 68.3–90 °F; Soil: 82.4–84.2 °F; 6–6.4 mph wind; 0% cc
7/7/2023			Air: 69.5–87.1 °F; Soil: 80.6–82.4 °F; 6.6–8.7 mph wind; 0% cc
7/8/2023			Air: 68.8–88.9 °F; Soil: 80.6–83.3 °F; 2.7–6.2 mph wind; 0% cc
7/18/2023	TP	Focused Burrowing Owl Survey Pass 5	7:56 AM–9:33 AM Air: 87–92 °F; 0–1 mph wind; 0% cc
9/29/2023	TP	Aquatic Resources Jurisdictional Delineation	11:30 AM–4:00 PM Air: 76–75 °F; 3–10 mph wind; 0% cc
11/7/2023	AP, LB	Focused Western Joshua Tree Mapping Survey	Survey conditions not collected.
1/22/2024	ST	Focused Western Joshua Tree Mapping Survey	Survey conditions not collected.
1/24/2024	TP	Aquatic Resources Jurisdictional Delineation	12:45 PM–2:07 PM Air: 56–57 °F; 0–5 mph wind; 100% cc

**Notes:**

<sup>1</sup> TP=Tracy Park; SC=Shana Carey; ST=Sarah Tian; AC=Aida Castro; ES=Eillean Salas; CBD=Chelsea Bowers-Doering; RS=Ryan Stanley; RP=Zarina “Rina” Pringle; AP=Ana Pflieger; LB=Luz Badillo

<sup>2</sup> °F = degrees Fahrenheit; mph = miles per hour; cc = cloud cover

### 3.4.1 Vegetation Community and Land Cover Mapping

Methods for vegetation mapping followed CDFW’s Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018) and the Survey of California Vegetation Classification and Mapping Standards (CDFW 2022). Where feasible, vegetation communities within the BSA were mapped using CDFW’s List of Vegetation Alliances and Associations (or California Natural Community List) (CDFW 2023c), which is based on A Manual of California Vegetation, Second Edition (Sawyer et al. 2009) and A Manual of California Vegetation, Online Edition (CNPS 2023b). These classification systems focus on a quantified, hierarchical approach that includes both floristic (plant species) and physiognomic (community structure and form) factors as currently observed (as opposed to predicting climax or successional stages). Vegetation communities and land covers were delineated to the vegetation alliance level and, where appropriate, the association level. In cases where the vegetation classification standards from the CDFW Natural Communities List did not apply, classification standards from “Methods used to survey the vegetation of Orange County parks and open space areas and The Irvine Company property” and Draft Vegetation Communities of San Diego County (Jones and Stokes 1993; Oberbauer et al. 2008) were incorporated to accommodate the lack of conformity of conditions observed on site (e.g., developed/disturbed land cover types).

Vegetation mapping surveys were conducted on foot to visually cover 100% of the BSA. Vegetation communities and other land cover types within the BSA were mapped in the field using the Environmental Systems Research Institute (Esri) Field Maps, a mobile data collection application, on a digital aerial-based background (Esri 2023). Communities were classified based on dominant species and associated cover classes, site factors, stand descriptions (e.g., slope aspect, canopy structure), geographic setting, and characteristic species present within an area. Minimum mapping units were established to standardize the scale and appropriate evaluation of stands, as recommended by CDFW (2022). Mapping standards call for a minimum mapping unit of not greater than 10 acres for upland natural communities not considered sensitive, but usually 1 or 2 acres, and 0.25 acres for sensitive vegetation communities and wetland or riparian vegetation communities were used as minimum mapping units. Visible disturbance factors were also noted during vegetation mapping. Following completion of the fieldwork, all vegetation linework was finalized using Esri ArcGIS software and GIS coverage was created. Once in ArcGIS, the acreage of each vegetation community and land cover type within the BSA was determined.

### 3.4.2 Flora

All plant species encountered during the field surveys were identified and recorded. Latin and common names for plant species with a CRPR follow the CNPS Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2023a). For plant species without a CRPR, Latin names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2023), and common names follow the USDA NRCS PLANTS Database (USDA 2023b).

### 3.4.3 Fauna

All wildlife species, as detected during the field survey—by sight, calls, tracks, scat, or other signs—were identified and recorded. Binoculars were used to aid in the identification of observed wildlife. In addition to species observed, expected wildlife usage of the BSA was determined according to known habitat preferences of regional wildlife species and knowledge of their relative distributions in the area. Latin and common names for wildlife species referred to in this report follow Crother (2017) for reptiles and amphibians, American Ornithological Society (AOS) Checklist (AOS 2023) for birds, Wilson and Reeder (2005) for mammals, and Moyle (2002) for fish.

### 3.4.4 Focused Special-Status Plant Survey

Based on the results of the literature review discussed in Section 3.1 and results of the reconnaissance-level field survey conducted in September 2022, seven special-status plant species were preliminarily determined to have potential to occur within the BSA based on known species distribution, species-specific habitat preferences, and habitat conditions on site: Beaver Dam breadroot (*Pediomelum castoreum*), Booth's evening primrose (*Eremothera boothii* ssp. *boothii*), Latimer's woodland-gilia (*Saltugilia latimeri*), Mojave monkeyflower (*Diplacus mohavensis*), sagebrush loeflingia (*Loeflingia squarrosa* var. *artemisiarum*), short-joint beavertail (*Opuntia basilaris* var. *brachyclada*), and western Joshua tree. Therefore, focused surveys were conducted for these target species on April 20, 2023, within the blooming period range for these species.

Surveys for special-status species were conducted by walking meandering transects throughout the entire project site, where accessible. The survey date and biologists for the focused special-status plant surveys within the BSA are included in Table 1. Focused special-status plant surveys conformed to CNPS Botanical Survey Guidelines (CNPS 2001), Protocols for Surveying and Evaluating Impacts to Special Status Native Populations and Natural Communities (CDFW 2018), and USFWS General Rare Plant Survey Guidelines (Cypher 2002). All plant species

encountered during the field surveys were identified to subspecies or variety, if applicable, to determine sensitivity status. Moreover, all plant species encountered in the field were recorded.

Focused surveys for desert native plants were conducted in accordance with the CDNPA and concurrently with special-status plant survey. Survey methods are further discussed below in Section 3.2.5, Desert Native Plant Survey. Western Joshua tree mapping was conducted during a separate focused survey and is discussed in Section 3.2.6, Western Joshua Tree Focused Survey.

Before conducting the surveys, Dudek botanists conducted reference population checks and a literature search to ensure the focal special-status plant species were in bloom and identifiable. White-bracted spineflower was observed in bloom on April 19, 2023, near Keenbrook Road within upper terrace of Cajon Wash (off of Cajon Blvd). Mojave monkeyflower was observed in bloom on April 18, 2023, south of Daggett, California in the Newberry Mountains. Beaver dam breadroot was observed in bloom north of Lucerne Dry Lake on April 18, 2023. It should be noted that short-joint beavertail is a conspicuous stem succulent species that can be identified outside the blooming period, and therefore was not included in the 2023 reference check. Similarly, western Joshua tree is a conspicuous tree that can be identified outside of the blooming period. Furthermore, Victorville received approximately 5.36 inches of precipitation from September 2022 to April 2023 (Agricultural Applied Climate Information System [AgACIS] 2023) as compared with the average annual precipitation is 5.52 inches (Western Regional Climate Center [WRCC] 2023); therefore, the area received average precipitation totals for the rain year thus far thereby asserting that surveys for special-status plant species adequately covered flora that are known to bloom within the vicinity.

### 3.4.5 Focused Desert Native Plant Survey

A desert native plant mapping survey within the BSA was conducted concurrently with the special-status plant survey and in accordance with the CDNPA. The survey date, biologists, and weather conditions are included in Table 1. All of the desert native plant target species are conspicuous shrubs that would have been identifiable during the survey.

In accordance with the CDNPA, Chapter 3, the following desert native plants were considered target species:

- (a) All species of the family Agavaceae (century plants, nolin, yuccas).
- (b) All species of the family Cactaceae (cacti), except for the plants listed in subdivisions (b) and (c) of Section 80072 which may be harvested under a permit obtained pursuant to that section.
- (c) All species of the family Fouquieriaceae (ocotillo, candlewood).
- (d) All species of the genus *Prosopis* (mesquites).
- (e) All species of the genus *Cercidium* (palos verdes).
- (f) *Acacia greggii* (catclaw).
- (g) *Atriplex hymenelytra* (desert-holly).
- (h) *Dalea spinosa* (smoke tree).
- (i) *Olneya tesota* (desert ironwood), including both dead and live desert ironwood.

### 3.4.6 Focused Western Joshua Tree Survey

The Commission determined that listing the western Joshua tree as threatened or endangered under CESA may be warranted and is currently under review. During the status review, the western Joshua tree is protected under CESA as a candidate species.

Per the WJTCA, an International Society of Arboriculture (ISA)-certified arborist performed a western Joshua tree survey (Table 1) to inventory and evaluate the health and relocation potential for each western Joshua tree within the project site plus off-site improvements and a 50-foot buffer (hereafter referred to as Joshua Tree Survey Area). The western Joshua tree inventory and evaluation survey methods are provided in Appendix A. During the inventory, the geographic location of each western Joshua tree found in the Joshua Tree Survey Area was recorded. Dudek certified arborists walked the entire Joshua Tree Survey Area in parallel transects to ensure documentation of each western Joshua on site.

Dudek collected the following attributes of each tree:

- Species
- Size class (Size A - <1m, Size B - >1m and <5m, and Size C - >5m)
- Actual height (meters)
- Health (excellent, good, fair, poor, critical, and dead)
- Live or dead
- Tree maturity (mature if branching occurs, not mature if no branching occurs)
- Flowering or fruiting stage (flowers or fruits present)
- If a tree had a severe bend in the trunk, height was recorded with two measurements, h1 and h2, h1 being the main, upright trunk, and h2 being the remaining, non-vertical trunk or branch. H1 and h2 were then added together to get an overall height and size class. If a tree was found leaning, the height was measured from the base of the tree along the leaning trunk to the top of the furthest leaf.
- All inventoried and assessed protected trees were tagged with an aluminum tag bearing a unique identification number, which was placed on the main trunk on the north side of each Joshua tree. Tagging on the north side allows for proper orientation during relocation (each relocated Joshua tree will need to be oriented in the same direction as it was in its original location). Photographs for each tree were taken in accordance with CDFW requirements for western Joshua tree photographs and included an object for frame of reference.

### 3.4.7 Focused Burrowing Owl Survey

Focused breeding season burrowing owl surveys were conducted in accordance with the March 7, 2012, Staff Report on Burrowing Owl mitigation (CDFW 2012). Dudek biologists conducted four survey passes in March through July of 2023 under suitable weather conditions, between morning civil twilight and 10:00 a.m. (Table 1). Surveys were scheduled at least three weeks apart as per CDFW protocol, with the first survey visit between February 15 and April 15, two survey visits between April 15 and June 15, and one survey visit after June 15. The first visit included a habitat assessment concurrent with searching for suitable burrows and burrowing owls.

Dudek biologists conducted the survey on foot by slowly walking transects to inspect all vegetation for evidence of burrowing owl within the project site as well as the surrounding 500-foot buffer area. The surveys covered all portions of site that included suitable burrowing owl habitat (i.e., short, sparse vegetation with few shrubs, level to gentle topography and well-drained soils). Pauses were taken to scan the area with appropriate binoculars (10x42 magnification) to search for burrowing owls. Any potentially suitable burrows or burrow surrogates (e.g., rock cavities, pipes, culverts, debris piles with crevices) greater than 11 centimeters (4 inches) in diameter were mapped using a GPS handheld unit with sub-meter accuracy and inspected for burrowing owl sign (e.g., owl pellets, white wash, abundant insect remains, feathers). Dudek conducted an additional pass on July 18, 2023, in order to confirm the presence and location of burrowing owls incidentally sighted in the project vicinity during Mohave ground squirrel surveys.

### 3.4.8 Focused Mojave Desert Tortoise Survey

On April 2, 1990, the Mojave population of the desert tortoise was listed by USFWS as threatened (55 FR 12178–12191). Proposed actions within the range of the desert tortoise fall under purview of FESA. Because the project lies within the range of the desert tortoise (Zeiner et al. 1990) within the Western Recovery Unit (USFWS 2011), Dudek conducted focused surveys for desert tortoise to determine the status of the species on site. To evaluate the impacts to desert tortoise, protocol surveys were conducted in accordance with the Pre-Project Field Survey Protocol for Potential Desert Tortoise Habitats section included in Preparing for Any Action That May Occur within the Range of the Mojave Desert Tortoise (*Gopherus agassizii*) (USFWS 2019). Biologists surveyed the site by walking approximately 10-meter-wide transects for 100% coverage of the BSA, searching for live tortoises, suitable burrows, scat, or carcasses.

### 3.4.9 Focused Mohave Ground Squirrel Survey

Dipodomys Ecological Consulting biologists conducted initial visual surveys within the project site and off-site improvement areas for Mohave ground squirrel in April 2023 (Dipodomys Ecological Consulting 2023). The visual surveys were conducted by driving and walking throughout the project site, portions of the off-site improvement areas, to identify suitable habitat for Mohave ground squirrel, which is consistent with the methods described in the 2010 CDFW Mohave Ground Squirrel Survey Guidelines (CDFW 2010). Field methods are described in detail in Appendix B. Following an initial visual survey, three 5-day live-trapping surveys for Mohave ground squirrel were conducted between April 21, 2023, and July 8, 2023, within the on-site portion of the BSA. The methods used for the live trapping effort followed the most recent CDFW Mohave Ground Squirrel Survey Guidelines issued in 2010 (CDFW 2010). Camera trappings consisted of ten camera stations in locations. Methods used for camera trapping effort are described in detail in Appendix B.

### 3.4.10 Jurisdictional Delineation of Aquatic Resources

Before conducting fieldwork for the aquatic resources delineation, Dudek reviewed the National Wetlands Inventory (USFWS 2023b), the National Hydrography Database (USGS 2023), the NRCS Web Soil Survey (USDA 2023a), historic aerials (Google Earth 2023; NETR 2023), and USGS topographic maps (USGS 2015a-b). Dudek biologists conducted an aquatic resources delineation field visit in September 2022. The survey dates, biologists, and weather conditions are included in Table 1. Survey datasheets and forms are included in the Aquatic Resources Delineation Report, provided in Appendix C. The surveys were conducted on foot to visually cover 100% of the BSA.

Dudek conducted a delineation of state and federal jurisdictional waters and wetlands within the BSA in accordance with current policies. Federal wetlands were mapped based on the procedures in USACE's 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987) and its 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008a). Non-wetland waters were mapped at the OHWM based on the procedures defined in USACE's 2008 A Field Guide to Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (USACE 2008b). Waters of the state were mapped in accordance with the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, adopted on April 2, 2019. CDFW jurisdictional areas were mapped to include the bank of the stream/channel and outer dripline of adjacent riparian vegetation, as set forth under California Fish and Game Code Section 1602.

To aid in the delineation and in conformance with the USACE 2008 Field Guide, five OHWM datasheets were recorded at potential non-wetland waters within the BSA to determine the OHWM indicators within those features. OHWM datasheets are included in Appendix C of Appendix C. The jurisdictional delineation did not contain any features that met the State Water Resources Control Board wetland criteria, and due to the lack of hydrophytic vegetation and hydric soils, wetland determination data forms were not completed.

The limits of aquatic resources were collected in the field using Esri Field Maps equipped with sub-meter accuracy. The geographic extents were digitized into ArcGIS based on data collected from the mobile application.

### 3.4.11 Survey Limitations

Limitations of the surveys include a diurnal bias as most surveys were conducted during the daytime. As such, birds represent the largest component of vertebrate fauna recorded during the surveys, as they are usually most active during daytime hours. Although the diurnal bias likely result in fewer observations of mammals, camera trapping and small mammal trapping surveys conducted as part of the Mohave ground squirrel protocol surveys made detections of most crepuscular and/or nocturnal wildlife species on site possible. Many species of reptiles and amphibians are secretive in their habits and are difficult to observe using standard meandering transects.

Despite these limitations, the survey work conducted in the BSA provides an adequate overall assessment of floral and faunal resources for purposes of evaluating potential biological constraints.

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## 4 Environmental Setting

The purpose of this section is to describe the general existing conditions within and adjacent to the BSA to document the baseline conditions for this report and subsequent analysis.

### 4.1 Climate

The BSA is located in the High Desert region of western San Bernardino County, located approximately 68 miles from the Pacific Ocean on the trans-montane slope of the San Gabriel and San Bernardino Mountains. July is the warmest month with an average high temperature of 98.1 °F, and December is the coolest month with an average low temperature of 29.2 °F (WRCC 2023). Significant rainfall occurs primarily between November and March, with the maximum average precipitation occurring in January and February. The average annual precipitation for Victorville is 5.52 inches (WRCC 2023). Periods of extended drought are common throughout the region.

### 4.2 Terrain

The BSA is located in Victor Valley, which lies northeast the San Gabriel Mountains and northwest of the San Bernardino Mountains. The topography of the project site and surrounding area is generally a flat plane, which slopes gently in a northeasterly direction. The BSA is located approximately 3.6 miles southwest of the Mojave River and approximately 7.2 miles southeast of Quartzite Mountain (USGS 2015b). Elevations within the BSA ranges from approximately 2,957 feet above mean sea level (amsl) in the northeastern portion to 3,014 feet amsl in the southwestern portion.

### 4.3 Soils

According to the USDA NRCS Web Soil Survey (USDA 2023a), the BSA is included within the Soil Survey for the San Bernardino County, Mojave River Area (USDA 1986). The BSA consists of six soil mapping unit types: Bryman loamy fine sand, 2% to 5% slopes; Cajon sand, 0% to 2% slopes; Cajon sand, 2% to 9% slopes; Helendale loamy sand, 2% to 5% slopes; Lavic loamy fine sand; and Rosamond loam, saline-alkali. These soil types are described in more detail below and are presented on Figure 3, Soils.

**Bryman Series** consists of very deep, well drained soils formed in alluvial material derived mainly from granitic rocks. The Bryman loamy fine sand, 2% to 5% slopes, mapping unit occurs on terraces at elevations between 3,000 to 3,400 feet amsl (USDA 1986).

**Cajon Series** consists of very deep, somewhat excessively drained soils formed in alluvial material derived mainly from granitic rocks. Both the Cajon sand, 0% to 2% slopes, and the Cajon sand, 2% to 9% slopes, mapping units occur on alluvial fans at elevations between 1,800 to 3,500 feet amsl (USDA 1986).

**Helendale Series** consists of very deep, well drained soils formed in alluvial material derived mainly from granitic rocks. The Helendale loamy sand, 2% to 5% slopes, mapping unit occurs on alluvial fans and terraces at elevations between 2,700 to 3,800 feet amsl (USDA 1986).



**Lavic Series** consists of very deep, moderately well drained soils formed in alluvial material derived mainly from granitic rocks. The Lavic loamy fine sand mapping unit occurs on alluvial fans and basin rims at elevations between 2,800 to 3,100 feet amsl (USDA 1986).

**Rosamond Series** consists of very deep, well drained soils formed in alluvial material derived mainly from granitic rocks. The Rosamond loam, saline-alkali flats, mapping unit occurs on the lower margins of alluvial fans and on basin rims at elevations between 1,700 to 2,800 feet amsl (USDA 1986).

## 4.4 Surrounding Land Uses

The BSA is primarily composed of currently vacant, undeveloped property located at the western edge of Victorville, southeast of Adelanto. The BSA is surrounded by undeveloped land immediately north, west, and east of the subject parcels and sparse residential development occurs south of Mojave Drive, east of Topaz Road and west of Onyx Road. Additionally, a residential development is actively under construction south of Tawney Ridge Lane and east of Diamond Road. Other developed lots in the project vicinity include existing school campuses located north of Tawney Ridge Lane and east of Diamond Road and an existing truck stop at the western extent of the BSA, where Cactus Road meets U.S. Highway 395.

According to the City of Victorville General Plan Land, the land use for the project site is planned for light industrial use (City of Victorville 2022). Dirt roads along Cactus Road and Onyx Road have been present since the mid-1980s and were observed to be frequently used by local commuters at the time of the site visits. A significant increase in bare patches and trails along these roads and within the main portion of the project site appear in aerial imagery between 2016 and 2020, likely due to an increase in foot traffic, trash dumping, homeless encampments, and off-road vehicular recreation. Evidence of these activities were observed throughout the BSA, with active off-road ATV use observed during 2022 and 2023 field surveys.

## 4.5 Watersheds and Hydrology

The BSA is located within southwestern portion of the Mojave River subbasin, Hydrologic Unit Code [HUC] 18090208 (Figure 4, Hydrologic Setting). The Mojave River subbasin comprises approximately 4,600 square miles and is almost entirely within San Bernardino County (USGS 2023). The primary geographic and surface hydrologic feature of the watershed is the Mojave River, which flows north for approximately 120 miles until it reaches Silver Dry Lake near the community of Baker. Some reaches of the Mojave River flow underground in the confined riverbed channel. The Mojave River is approximately 3.6 miles northeast of the BSA.

Within this subbasin, the BSA occurs primarily within Burkhardt Lake-Mojave River subwatershed (HUC 180902080706) of the Bell Mountain Wash-Mojave River watershed (HUC 1809020807) (Figure 4). The northeastern extent of the BSA, including the northeastern corner of the northern project parcel, occurs within the Manzanita Wash subwatershed (HUC 180902080503) of the Upper Fremont Wash Watershed (HUC 1809020805).

# 5 Results

This section describes the results of the literature review, field surveys, and habitat assessments within the BSA.

## 5.1 Vegetation Communities and Land Covers

Three vegetation communities and land cover types were mapped within the BSA: creosote bush scrub (*Larrea tridentata* association), disturbed habitat, and urban/developed land. The vegetation communities and land cover types mapped within the BSA are detailed below in Table 2. The spatial distribution of the vegetation communities and land covers are presented on Figure 5, Vegetation. Representative photos of the BSA are included in Appendix D, Site Photos.

**Table 2. Existing Vegetation Communities and Land Cover Types within the Biological Study Area**

Vegetation Community or Land Cover Type	Alliance	Association	State Ranking <sup>a</sup>	Project Site (acres)	Off-Site Areas (acres)	Total BSA (acres) <sup>c</sup>
Creosote Bush Scrub	<i>Larrea tridentata</i> Shrubland Alliance	<i>Larrea tridentata</i> Association	S5	76.74	7.60	119.21
Disturbed Habitat	N/A	N/A	NA	2.40	6.57	20.60
Urban/Developed	N/A	N/A	NA	1.97	3.23	12.62
<b>Total<sup>b</sup></b>				<b>81.10</b>	<b>17.40</b>	<b>152.42</b>

**Notes:** BSA = biological study area (project site, off-site areas, and 100-foot buffer combined); N/A = not applicable.

<sup>a</sup> The conservation status of a vegetation community is designated by a number from 1 to 5, preceded by a letter reflecting the appropriate geographic scale of the assessment (G = global, N = national, and S = subnational). The numbers have the following meaning (NatureServe 2023):

- 1 = critically imperiled
- 2 = imperiled
- 3 = vulnerable to extirpation or extinction
- 4 = apparently secure
- 5 = demonstrably widespread, abundant, and secure
- NA = no applicable ranking
- GNR = unranked, global rank not yet assessed
- SNR = unranked, subnational rank not yet assessed

<sup>b</sup> Total acreages may not sum exactly due to rounding.

### 5.1.1 Creosote Bush Scrub

Creosote bush scrub, or the *Larrea tridentata* shrubland alliance, is recognized by the CDFW Natural Community List. Communities in this alliance include creosote bush as the dominant shrub, exceeding all other shrubs in cover. If brittlebush (*Encelia farinosa*) is present, it is less than three times the cover of creosote bush, or if white bursage (*Ambrosia dumosa*) is present, it is less than two times the cover of creosote bush (CNPS 2023b). This alliance is found in a variety of desert landforms, including alluvial fans, upland slopes, and small intermittent washes on well-drained soils (CNPS 2023b).

Creosote bush scrub composes the majority of the BSA (Figure 5). Other shrub species observed in the community on site include white bursage, Nevada joint-fir (*Ephedra nevadensis*), rubber rabbitbrush (*Ericameria nauseosa*), Mexican bladdersage (*Scutellaria mexicana*), Mojave cottonthorn (*Tetradymia stenolepis*), peach thorn (*Lycium cooperi*), and cheesebush (*Ambrosia salsola* var. *salsola*). Western Joshua trees were scattered throughout the creosote bush scrub community within the BSA; however, they make up less than 1% absolute cover and therefore did not warrant its own community. Western Joshua trees were scattered throughout the creosote bush scrub community within the BSA; however, western Joshua tree made up less than 1% absolute cover and therefore did not warrant its own community. Creosote bush scrub is ranked as S5 and therefore is not considered a sensitive biological resource by CDFW under CEQA (CDFW 2023c).

## 5.1.2 Disturbed Habitat

Although not recognized by the CDFW Natural Community List (CDFW 2023c), disturbed habitat refers to areas that have had physical anthropogenic disturbance and, as a result, cannot be identified as a native or naturalized vegetation association. However, these areas do have a recognizable soil substrate. If vegetation is present, it is almost entirely composed of non-native vegetation, such as ornamentals or ruderal exotic species.

Within the BSA, disturbed habitat includes the existing dirt roads within the site and along the western and northern boundaries of the on-site portion of the BSA, as well as cleared areas bordering Mojave Drive and adjacent to the truck stop off of U.S. Highway 395 (Figure 5). Dirt roads within BSA, including the on-site areas, were observed during surveys to be frequently used by local residents and off-road vehicular motorists for commuting and recreation. Disturbed habitat is not considered a sensitive biological resource by CDFW under CEQA (CDFW 2023c).

## 5.1.3 Urban/Developed Land

Although not recognized by the CDFW Natural Community List (CDFW 2023c), urban/developed land represents areas that have been constructed upon or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants and landscaping.

Within the BSA, urban/developed land consists of the paved roads and lots associated with Mojave Drive Road along the southern boundary, the Diamond Road-Tawney Ridge Lane intersection located at the northeastern extent of the BSA, and the truck stop off of U.S. Highway 395 located at the western extent of the BSA (Figure 5). Urban/developed land is not considered a sensitive biological resource by CDFW under CEQA (CDFW 2023c).

## 5.2 Plants

A total of 73 plant species, 59 native (81%) and 14 non-native (19%), were recorded within the BSA. A comprehensive list of species is available in Appendix E, Plant Compendium. Special-status plants that were observed within the BSA are discussed below in Section 5.2.1.

## 5.2.1 Special-Status Plant Species Assessment

Nine plant species considered special-status in this report were returned in the queries of the CNDDDB and the CNPS Inventory for the subject USGS 7.5-minute quadrangles (i.e., Adelanto) and surrounding eight USGS 7.5-minute quadrangles (i.e., Hesperia, Victorville, Shadow Mountains, Helendale, Victorville NW, Phelan, Baldy Mesa, and Shadow Mountains SE) or were included in the USFWS IPaC list generated for the BSA (CDFW 2023a; CNPS 2023a; USFWS 2023a). One special-status plant species, western Joshua tree, was observed within the BSA. This species is discussed in further detail below and its regulatory status, ecological associations, and presence within the BSA are summarized in Table 3, Special-Status Plant Species Detected in the Biological Study Area.

No other listed species or non-listed CRPR 1 or CRPR 2 plants were observed during focused surveys. Due to focused surveys being conducted during the appropriate blooming period, all other special-status plants are not expected to occur. These species are listed in Appendix F, Special-Status Plant Species Not Expected to Occur within the Biological Survey Area and are not discussed further in this report because no significant direct, indirect, or cumulative impacts are expected. The BSA does not overlap with any designated critical habitat for listed plant species .

**Table 3. Special-Status Plant Species Detected within the Biological Study Area**

Scientific Name	Common Name	Status (Federal/State/CRPR)	Primary Habitat Associations/Life Form/Blooming Period/Elevation Range (feet amsl)	Potential to Occur
<i>Yucca brevifolia</i>	Western Joshua tree	None/CST/None	Great Basin grassland, Great Basin scrub, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland, Sonoran desert scrub, valley and foothill grassland/perennial leaf succulent/April–May/1,310–6,560	Present. This species was detected within the BSA.

**Status Designations**

CST: Candidate for listing under CESA as State Threatened

**Notes:** BSA = biological survey area; CRPR = California Rare Plant Rank; amsl = above mean sea level.

### Western Joshua Tree

Western Joshua tree is a candidate for listing as “Threatened” under CESA and afforded the protection of the act while the Commission decides if listing the species is warranted. This monocot tree in the asparagus family (Agavaceae) typically blooms between April and May but is a conspicuous tree identifiable at any time of year. It is found within Joshua tree woodland, Great Basin grassland and scrub, Mojavean desert scrub, pinyon and juniper woodland, Sonoran desert scrub, and valley and foothill grassland between 1,310 and 6,560 feet amsl (CNPS 2023b). This species occurs on desert flats and slopes in San Bernardino County and other southern and eastern counties of California (Calflora 2023; Jepson Flora Project 2023).

A total of 119 western Joshua tree individuals were observed within the Joshua Tree Survey Area (project site, off-site improvement areas, and 50-foot buffer) (Figure 6, Floral and Faunal Resources). Of the 119 trees found

within the Joshua Tree Survey Area, 101 western Joshua tree individuals are located within the project site and off-site improvement areas, with the remaining 18 western Joshua tree individuals located within the 50-foot Joshua Tree Survey Area buffer. Further details on phenological data of western Joshua tree individuals observed is provided in Appendix A, Joshua Tree Preservation, Protection, and Relocation Plan (Joshua Tree Plan).

## 5.2.2 California Desert Native Plants

Other than western Joshua tree, two desert native plant species were mapped within the BSA (Figure 6). Specifically, one Wiggins' cholla (*Cylindropuntia echinocarpa*) individual and two buckthorn cholla (*Cylindropuntia acanthocarpa*) individuals were observed.

Although the CDNPA is codified in state law (California Food and Agricultural Code Division 23), enforcement powers and administrative responsibilities are given to the subject County commissioner, sheriff, and board of supervisors as stipulated in Chapter 4 of the CDNPA (Enforcement Powers and Administrative Responsibilities). Therefore, potential impacts to desert native plant species are analyzed in Section 6.7, which discusses project consistency with local policies or ordinances.

## 5.3 Wildlife

A total of 44 wildlife species, consisting of 40 native species and 4 non-native species, were recorded within the BSA or vicinity during surveys.

Avifauna comprised the majority of wildlife species detections with a total of 31 bird species due a detection bias for their mobility and diurnal activity. Some commonly observed bird species include common raven (*Corvus corax*), horned lark (*Eremophila alpestris*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaida macroura*), verdin (*Auriparus flaviceps*), lesser goldfinch (*Spinus psaltria*), and house finch (*Haemorhous mexicanus*). Six reptile species were observed: zebra-tailed lizard (*Callisaurus draconoides*), western fence lizard (*Sceloporus occidentalis*), common side-blotched lizard (*Uta stansburiana*), Great Basin tiger whiptail (*Aspidoscelis tigris tigris*), long-nosed leopard lizard (*Gambelia wislizenii*), and Mohave rattlesnake (*Crotalus scutulatus*). Six common mammal species were observed: coyote (*Canis latrans*), domestic dog (*Canis familiaris*), black-tailed jackrabbit (*Lepus californicus*), desert cottontail (*Sylvilagus audubonii*), kangaroo rats (*Dipodomys* sp.), and white-tailed antelope squirrel (*Ammospermophilus leucurus*). No amphibian species were observed due to lack of suitable aquatic habitat. A comprehensive list of wildlife species observed during surveys is available in Appendix G, Wildlife Compendium. Special-status wildlife species detected within the BSA are discussed below in Section 5.3.1.

### 5.3.1 Special-Status Wildlife

Twenty-eight wildlife species considered special-status in this report were returned in the query of the CNDDb for the subject USGS 7.5-minute quadrangles (i.e., Adelanto) and surrounding eight USGS 7.5-minute quadrangles (i.e., Hesperia, Victorville, Shadow Mountains, Helendale, Victorville NW, Phelan, Baldy Mesa, and Shadow Mountains SE) or were included in the USFWS IPaC list generated for the BSA (CDFW 2023a; USFWS 2023a). Special-status wildlife that have a low potential to occur or are not expected to occur within the BSA due to lack of suitable habitat are listed in Appendix H, Special-Status Wildlife Species with Low Potential or Not Expected to Occur within the Biological Study Area. These species are not discussed further in this report because no significant direct, indirect, or cumulative impacts are expected.



**Table 4. Special-Status Wildlife Species Detected or with Moderate to High Potential and Listed Wildlife Species with a Low Potential to Occur within the Biological Study Area**

Scientific Name	Common Name	Status (Federal/State)	Habitat	Potential to Occur
<i>Vulpes macrotis arsipus</i>	Desert kit fox	None/None <sup>a</sup>	Sparse scrub habitats such as creosote scrub communities that support abundant rodent populations (Center for Biological Diversity 2013)	Observed. This species was detected within the BSA via a camera trap that was deployed as part of 2023 focused Mohave ground squirrel surveys.

**Status Designations:**

BCC: U.S. Fish and Wildlife Service Bird of Conservation Concern

SSC: California Species of Special Concern

SCE: State candidate for listing as endangered

Notes: BSA = biological survey area; CNDDDB = California Natural Diversity Database.

<sup>a</sup> Species considered a “fur-bearing mammal” protected under Fish and Game Code Section 4000.

**Burrowing Owl**

Burrowing owl is a CDFW SSC. With a relatively wide-ranging distribution throughout the west, burrowing owls are considered to be habitat generalists (Lantz et. al. 2004). In California, burrowing owls are yearlong residents of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon–juniper and ponderosa pine habitats (Zeiner et. al. 1990). Preferred habitat is generally typified by short, sparse vegetation with few shrubs, level to gentle topography, and well-drained soils (Haug et. al. 1993).

The presence of burrows is the most essential component of burrowing owl habitat as they are required for nesting, roosting, cover, and caching prey (Coulombe 1971; Martin 1973; Green and Anthony 1989; Haug et. al. 1993). In California, western burrowing owls most commonly live in burrows created by California ground squirrels (*Otospermophilus beecheyi*). Burrowing owls may occur in human-altered landscapes such as agricultural areas, ruderal grassy fields, vacant lots, and pastures if the vegetation structure is suitable (i.e., open and sparse); usable burrows are available; and foraging habitat occurs in close proximity (Gervais et. al. 2008). Debris piles, riprap, culverts, and pipes can be used for nesting and roosting.

Focused surveys for burrowing owl were conducted between March 23, 2023, and July 18, 2023, in five passes. Dudek conducted an additional pass rather than the minimum four passes required by CDFW protocol in order to confirm the presence and location of burrowing owls incidentally sighted in the project vicinity during Mohave ground squirrel surveys. One burrowing owl individual was observed flying over project site after being flushed from its off-site burrow location on July 18, 2023 (Figure 6). The active burrow, at which breeding was confirmed with observations of a pair of adult owls and at least four owlets, is located approximately 150 feet east of the proposed project (Figure 6). Although the burrowing owls were not nesting within the BSA, they are likely to use the project site to forage due to their close proximity and the presence of suitable foraging habitat. The BSA contains suitable nesting or overwintering habitat for the species due to presence of open scrub vegetation and burrows of suitable size. Therefore, burrowing owl could use the site as overwintering habitat or for breeding in subsequent years. A burrowing owl relocation plan for the project is detailed in Appendix I.

## Crotch's Bumblebee

Crotch bumblebee is a candidate for listing as an endangered species under CESA. The Crotch bumblebee is distributed in coastal California, east towards the Sierra-Cascade Crest, and is less commonly in western Nevada (Koch et al. 2012). It occurs in grassland and scrub communities that contain *Phacelia*, *Clarkia*, *Eriogonum*, *Eschscholzia*, and *Antirrhinum* species which have been identified as genera with preferred nectar sources.

Crotch bumblebee has a moderate potential to occur within the BSA, as the study area contains open scrub communities with the preferred plant genera. The nearest CNDDDB record is approximately 10 miles northeast of the BSA (CDFW 2023a).

## Desert Tortoise

Desert tortoise is listed under FESA and CESA as a threatened species. The range of the Mojave population of the desert tortoise includes portions of the Mojave Desert and the Colorado Desert in Southern California (parts of Inyo, Kern, Los Angeles, San Bernardino, and Riverside Counties), southern Nevada (Clark, Esmeralda, Nye, and Lincoln Counties), northwestern Arizona (Mohave County), and southwestern Utah (Washington County).

Typical habitat for desert tortoise in the Mojave Desert is creosote bush scrub where precipitation ranges from 2 to 8 inches, with relatively high diversity of perennial plants and high productivity of ephemeral plants. Throughout most of the Mojave Desert, desert tortoises occur most commonly on gently sloping terrain with sandy gravel soils and where there is sparse cover of low-growing shrubs, which allows for the establishment of herbaceous plants. Soils must be friable enough for digging of burrows, but firm enough that burrows do not collapse (USFWS 2008). Although populations of desert tortoise are not generally known to inhabit elevations much above 4,000 feet amsl, they occur from below sea level to an elevation of 7,300 feet amsl. Occupied habitat varies from flats and slopes dominated by creosote bush scrub at low elevations to rocky slopes in blackbrush and juniper woodland ecotones at higher elevations (USFWS 2008).

Protocol surveys in 2023 resulted in no observations of active desert tortoise burrows, active desert tortoise sign (i.e., scat, drink basins, footprints, tortoise remains), or observations of individual desert tortoises. However, the BSA contains suitable sandy soils, ephemeral washes, and creosote scrub to support this species. In addition, nearest CNDDDB occurrences from 2007 are mapped approximately 250 feet east and 0.25-mile north of the BSA (CDFW 2023a) and the BSA is located within CDFW's CWHR predicted habitat modeling for the species ranked with a high habitat suitability score (CDFW 2017). Therefore, this species is considered to have a low potential to occur within the BSA. Due to an abundance of caution and this species' federal and state listing status, impacts to this species are analyzed in Section 6.3, which discusses impacts to special-status species. Desert tortoise survey forms are included as Appendix J.

## Loggerhead Shrike

Loggerhead shrike is a CDFW SSC. This stocky, large-headed songbird is widespread at the lower elevations in California (Humple 2008). Preferred habitats for the species are open areas that include scattered shrubs, trees, posts, fences, utility lines, or other structures that provide hunting perches with views of open ground, as well as nearby spiny vegetation or man-made structures (such as the top of chain-link fences or barbed wire) that provide a location to impale prey items for storage or manipulation (Humple 2008). Nest sites are chosen based more on the cover than the particular vegetation species and are usually constructed in a dense shrub or tree well below



the crown and are well concealed (Yosef 2020). Although this species was not detected within the BSA, two loggerhead shrike detections were made approximately 580 feet and 0.3-mile north of the BSA on two separate site visits. Additionally, the BSA supports suitable foraging and nesting habitat (e.g., open desert scrub with scattered shrubs) for this species. Therefore, loggerhead shrike has a high potential to occur within the BSA.

### Desert Kit Fox

Desert kit fox is considered a “fur-bearing mammal,” protected from take under the Commission’s Mammal Hunting Regulations (Subdivision 2, Chapter 5), which effectively protects it from hunting pressure. Desert kit fox is not listed under FESA or CESA, or under any other special-status designation. The desert kit fox lives in the open desert, on creosote bush flats, and amongst the sand dunes (National Park Service [NPS] 2015). Desert kit fox was observed within the BSA via a camera trap deployed as part of the protocol-level Mohave ground squirrel surveys conducted in 2023. The BSA provides suitable creosote bush flats habitat for this species and burrows suitable for use as desert kit dens were observed north of the BSA (Figure 6). A desert kit fox relocation plan for the project is detailed in Appendix K.

### Mohave Ground Squirrel

Mohave ground squirrel is listed under CESA as a threatened species. The distribution range for this species is restricted to the Mojave Desert in San Bernardino, Los Angeles, Kern, and Inyo Counties (Zeiner et. al. 1990). This species generally inhabits areas where the soil is friable and sandy or gravelly. Mohave ground squirrels occur in desert scrub habitats dominated by creosote bush and desert saltbush scrub at elevations between 1,800 and 5,000 feet amsl.

Although suitable habitat is present within the BSA, focused Mohave ground squirrel surveys conducted in accordance with CDFW survey guidelines were negative for the species. Therefore, CDFW survey guidelines indicate it can be determined that Mohave ground squirrel are currently absent from the BSA. More details of this species and the results of the protocol survey are provided in the Mohave Ground Squirrel Report (Appendix B).

## 5.3.2 Wildlife Corridors and Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by ensuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (e.g., fires). Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as steppingstones for dispersal.

The BSA is not mapped as an essential connectivity area, natural landscape block, or linkage for the California Essential Habitat Connectivity Network nor the California Desert Linkage Network. Additionally, due to the undeveloped land on the BSA, there are opportunities for wildlife to move across the site when migrating through the region. However, the BSA does not currently function as a corridor or linkage between two larger habitat blocks. Although the BSA may function as local dispersal habitat for wildlife movement and/or foraging, the project would not create a significant impediment to wildlife movement that would warrant a wildlife corridor study.

### 5.3.3 Native Wildlife Nursery Sites

No diagnostic signs of bird rookeries (e.g., numerous nests, whitewash) or large maternal or overwintering bat roosts (e.g., large concentrations of guano or guano odors) were identified in the BSA. Additionally, aquatic resources identified within the BSA are unlikely to support fisheries due to a lack of perennially available water. The lack of typical urban roosting habitat (bridges and older buildings with structural deficiencies) and minimal stands of large trees makes it unlikely for the BSA to support roosting bats. However, vegetation throughout the BSA could provide suitable nesting habitat for many species of native birds.

## 5.4 Jurisdictional Aquatic Resources

With respect to USACE-jurisdictional waters of the United States, including wetlands, the USACE makes the jurisdictional determination. The USACE issues two types of jurisdictional determinations: preliminary and approved.<sup>1</sup> Both types of determinations require a submittal of a formal jurisdictional delineation report. CDFW and RWQCB also may request a site visit to review the jurisdictional delineation and may potentially change the limits of delineation. Therefore, the jurisdiction determinations provided in this technical report are preliminary and only identify potential jurisdictional areas.

Dudek used the methods described in Section 3.4.10 of this report to determine the presence or absence of potential USACE, RWQCB, and CDFW jurisdiction within the BSA. Table 5 summarizes the features identified and the limits of aquatic resources are provided on Figure 7, Aquatic Resources.

**Table 5. Summary of Potential Jurisdictional Waters within the Biological Study Area**

Aquatic Resources Type	Regulatory Agency	Acreage
Non-Wetland Waters of the U.S.	USACE	None
Non-Wetland Waters of the State	RWQCB	0.40
Streambed, Banks, and Riparian Habitat	CDFW	1.02

**Notes:** USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife.

Three un-named hydrological features were identified in the BSA. All three features are ephemeral desert washes, which are presumed to be non-jurisdictional by USACE because they do not meet the relatively permanent standard as waters of the United States. However, features mapped within the BSA may be regulated by the RWQCB and CDFW. In total, 0.40-acre of non-wetland waters (below OHWM) fall under RWQCB jurisdiction, and 1.02-acre of CDFW streambed occurs in the BSA. No areas within the review area supported hydrophytic vegetation, and therefore features within the BSA were considered non-wetland waters of the State. The results of the formal aquatic resources delineation are discussed in further detail in the attached Aquatic Resources Delineation Report prepared for this project (Appendix C).

<sup>1</sup> The USACE issues two types of jurisdictional Determinations (JDs)—preliminary and approved. A preliminary JD is an expedited process typically initiated at the time that a 404 permit is requested for impacts to federal jurisdictional waters; the preliminary JD is non-binding and does not involve USACE review. This process is used when the permittee does not wish to request a determination that some or all of the potentially jurisdictional waters on the project site are not subject to federal jurisdiction. An approved JD is requested through submittal of a JD report and the accompanying form. It requires USACE review of the report and application of the criteria used to request a non-federal JD.

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# 6 Project Impacts

This section addresses direct and indirect impacts to special-status biological resources that would result from implementation of the project. The significance determinations for proposed or potential impacts are described in this chapter, and proposed mitigation is provided in Section 7, Mitigation. Cumulative impacts are addressed in the project's environmental impact report.

## 6.1 Explanation of Findings of Significance

Impacts to special-status vegetation communities, plant and wildlife species, and jurisdictional waters, including wetlands, must be quantified and analyzed to determine whether such impacts are significant under CEQA. CEQA Guidelines Section 15064(b) states that an ironclad definition of "significant" effect is not possible because the significance of an activity may vary with the setting. Appendix G, Environmental Checklist, of the CEQA Guidelines, however, does provide "examples of consequences which may be deemed to be a significant effect on the environment" (14 California Code of Regulations [CCR] 15064[e]). These effects include substantial effects on rare or endangered species of animal or plant or the habitat of the species. CEQA Guidelines Section 15065(a) is also helpful in defining whether a project may have a significant effect on the environment. Under that section, a proposed project may have a significant effect on the environment if the project has the potential to (1) substantially degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife population to drop below self-sustaining levels, (4) threaten to eliminate a plant or animal community, (5) reduce the number or restrict the range of a rare or endangered plant or animal, or (6) eliminate important examples of a major period of California history or prehistory.

The following are the significance thresholds for biological resources provided in the CEQA Guidelines Appendix G, which states that a project would potentially have a significant effect if it does any of the following:

- **Impact BIO-1.** Has a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- **Impact BIO-2.** Has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- **Impact BIO-3.** Has a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- **Impact BIO-4.** Interferes substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impedes the use of native wildlife nursery sites.
- **Impact BIO-5.** Conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- **Impact BIO-6.** Conflicts with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

The evaluation of whether an impact to a particular biological resource is significant must consider both the resource itself and the role of that resource in a regional context. Substantial impacts are those that contribute to,

or result in, permanent loss of an important resource, such as a population of a rare plant or wildlife species. Impacts may be important locally, because they result in an adverse alteration of existing site conditions but considered not significant because they do not contribute substantially to the permanent loss of that resource regionally. The severity of an impact is the primary determinant of whether that impact can be mitigated to a level below significance.

## 6.2 Definition of Impacts

**Direct impacts** refer to complete loss of a biological resource. For purposes of this report, it refers to the area where vegetation clearing, grubbing, or grading replaces biological resources. Direct impacts were quantified by overlaying the proposed impact limits on the biological resources map of the BSA. Direct impacts would occur from construction of three industrial/warehouse buildings and associated loading docks, tractor-trailer stalls, passenger vehicle parking spaces, landscaped areas, and off-site road and utility improvements. All on-site and off-site direct impacts are considered permanent.

**Indirect impacts** are reasonably foreseeable effects caused by a project's implementation on remaining or adjacent biological resources outside the direct disturbance zone. For purposes of this report, indirect impacts may affect areas outside the disturbance. Indirect impacts may be short-term and construction-related, or long-term and associated with development in proximity to biological resources.

**Cumulative impacts** refer to the combined environmental effects of a project and other relevant projects. These impacts may be minor when analyzed individually but become collectively significant as they occur over time. Cumulative impacts are addressed in the project's environmental impact report.

The evaluation of project impacts is organized below using Appendix G of the CEQA Guidelines.

## 6.3 Impact BIO-1: Special-Status Species

One listed special-status plant species (i.e., western Joshua Tree) and two special-status wildlife species (i.e., burrowing owl and desert kit fox) were detected within the project's BSA (project footprint plus a 100-foot buffer). Additionally, two special-status wildlife species (i.e., loggerhead shrike, Crotch bumble bee) have a moderate or high potential to occur within the BSA due to presence of suitable habitat and site conditions. Although 2023 protocol survey results were negative for Mojave desert tortoise, in the abundance of caution and due to recent nearby CNDDDB occurrences, this listed species is considered to have a low potential to occur. The project would have significant impacts on special-status species absent mitigation or avoidance.

No non-listed special-status plant species were observed or have a high or moderate potential to occur within the BSA; therefore, the project would have no direct impacts to non-listed special-status plant species. In addition, the BSA does not occur within federally designated critical habitat for any special-status species, and there would be no direct impacts to critical habitat. Impacts to these species and proposed mitigation measures are discussed below. Plant species that are not considered special-status but are protected under the locally-enforced CDNPA (i.e., Wiggins' cholla, buckthorn cholla) are discussed below in Section 6.7, Impacts Associated with Local Policies and Ordinances.

## 6.3.1 Impacts to Special-Status Plants

### 6.3.1.1 Direct Impacts

One listed special-status plant species was observed within the BSA: western Joshua tree.

#### Western Joshua Tree

Western Joshua tree, a candidate for state listing under CESA, was observed and would be directly impacted by the project. Based on the site plan, implementation of the project would result in direct impacts to 101 western Joshua trees. All ground-disturbing activities are considered permanent impacts to western Joshua trees. Direct impacts to western Joshua tree would be significant absent mitigation under CEQA.

Based on the WJTCA, Fish and Game Code section 1927.3 requires the applicant to mitigate by paying the statutorily prescribed fees. Trees located in the area described in Fish and Game Code section 1927.3 (e) are in the reduced fee area; therefore, impacts to western Joshua tree can be mitigated on a per-tree basis as follows:

- 5 meters or greater in height - \$1,000
- 1 meter or greater but less than 5 meters in height - \$200
- less than 1 meter in height - \$150

The project would result in direct impacts to 2 Joshua trees that are 5 meters or greater in height, 74 trees 1 meter or greater but less than 5 meters in height, and 25 trees less than 1 meter in height.

As required by **Mitigation Measure (MM)-BIO-1** (Western Joshua Tree Fee Payment), mitigation for direct impacts to 101 western Joshua trees, their seed bank, and associated habitat would be fulfilled through conservation of western Joshua trees through a payment of fees consistent with the Western Joshua Tree Conservation Act or through payment to a CDFW approved mitigation bank.

Furthermore, the implementation of **MM-BIO-3** (Designated Biologist Authority) gives the project's designated biologist the authority to stop work if construction is not compliant with this CEQA document. **MM-BIO-4** (Compliance Monitoring) requires that an experienced biologist oversee compliance with the protective measures, including limiting impacts to the project footprint. **MM-BIO-5** (Education Program) would provide construction personnel with training related to special-status plants that could potentially occur on or adjacent to the impact footprint. **MM-BIO-6** (Construction Monitoring Notebook) provides for documentation that the education program was administered to applicable personnel. **MM-BIO-7** (Delineation of Property Boundaries) requires that impacts occur within the fenced, staked, or flagged area that is clearly delineated within the project impact footprint. The construction crew would be responsible for unauthorized impacts from construction activities to special-status plants that are outside the permitted project footprint.

Therefore, implementation of **MM-BIO-1** (Western Joshua Tree Fee Payment), **MM-BIO-3** (Designated Biologist Authority), **MM-BIO-4** (Compliance Monitoring), **MM-BIO-5** (Education Programs), **MM-BIO-6** (Construction Monitoring Notebook), and **MM-BIO-7** would reduce potential direct impacts to western Joshua trees to less than significant.

### 6.3.1.2 Indirect Impacts

No non-listed special-status plant species were observed or have a high or moderate potential to occur within the 50-foot buffer outside of the project footprint; therefore, the project would have no indirect impacts to non-listed special-status plant species.

In total, 18 western Joshua trees were mapped within the 50-foot buffer outside of the project footprint and would be preserved in place. Although these trees would not be directly impacted, implementation of the project may result in indirect impacts to these western Joshua trees.

#### Western Joshua Tree

Construction-related, short-term indirect impacts may include dust accumulation on Joshua trees, stormwater erosion and sedimentation, chemical spills, increased wildfire risk, and inadvertent spillover impacts outside of the construction footprint. Potential long-term (post-construction) indirect impacts from operation and maintenance activities may include effects of herbicides, changes in water quality, increased wildfire risk, induced demand of the surrounding area, increased traffic and vehicle emissions, and accidental chemical spills. Indirect impacts to Joshua trees would be significant absent mitigation.

To reduce fugitive dust resulting from project construction and to minimize adverse air quality impacts, the project would employ dust mitigation measures in accordance with the Mojave Desert Air Quality Management District's (AQMDs) Rules 401 and 403.2, which limit the amount of fugitive dust generated during construction.

A Stormwater Pollution Prevention Plan (SWPPP) would be prepared and implemented to prevent all construction pollutants from contacting stormwater during construction activities, with the intent of keeping sediment and any other pollutants from moving off site and into receiving waters. Best management practice (BMP) categories employed on site would include erosion control, sediment control, and non-stormwater good housekeeping. Preparation and implementation of a SWPPP would help to avoid and minimize the potential effects of stormwater erosion during construction.

Implementation of low-impact-development features and BMPs would, to the maximum extent practicable, reduce the discharge of pollutants into receiving waters, including inadvertent release of pollutants (e.g., hydraulic fluids and petroleum); the improper management of hazardous materials, trash, and debris; and the improper management of portable restroom facilities (e.g., regular service) in accordance with all relevant local and state development standards. In addition, in accordance with California Green Building Standards Code (CalGreen) requirements (CCR, Title 24, Part 11), project source controls to improve water quality would be provided for outdoor material storage areas, outdoor trash storage/waste handling areas, and outdoor loading/unloading areas. Therefore, impacts to special-status plants due to changes in water quality would be avoided and minimized through implementation of low-impact-development features and BMPs.

Construction of the project would introduce potential ignition sources to the project site, including the use of heavy machinery and the potential for sparks during welding activities or other hot work. However, the project would be required to comply with City and state requirements for fire safety practices to reduce the possibility of fires during construction activities. Further, vegetation would be removed from the site prior to the start of construction. Adherence to City and state regulatory standards during project construction would reduce the risk of wildfire

ignition and spread during construction activities. Therefore, short-term construction impacts involving wildland fires would be less than significant.

Upon completion of project construction, the project would not facilitate wildfire spread or exacerbate wildfire risk due to the low ignitability of the proposed structures and implementation of fire-resistant and irrigated landscaping. Further, given that surrounding off-site fuels consist of moderately spaced vegetation, wildfires in the immediate surrounding area are not common, and it is unlikely that the project site would be exposed to the uncontrolled spread of a wildfire. It is not anticipated that the project, due to slope, prevailing winds, and other factors, would exacerbate wildfire risks or the uncontrolled spread of a wildfire; thus, long-term indirect impacts to special-status plants associated with increased wildlife risk are not expected to occur.

Additionally, **MM-BIO-8** (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and that repair and clean-up of any hazardous waste occurs. Implementation of **MM-BIO-9** (Herbicides) would limit herbicide use to instances where hand or mechanical efforts are infeasible and would only be applied when wind speeds are less than 7 miles per hour to prevent drift into off-site special-status plants. Thus, implementation of **MM-BIO-8** (Hazardous Waste) and **MM-BIO-9** (Herbicides) would help to avoid and minimize indirect impacts to special-status plants from any construction-related chemical spills or improper application of herbicides.

Furthermore, the implementation of **MM-BIO-3** (Designated Biologist Authority) gives the project's designated biologist the authority to stop work if construction is not compliant with this CEQA document. **MM-BIO-4** (Compliance Monitoring) requires that an experienced biologist oversee compliance with the protective measures, including limiting impacts to the project footprint. **MM-BIO-5** (Education Program) would provide construction personnel with training related to special-status plants that could potentially occur on or adjacent to the impact footprint. **MM-BIO-6** (Construction Monitoring Notebook) provides for documentation that the education program was administered to applicable personnel. **MM-BIO-7** (Delineation of Property Boundaries) requires that impacts occur within the fenced, staked, or flagged area that is clearly delineated within the project impact footprint. The construction crew would be responsible for unauthorized impacts from construction activities to special-status plants that are outside the permitted project footprint. Thus, implementation of **MM-BIO-3** through **MM-BIO-7** would help to avoid and minimize inadvertent spillover impacts outside of the approved impact footprint.

Lastly, the Joshua Tree Plan provide measures for protecting the remaining western Joshua trees, such as establishment of a tree protected zone (crown/canopy plus 6 feet), protective fencing and signage, pre-construction meetings, measures for protection and maintenance during construction, and procedures for maintenance after construction.

Accordingly, implementation of the Joshua Tree Plan, **MM-BIO-3** (Designated Biologist Authority), **MM-BIO-4** (Compliance Monitoring), **MM-BIO-5** (Education Program), **MM-BIO-6** (Construction Monitoring Notebook), **MM-BIO-7** (Delineation of Property Boundaries), **MM-BIO-8** (Hazardous Waste), and **MM-BIO-9** (Herbicides) would reduce potential indirect impacts to western Joshua tree to less than significant.



## 6.3.2 Impacts to Special-Status Wildlife

### 6.3.2.1 Direct Impacts

Direct impacts can potentially occur to special-status wildlife species from impacts to habitat and impacts to the species from injury or mortality of individuals from construction activities. The project could result in significant, direct impacts to four special-status wildlife species that were observed or have a moderate to high potential to occur within the BSA: burrowing owl, loggerhead shrike, Crotch bumble bee, and desert kit fox. Additionally, potential significant direct impacts to one special-status species that has a low potential to occur, desert tortoise, are analyzed due its federal and state listing status. Potential direct impacts to these five special status species and proposed avoidance/minimization measures are detailed below. Focused surveys conducted for Mohave ground squirrel were negative; therefore, impacts to these species are not expected to occur and will not be analyzed further.

#### Burrowing Owl

Burrowing owl was observed within the BSA. Specifically, an individual was flushed from a burrow located out of the BSA and was observed briefly flying into the project site. The individual was part of a family of burrowing owls that were occupying a burrow approximately 50 feet outside of the BSA. Although burrowing owls were not nesting within the BSA for the 2023 breeding season, they were likely using the project site to forage due to the presence of suitable open scrub habitat and its close proximity to the active burrow. The BSA also contains suitable nesting and overwintering habitat for burrowing owl with a few suitable burrows. Therefore, burrowing owl could breed or overwinter within the BSA at the start of construction.

While home ranges vary widely, burrowing owl have been found to primarily forage within 600 meters of nest burrows (Haug & Oliphant 1990; Gervais et al. 2003; Rosenberg & Haley 2004). As such, implementation of the project would result in the loss of approximately 76.47 acres of occupied breeding habitat for burrowing owl (i.e., directly impacted creosote bush scrub occurring within 600 meters of the occupied nest burrow). These potential direct impacts to burrowing owls are considered significant absent mitigation under CEQA. **MM-BIO-10** (Pre-Construction Surveys for Burrowing Owl Avoidance) requires mitigation for the loss of occupied breeding habitat, which would be fulfilled through conservation of burrowing owl habitat with purchase of credits at a minimum of 1:1 in-kind habitat replacement. Accordingly, **MM-BIO-10** (Pre-Construction Burrowing Owl Survey and Avoidance) would reduce direct impacts due to loss of suitable burrowing habitat to less than significant.

Direct impacts could occur to burrowing owl if nesting or overwintering individuals occur within the BSA during construction. Construction activities could cause disruptions to breeding activities and mortality or injury to individuals in burrows if present within the disturbance footprint during construction. Harm to or loss of individuals as a result of construction activities would be significant absent mitigation under CEQA. Pursuant to the California Fish and Game Code and MBTA, a pre-construction survey in compliance with the Staff Report on Burrowing Owl Mitigation (CDFW 2012) would be necessary to reevaluate the locations of potential burrowing owl burrows within the project limits so take of owls or active owl nests can be avoided. **MM-BIO-10** (Pre-Construction Burrowing Owl Survey and Avoidance) would require pre-construction surveys for burrowing owl shall be conducted in areas supporting potentially suitable habitat with the first survey no less than 14 days prior to the start of construction activities, and the second within 24 hours of start of construction. A Burrowing Owl Relocation Plan has been prepared to facilitate implementation of this mitigation measure and is attached to this report as Appendix I. In addition, implementation of **MM-BIO-3** (Designated Biologist Authority), **MM-BIO-4** (Compliance Monitoring),

**MM-BIO-5** (Education Programs), and **MM-BIO-6** (Construction Monitoring Notebook) would reduce potential direct impacts to less than significant.

Accordingly, implementation of **MM-BIO-3** (Designated Biologist Authority), **MM-BIO-4** (Compliance Monitoring), **MM-BIO-5** (Education Programs), **MM-BIO-6** (Construction Monitoring Notebook), **MM-BIO-10** (Pre-Construction Burrowing Owl Survey and Avoidance) would reduce potential direct impacts to burrowing owl to less than significant.

### Loggerhead Shrike

The BSA supports suitable loggerhead shrike foraging and nesting habitat (e.g., open desert scrub with scattered shrubs). Additionally, two loggerhead shrike detections were made in close proximity to the BSA. Therefore, loggerhead shrike has a high potential to occur within the BSA.

Implementation of the proposed project could result in direct impacts to loggerhead shrike through the removal of potentially suitable habitat. However, this impact would be adverse, but not significant due to abundant suitable habitat present in the project region. These areas will continue to provide habitat opportunities for this species. As a result, the loss of suitable habitat would not substantially reduce the habitat for the species and would not cause the species population to drop below self-sustaining levels. Additionally, as required by **MM-BIO-1** (Western Joshua Tree Fee Payment), mitigation for direct impacts to western Joshua trees would be fulfilled through a payment of fees consistent with the WJTCA or through payment to a CDFW approved mitigation bank. Conservation efforts for western Joshua tree will focus on the conservation of large, interconnected Joshua tree woodlands on lands where edge effects are limited, versus lands in urban settings that are subject to habitat fragmentation and edge effects, such as the project site. Thus, mitigation for impacts to western Joshua tree would ensure conservation of suitable habitat for loggerhead shrike, which use similar habitat. Therefore, direct impacts resulting from the loss of habitat for loggerhead shrike would be less than significant.

To avoid potential direct impacts to nesting loggerhead shrike, vegetation removal activities would be conducted outside the general bird nesting season (February 1 through August 31). If vegetation cannot be removed outside the bird nesting season, a pre-construction nesting bird survey by a qualified biologist is required prior to vegetation removal. This requirement is outlined in **MM-BIO-11** (Pre-Construction Nesting Bird Survey and Avoidance).

Accordingly, implementation of **MM-BIO-1** (Western Joshua Tree Fee Payment) and **MM-BIO-11** (Pre-Construction Nesting Bird Survey and Avoidance) would reduce potential direct impacts to loggerhead shrike to less than significant.

### Crotch Bumble Bee

Crotch bumble bee is a generalist forager and could forage anywhere within the BSA where suitable floral resources are present. Therefore, this species has a moderate potential to occur in open scrub where preferred plant genera occurs in the herbaceous layer. There is also potential for the project to support nesting sites for bumble bee colonies, including Crotch bumble bee, which are primarily located underground in abandoned holes made by ground squirrels, mice, and rats, but may be above ground in abandoned bird nests or empty cavities (Williams et al. 2014).

Implementation of the proposed project could result in direct impacts to Crotch bumble bee through the removal of potentially suitable habitat. However, this impact would be adverse, but not significant due to abundant suitable habitat present in the project region. These areas will continue to provide habitat opportunities for this species. As a result, the loss of suitable habitat would not substantially reduce the habitat for the species and would not cause

the species population to drop below self-sustaining levels. Additionally, as required by **MM-BIO-1** (Western Joshua Tree Fee Payment), mitigation for direct impacts to western Joshua trees would be fulfilled through a payment of fees consistent with the WJTCA or through payment to a CDFW approved mitigation bank. Conservation efforts for western Joshua tree will focus on the conservation of large, interconnected Joshua tree woodlands on lands where edge effects are limited, versus lands in urban settings that are subject to habitat fragmentation and edge effects, such as the project site. Thus, mitigation for impacts to western Joshua tree would ensure conservation of suitable habitat for Crotch bumble bee, which use similar habitat. Therefore, direct impacts resulting from the loss of habitat for Crotch bumble bee would be less than significant.

Because Crotch bumble bee typically nests underground, individuals if present at a given work location in the BSA would also be highly vulnerable to injury and mortality during construction. Harm to or the loss of individuals during construction could be significant, absent mitigation. Implementation of **MM-BIO-12** (Pre-Construction Crotch Bumble Bee Survey and Avoidance) would require pre-construction habitat assessments and focused surveys to identify any Crotch bumble bee nest(s) present within the impact footprint. The measure would require no-impact buffers to be established around nests if found, thereby avoiding potential direct impacts to Crotch bumble bee resulting from the loss of individuals. In addition, implementation of **MM-BIO-3** (Designated Biologist Authority), **MM-BIO-4** (Compliance Monitoring), **MM-BIO-5** (Education Programs), and **MM-BIO-6** (Construction Monitoring Notebook) would reduce potential direct impacts to less than significant.

Accordingly, implementation of **MM-BIO-1** (Western Joshua Tree Fee Payment), **MM-BIO-3** (Designated Biologist Authority), **MM-BIO-4** (Compliance Monitoring), **MM-BIO-5** (Education Programs), **MM-BIO-6** (Construction Monitoring Notebook), **MM-BIO-12** (Pre-Construction Crotch Bumble Bee Survey and Avoidance) would reduce potential direct impacts to Crotch bumble bee to less than significant.

## Mojave Desert Tortoise

Although 2023 protocol surveys for desert tortoise were negative, the BSA contains suitable habitat ranked with a high habitat suitability score in CWHR predicted habitat modeling for the species (CDFW 2017). In addition, the nearest CNDDDB occurrences from 2007 are mapped approximately 250 feet east and 0.25-mile north of the BSA (CDFW 2023a). Therefore, Mojave desert is a mobile species that could enter the BSA prior to construction and has a low potential to occur. Any potential direct and indirect impacts to Mojave desert tortoise would be significant absent mitigation under CEQA.

A pre-construction Mojave desert tortoise clearance survey in compliance with current USFWS protocol would be necessary to reevaluate the locations of potential Mojave desert tortoise burrows within the project limits so take of Mojave desert tortoise can be avoided. Consistent with **MM-BIO-13** (Pre-Construction Mojave Desert Tortoise Clearance Survey and Avoidance), a pre-construction clearance survey for Mojave desert tortoise would be conducted in areas supporting potentially suitable habitat 14 to 21 days prior to the start of construction activities, and a second survey would be repeated within 72 hours prior to the start of construction activities; or, alternatively, pre-construction clearance surveys may be conducted following construction of a desert-tortoise-proof fence encompassing the project site that would ensure that tortoises cannot enter the project after clearance surveys are completed. Should Mojave desert tortoises be located during the clearance survey, additional measures in compliance with current USFWS protocol would be required, as described further in **MM-BIO-13** (Pre-Construction Mojave Desert Tortoise Clearance Survey and Avoidance). In addition, implementation of **MM-BIO-3** (Designated Biologist Authority), **MM-BIO-4** (Compliance Monitoring), **MM-BIO-5** (Education Programs), and **MM-BIO-6** (Construction Monitoring Notebook) would reduce potential direct impacts to less than significant.

Should Mojave desert tortoise be located during the clearance survey, the project would result in the permanent loss of 84.34 acres of occupied habitat for Mojave desert tortoise (i.e., creosote bush scrub). These direct permanent impacts would be significant absent mitigation. As required by **MM-BIO-13** (Pre-Construction Mojave Desert Tortoise Clearance Survey and Avoidance), mitigation for direct impacts to 84.34 acres, should Mojave desert tortoise be found during pre-construction clearance surveys, would be fulfilled through conservation of suitable Mojave desert tortoise habitat through the purchase of credits at a minimum of 1:1 in-kind habitat replacement.

Accordingly, implementation of **MM-BIO-3** (Designated Biologist Authority), **MM-BIO-4** (Compliance Monitoring), **MM-BIO-5** (Education Program), **MM-BIO-6** (Construction Monitoring Notebook), and **MM-BIO-13** (Pre-Construction Mojave Desert Tortoise Clearance Survey and Avoidance) would reduce potential direct impacts to Mojave desert tortoise to less than significant.

### Desert Kit Fox

Desert kit fox was observed within the BSA. An individual was incidentally detected during a camera trapping study conducted as part of focused Mohave ground squirrel surveys. Additionally, the BSA contains suitable open desert scrub habitat for desert kit fox with suitable burrows. Therefore, desert kit fox could occupy the BSA at the start of construction.

Implementation of the proposed project could result in direct impacts to desert kit fox through the removal of potentially suitable habitat. However, this impact would be adverse, but not significant due to abundant suitable habitat present in the project region. These areas will continue to provide habitat opportunities for this species. As a result, the loss of suitable habitat would not substantially reduce the habitat for the species and would not cause the species population to drop below self-sustaining levels. Additionally, as required by **MM-BIO-1** (Western Joshua Tree Fee Payment), mitigation for direct impacts to western Joshua trees would be fulfilled through a payment of fees consistent with the WJTCA or through payment to a CDFW approved mitigation bank. Conservation efforts for western Joshua tree will focus on the conservation of large, interconnected Joshua tree woodlands on lands where edge effects are limited, versus lands in urban settings that are subject to habitat fragmentation and edge effects, such as the project site. Thus, mitigation for impacts to western Joshua tree would ensure conservation of suitable habitat for desert kit fox, which use similar habitat. Therefore, direct impacts resulting from the loss of habitat for desert kit fox would be less than significant.

To avoid potential direct impacts to desert kit fox, a pre-construction survey for desert kit fox will be conducted within 10 days prior to the start of construction to determine the presence/absence of desert kit fox, pursuant to **MM-BIO-14** (Pre-Construction Desert Kit Fox Survey and Avoidance). A Desert Kit Fox Relocation Plan has been prepared to facilitate implementation of this mitigation measure and is attached to this report as Appendix K. In addition, implementation of **MM-BIO-3** (Designated Biologist Authority), **MM-BIO-4** (Compliance Monitoring), **MM-BIO-5** (Education Program), and **MM-BIO-6** (Construction Monitoring Notebook) would reduce potential direct impacts to a less-than-significant level.

Accordingly, implementation of **MM-BIO-3** (Designated Biologist Authority), **MM-BIO-4** (Compliance Monitoring), **MM-BIO-5** (Education Programs), **MM-BIO-6** (Construction Monitoring Notebook), **MM-BIO-14** (Pre-Construction Desert Kit Fox Survey and Avoidance) would reduce potential direct impacts to desert kit fox to less than significant.

## Nesting Migratory Birds and Raptors

The BSA contains trees, shrubs, and other vegetation suitable for birds of prey (raptors) and other avian species to nest on site. Native nesting bird species with potential to occur within the BSA are protected by California Fish and Game Code Sections 3503 and 3503.5, and by the federal MBTA (16 USC 703–711). In particular, California Fish and Game Code Section 3503 provides that it is unlawful to take, possess, or needlessly destroy the active nests or eggs of any bird in California; Section 3503.5 protects all raptors and their eggs and active nests; and the MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of native migratory bird species throughout the United States. Currently, California considers any nest that is under construction or modification, or is supporting eggs, nestlings, or juveniles, as “active.” Therefore, impacts to nesting migratory birds and raptors would be significant absent mitigation under CEQA.

To ensure compliance with the California Fish and Game Code and MBTA and to avoid potential impacts to nesting birds, vegetation removal activities would be conducted outside the general bird nesting season (February 1 through August 31, depending on the species), and if vegetation cannot be removed outside the bird nesting season, a pre-construction nesting bird survey by a qualified biologist is required prior to vegetation removal. This requirement is outlined in **MM-BIO-11** (Pre-Construction Nesting Bird Survey and Avoidance).

Accordingly, implementation of **MM-BIO-11** (Pre-Construction Nesting Bird Survey and Avoidance) would reduce potential direct impacts to nesting migratory birds and raptors to less than significant.

### 6.3.2.2 Indirect Impacts

Indirect impacts to special-status wildlife species are those that occur during construction to species present near the site, but not within the construction zone. Such impacts include fugitive dust that can degrade habitat and result in health implications for wildlife species; noise and vibration that can stress wildlife species or cause them to leave an area of otherwise suitable habitat, or that can result in disruption of bird nesting and abandonment of nests; increased human presence, which can also disrupt daily activities of wildlife and cause them to leave an area; generation of trash, such as food packaging and cigarette butts, and debris from construction-related materials, which can degrade wildlife habitat and can attract nuisance and pest species; night-time lighting, which can disrupt the activity patterns of nocturnal species, including many mammals and some birds, amphibians, and reptiles; and release of chemical pollutants, such as from oil leaks from construction vehicles and machinery. Implementation of the project could result in significant indirect impacts to special-status wildlife species absent mitigation.

**MM-BIO-3** (Designated Biologist Authority), **MM-BIO-4** (Compliance Monitoring), **MM-BIO-5** (Education Program), and **MM-BIO-6** (Construction Monitoring Notebook) would require that all workers complete a Worker Environmental Awareness Program (WEAP) training and would require ongoing biological monitoring and compliance with all biological resource mitigation. **MM-BIO-8** (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and that repair and clean-up of any hazardous waste occurs. To reduce fugitive dust resulting from project construction and to minimize adverse air quality impacts, the project would employ dust mitigation measures in accordance with the Mojave Desert AQMDs Rules 401 and 403.2, which would limit the amount of fugitive dust generated during construction. **MM-BIO-15** (Trash and Debris) would require trash and debris to be removed regularly and would require animal-resistant trash receptacles to avoid attracting urban-related predator species. **MM-BIO-16** (Lighting) would require night-time lighting during construction within 50 feet of habitat for special-status species to be shielded downward.

In addition, pre-construction surveys as required by **MM-BIO-10** (Pre-Construction Burrowing Owl Survey and Avoidance), **MM-BIO-11** (Pre-Construction Nesting Bird Survey and Avoidance), **MM-BIO-12** (Pre-Construction Crotch’s Bumble Bee Survey and Avoidance), **MM-BIO-13** (Pre-Construction Mojave Desert Tortoise Clearance Survey and Avoidance), and **MM-BIO-14** (Pre-Construction Desert Kit Fox Survey and Avoidance) would require establishment of construction buffers around any occupied burrows or active nests found, thus limiting effects from most short-term indirect impacts, including noise and vibration, increased human presence, night-time lighting, and vehicle collisions.

Post-construction (long-term) activities have the potential to result in indirect impacts to special-status wildlife and their habitat. Long-term impacts that could result from development adjacent to habitat include nighttime lighting and increased invasive plant species that may degrade habitat. These potential long-term indirect impacts to special-status wildlife would be significant absent mitigation under CEQA.

**MM-BIO-16** (Lighting) would require night-time lighting during post-construction operations within 50 feet of habitat for special-status species to be shielded downward. **MM-BIO-17** (Invasive Plant Management) would require that landscape plants within 200 feet of native vegetation communities not be on the most recent version of the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory (2023).

Accordingly, **MM-BIO-3** (Designated Biologist Authority), **MM-BIO-4** (Compliance Monitoring), **MM-BIO-5** (Education Program), and **MM-BIO-6** (Construction Monitoring Notebook), **MM-BIO-8** (Hazardous Waste), **MM-BIO-10** (Pre-Construction Burrowing Owl Survey and Avoidance), **MM-BIO-11** (Pre-Construction Nesting Bird Survey and Avoidance), **MM-BIO-12** (Pre-Construction Crotch’s Bumble Bee Survey and Avoidance), **MM-BIO-13** (Pre-Construction Mojave Desert Tortoise Clearance Survey and Avoidance), **MM-BIO-14** (Pre-Construction Desert Kit Fox Survey and Avoidance), **MM-BIO-15** (Trash and Debris), **MM-BIO-16** (Lighting), and **MM-BIO-17** (Invasive Plant Management) would reduce potential indirect (short-term and long-term) impacts to special-status wildlife to less than significant.

## 6.4 Impact BIO-2: Riparian Habitat and Sensitive Vegetation Communities

A total of 98.50<sup>2</sup> acres, including 81.10 acres within the project site and 17.40 acres within the off-site areas, would be impacted by the project within the BSA (Figure 8, Impacts to Biological Resources). Table 6, Impacts to Vegetation Communities and Land Cover Types within the Biological Study area, summarizes permanent direct impacts to vegetation communities and land covers within the BSA.

**Table 6. Impacts to Vegetation Communities and Land Cover Types within the Biological Study Area**

Vegetation Community or Land Cover Type	State Ranking <sup>1</sup>	Total BSA (acres)	On-Site Permanent Impacts (acres)	Off-Site Permanent Impacts (acres)	Total Impacts (acres)
Creosote Bush Scrub	S5	119.21	76.74	7.60	84.34

<sup>2</sup> Totals do not sum due to rounding.

**Table 6. Impacts to Vegetation Communities and Land Cover Types within the Biological Study Area**

Vegetation Community or Land Cover Type	State Ranking <sup>1</sup>	Total BSA (acres)	On-Site Permanent Impacts (acres)	Off-Site Permanent Impacts (acres)	Total Impacts (acres)
Disturbed Habitat	NA	20.60	2.40	6.57	8.97
Urban/Developed	NA	12.62	1.97	3.23	5.20
<b>Total<sup>2</sup></b>		<b>152.42</b>	<b>81.10</b>	<b>17.40</b>	<b>98.50</b>

**Notes:** BSA = biological study area (project site, off-site areas, and 100-foot buffer combined); N/A = not applicable.

<sup>1</sup> The conservation status of a vegetation community is designated by a number from 1 to 5, preceded by a letter reflecting the appropriate geographic scale of the assessment (G = global, N = national, and S = subnational). The numbers have the following meaning (NatureServe 2023):

- 1 = critically imperiled
- 2 = imperiled
- 3 = vulnerable to extirpation or extinction
- 4 = apparently secure
- 5 = demonstrably widespread, abundant, and secure
- NA = no applicable ranking
- GNR = unranked, global rank not yet assessed
- SNR = unranked, subnational rank not yet assessed

<sup>2</sup> Total acreages may not sum exactly due to rounding.

The BSA does not contain any riparian habitat or vegetation communities considered a sensitive biological resource by CDFW under CEQA. Therefore, project implementation would have no impact on sensitive vegetation communities.

## 6.5 Impact BIO-3: State or Federally Protected Wetlands or Waters

The BSA supports three ephemeral drainages consisting of 0.40-acre of non-wetland waters of the state under RWQCB, and 1.02-acre of jurisdictional streambed under CDFW. These drainages are presumed to be non-jurisdictional by USACE because they do not meet the relatively permanent standard as waters of the United States. No areas within the review area supported hydrophytic vegetation, and therefore features within the BSA were considered non-wetland waters of the State.

### 6.5.1 Direct Impacts

The project would result in direct permanent impacts to 0.27-acre of potential non-wetland waters of the state under RWQCB jurisdiction, consisting of 0.20-acre within the project site and 0.07-acre within off-site improvement areas. The project would also result in direct permanent impacts to 0.65-acre of potential streambed under CDFW jurisdiction, consisting of 0.47-acre within the project site and 0.18-acre within off-site improvement areas. These impacts are depicted on Figure 8 and are summarized in Table 7. The ephemeral drainages present are not likely subject to USACE jurisdiction because these features are isolated and do not meet the relatively permanent as a water of the United States. However, the ultimate decisions on the amount and location of jurisdictional resources are made by the resource agencies (i.e., USACE, CDFW, and RWQCB). These potential direct impacts to jurisdictional waters would be significant absent mitigation under CEQA.

**Table 7. Summary of Impacts to Potential Jurisdictional Aquatic Resources within the Biological Study Area**

Aquatic Resource Type	Regulatory Agency	Permanent On-Site Impacts (acres)	Permanent Off- Site Impacts (acres)	Total Permanent Impacts (acres)	Total Jurisdictional Aquatic Resources in the BSA (acres)
Non-wetland Waters of the State	RWQCB	0.20	0.07	0.27	0.40
Streambed	CDFW	0.47	0.18	0.65	1.02

**Notes:** BSA = Biological Study Area; CDFW = California Department of Fish and Wildlife; USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board.

Permits would be required from each of the regulatory agencies and entail providing mitigation to offset the impacts and loss of beneficial uses, functions, and values to the jurisdictional waters and habitats. **MM-BIO-18** (Aquatic Resources Mitigation) would require obtaining permits from each of the regulatory agencies (RWQCB and CDFW). Based on the project design, it is assumed that the project would require a waste discharge requirement; therefore, an application must be submitted to RWQCB. A Streambed Alteration Agreement would be required for impacts to jurisdictional streambed under CDFW.

In addition, **MM-BIO-3** (Designated Biologist Authority), **MM-BIO-4** (Compliance Monitoring), **MM-BIO-5** (Education Program), and **MM-BIO-6** (Construction Monitoring Notebook) would require that all workers complete WEAP training and would require ongoing biological monitoring and compliance with all biological resource mitigation requirements. **MM-BIO-7** (Delineation of Property Boundaries) requires that impacts occur within the fenced, staked, or flagged area that is clearly delineated within the project impact footprint. The construction crew would be responsible for unauthorized impacts from construction activities to waters of the state that are outside the permitted project footprint, if applicable. **MM-BIO-8** (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and that repair and clean-up of any hazardous waste occurs. To reduce fugitive dust resulting from project construction and to minimize adverse air quality impacts, the project would employ dust mitigation measures in accordance with the Mojave Desert AQMDs Rules 401 and 403.2, which limit the amount of fugitive dust generated during construction.

Accordingly, implementation of **MM-BIO-3** (Designated Biologist Authority), **MM-BIO-4** (Compliance Monitoring), **MM-BIO-5** (Education Program), **MM-BIO-6** (Construction Monitoring Notebook), **MM-BIO-7** (Delineation of Property Boundaries), **MM-BIO-8** (Hazardous Waste), and **MM-BIO-18** (Aquatic Resources Mitigation) would reduce potential direct impacts to jurisdictional aquatic resources to less than significant.

## 6.5.2 Indirect Impacts

Construction-related (short-term) indirect impacts may include inadvertent spillover impacts outside of the construction footprint, chemical spills, and stormwater erosion and sedimentation. These potential short-term or temporary indirect impacts to jurisdictional aquatic resources would be significant absent mitigation under CEQA.

**MM-BIO-3** (Designated Biologist Authority) gives the project’s designated biologist the authority to stop work if construction is not compliant with this CEQA document. **MM-BIO-4** (Compliance Monitoring) requires that an experienced biologist oversee compliance with the protective measures, including limiting impacts within the project footprint. **MM-BIO-5** (Education Program) would provide construction personnel with training related to



waters of the state that are present on and adjacent to the impact footprint. **MM-BIO-6** (Construction Monitoring Notebook) provides for documentation that the education program was administered to applicable personnel. **MM-BIO-7** (Delineation of Property Boundaries) requires that impacts occur within the fenced, staked, or flagged area that is clearly delineated within the project impact footprint. The construction crew would be responsible for unauthorized impacts from construction activities to waters of the state that are outside the permitted project footprint, if applicable. Thus, implementation of **MM-BIO-3** through **MM-BIO-7** would enable the project to avoid and minimize inadvertent spillover impacts outside of the approved impact footprint.

**MM-BIO-8** (Hazardous Waste) would ensure that a prompt and effective response to any accidental chemical spills would be implemented, and that repair and clean-up of any hazardous waste occurs. Thus, implementation of **MM-BIO-8** (Hazardous Waste) would help to avoid and minimize impacts to waters of the state from any construction-related chemical spills.

In addition, a SWPPP would be prepared and implemented to prevent construction pollutants from contacting stormwater during construction activities, with the intent of keeping sediment and any other pollutants from moving off site and into receiving waters. BMP categories employed on site would include erosion control, sediment control, and non-stormwater good housekeeping. Preparation and implementation of a SWPPP would help to avoid and minimize the potential effects of stormwater erosion during construction.

Post-construction (long-term) indirect impacts from operations and maintenance activities may include changes in water quality and accidental chemical spills. These potential long-term indirect impacts to jurisdictional aquatic resources would be significant absent mitigation under CEQA.

Implementation of low-impact-development features and BMPs would, to the maximum extent practicable, reduce the discharge of pollutants into receiving waters, including inadvertent release of pollutants (e.g., hydraulic fluids and petroleum); the improper management of hazardous materials; trash and debris; and the improper management of portable restroom facilities (e.g., regular service) in accordance with all relevant local and state development standards. In addition, in accordance with CalGreen requirements (CCR, Title 24, Part 11), project source controls to improve water quality would be provided for outdoor material storage areas, outdoor trash storage/waste handling areas, and outdoor loading/unloading areas. Therefore, impacts to jurisdictional aquatic resources due to changes in water quality would be avoided and minimized through implementation of low-impact-development features and BMPs.

As discussed above, implementation of **MM-BIO-3** (Designated Biologist Authority), **MM-BIO-4** (Compliance Monitoring), **MM-BIO-5** (Education Program), **MM-BIO-6** (Construction Monitoring Notebook), **MM-BIO-7** (Delineation of Property Boundaries), **MM-BIO-8** (Hazardous Waste), SWPPP, low-impact-development features, BMPs, and CalGreen requirements would reduce potential indirect (short-term and long-term) impacts to jurisdictional aquatic resources to less than significant.

## 6.6 Impact BIO-4: Wildlife Corridors and Nurseries

### 6.6.1 Direct Impacts

No significant direct permanent impacts would occur on wildlife movement or use of native wildlife nursery sites associated with project activities. Existing nearby habitat linkages and wildlife corridor functions would remain intact

while construction activities are conducted and following project completion. Wildlife movement may be temporarily disrupted during the construction phase of the project, although this effect would be both localized and short-term. Nearby corridors that could support wildlife movement in the region, such as the Mojave River, which is approximately 3.6 miles northeast of the BSA, would not be impacted by the project. Further, the project site does not contain nursery sites, such as bat colony roosting sites or colonial bird nesting areas. Therefore, impacts associated with wildlife movement, wildlife corridors, and wildlife nursery sites would be less than significant under CEQA.

## 6.6.2 Indirect Impacts

Construction-related short-term noise and work in the vicinity would be temporary and would not be expected to significantly disrupt wildlife movement due to ambient noise conditions and the ability for wildlife to continue to move around the construction area and upland portions of the BSA during and after construction. Temporary disturbance to local species may occur but would not substantially degrade the quality or use of the vegetation communities in the vicinity. Work activities are not currently proposed during the nighttime. Therefore, implementation of the project would not result in significant short-term indirect impacts to wildlife corridors or migratory routes.

Potential long-term (post-construction) indirect impacts from operations and maintenance activities could disrupt wildlife movement around the project site due to increased lighting from buildings. **MM-BIO-16** (Lighting) would ensure all lighting during operations and within 50 feet of the outside edge of the impact footprint containing habitat for special-status wildlife would be directed away from natural areas.

Accordingly, implementation of **MM-BIO-16** (Lighting) would reduce potential indirect impacts to wildlife movement to less than significant.

## 6.7 Impact BIO-5: Local Policies or Ordinances

Applicable local ordinances protecting biological resources within the biological study area include the County General Plan, San Bernardino Development Code, the City of Victorville General Plan, City of Victorville Municipal Code, and the locally-enforced CDNPA. Biological resources protected under these ordinances and policies are present within the BSA. These ordinances and proposed mitigation measures to ensure compliance are discussed below.

### San Bernardino County General Plan

The Project site occurs within the Desert Planning Region of San Bernardino County, which has two goals and policies: (1) to preserve open lands by working with BLM and (2) to ensure that off-highway vehicle use is managed to protect environmentally sensitive resources.

The project does not occur within any Land Use Zoning Districts designated by the County General Plan and would be compatible with the goals of Desert Planning Region. Additionally, the project would comply with San Bernardino County Development Code, which implements the goals and policies of the General Plan, by transplanting or stockpiling any western Joshua trees proposed for removal where possible. Therefore, the project would not conflict with the County General Plan.

### San Bernardino County Development Code

The San Bernardino County Development Code Chapter 88.01.060, Desert Native Plant Protection, ensures coordination with CNDPA and requires issuance of a Tree or Plant Removal Permit in compliance with Section 88.01.050 for specified desert tree species. The code also emphasizes compliance with the CDNPA for all plants regulated under the act, including those not explicitly stated in the Development Code Chapter 88.01.060.

The project only contains western Joshua trees protected under San Bernardino County Development Code. The San Bernardino County Development Code prohibits the removal of specified desert native trees except under a Tree or Plant Removal Permit in compliance with Section 88.01.050. Although the project includes Wiggins’ cholla and buckthorn cholla, which are protected under the CDNPA, this species does not require a Tree or Plant Removal Permit under the County Development Code. **MM-BIO-1** (Western Joshua Tree Fee Payment) would require mitigation for direct impacts to western Joshua trees through attainment of a WJTCA Incidental Take Permit (ITP) and fee payment, as well as attainment of a Tree or Plant Removal Permit in accordance with San Bernardino County Development Code Chapter 88.01.050. Therefore, impacts to western Joshua tree as protected under the San Bernardino County Development Code would be reduced to a less-than-significant level. **MM-BIO-2** (Desert Native Plant Removal Permit) also requires compliance with the CDNPA. Therefore, impacts to desert native plants as protected under the San Bernardino County Development Code would be less than significant. The project would not be in conflict with the San Bernardino County Development Code.

### City of Victorville General Plan

The City’s Resource Element (City of Victorville 2008) addresses biological resources in Goal #4 (Conservation of Important Habitat), wherein objectives and policies are set forth to achieve the goal of preserving native vegetation that provides habitat for rare, threatened, and/or endangered plant and wildlife species.

**Table 8. City of Victorville General Plan Goal #4 Conservation of Important Habitat**

Protection of Biological Resources – Policies	Consistency	Analysis
<b>Objective 4.1:</b> Preservation of natural communities that support rare, threatened, and or endangered plant and wildlife species throughout the planning area		
<i><b>Policy 4.1.1:</b> Encourage natural habitat that supports rare, threatened, or endangered plants and wildlife (i.e., “sensitive” species), or require restoration of the same type of impacted habitat within an existing, planned, or potential conservation area.</i>	Yes, with mitigation.	Focused surveys for special-status (or sensitive) species were conducted as part of the biological study of the project site. Impacts to special-status species would be reduced to a less-than-significant impact with implementation of <b>MM-BIO-1</b> through <b>MM-BIO-7</b> .
<i><b>Policy 4.1.2:</b> Support and participate in the West Mojave Plan.</i>	N/A	Although the BLM issued a Record of Decision for the West Mojave Plan in 2006, the West Mojave Plan has not been formally adopted. Therefore, the City of Victorville is not currently a participant to the West Mojave Plan.

**Table 8. City of Victorville General Plan Goal #4 Conservation of Important Habitat**

Protection of Biological Resources – Policies	Consistency	Analysis
<b>Objective 4.2: Permanent Conservation of Mojave River Corridor Ecological Values</b>		
<p><b>Policy 4.2.1:</b> Generally, prohibit private or public development projects or major infrastructure facilities on land within the Mojave River Corridor, where biological surveys have determined there is habitat that supports rare, threatened, and/or endangered plants or wildlife. Allow minor encroachments into such habitat for critical public facilities and recreational trails, where reliable assurances are provided that no loss of sensitive species would occur.</p>	<p>Yes.</p>	<p>The proposed project does not occur within the Mojave River Corridor, and therefore, would not be in conflict with this goal or policy.</p>

Impacts to biological resources goals and objectives provided within the City of Victorville General Plan would not impact, is less than significant, or would be mitigated to a less-than-significant level. The project would comply with requirements of the City of Victorville General Plan biological resource goals and policies through the implementation of the recommended mitigation measures. Additionally, the project would not be in conflict with the City’s General Plan Land Use Element. Therefore, the project would not conflict with the City of Victorville General Plan.

**City of Victorville Municipal Code**

The City of Victorville Municipal Code prohibits the removal or damage to western Joshua trees without prior consent of the Director of Parks and Recreation or their designee per VMC 13.33.040. The VMC also requires coordination with any laws and standards enforced by CDFW.

As required by **MM-BIO-1** (Western Joshua Tree Fee Payment), mitigation for direct impacts to western Joshua trees will be fulfilled through attainment of a WJTCA ITP and payment of fees consistent with the Western Joshua Tree Conservation Plan. In addition, **MM-BIO-1** requires that the project attain prior written consent from the City of Victorville Director of Parks and Recreation in accordance with the City of Victorville Municipal Code Chapter 13.33, Preservation and Removal of Joshua Trees. Therefore, the project would not conflict with City of Victorville Municipal Code.

**California Desert Native Plants Act**

A total of 119 western Joshua tree individuals were observed within the Joshua Tree Survey Area (project site, off-site improvement area, and a 50-foot buffer) (Figure 6). Of the 119 trees found within the Joshua Tree Survey Area, 101 western Joshua tree individuals are within the project impact area and would be directly impacted by project implementation (Figure 8).

In addition to western Joshua tree, two desert native plant species were observed within the BSA during the focused desert native plant survey: Wiggins’ cholla and buckthorn cholla (Figure 6). Specifically, one Wiggins’ cholla and one buckthorn cholla are located within the project impact area and would be directly impacted by project

implementation (Figure 8). Therefore, the project would result in significant impacts to native desert plants and western Joshua trees protected by state and local plant and tree preservation regulations, absent mitigation.

As required by **MM-BIO-1** (Western Joshua Tree Fee Payment), mitigation for direct impacts to 101 western Joshua trees will be fulfilled through payment of fees consistent with the Western Joshua Tree Conservation Plan. Conservation efforts for western Joshua tree will focus on the conservation of large, interconnected Joshua tree woodlands on lands where edge effects are limited, versus lands in urban settings that are subject to habitat fragmentation and edge effects, such as the Project site. In addition, **MM-BIO-1** requires that the project attain prior written consent from the City of Victorville Director of Parks and Recreation in accordance with the City of Victorville Municipal Code Chapter 13.33, Preservation and Removal of Joshua Trees. The mitigation also requires attainment of a Tree of Plant Removal Permit per San Bernardino County Development Code Chapter 88.01.050 prior to removal.

As of the date of this report, relocation of western Joshua trees is not a requirement of CDFW. However, relocation may be requested by CDFW following review of the Western Joshua Tree Conservation Act Incidental Take Permit Application. Should relocation be required by CDFW, the relocation specifications are detailed in Appendix A (Joshua Tree Preservation, Protection, and Relocation Plan).

For direct impacts to desert native plant species other than western Joshua tree, a permit must be attained as outlined in the CDNPA and applicable fee paid to the County of San Bernardino. **MM-BIO-2** (Desert Native Plants Removal Permit) requires compliance with the CDNPA and provides measures for successful relocation if required by applicable review authority.

Implementation of **MM-BIO-1** (Western Joshua Tree Fee Payment) and **MM-BIO-2** (Desert Native Plants Removal Permit) would reduce potential impacts associated with local policies and ordinances to less than significant.

## 6.8 Impact BIO-6: NCCP/HCP

The project is not located within any formally adopted Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) (CDFW 2023h). The project is within the BLM California Desert Conservation Area Plan (BLM 1980). The project is also within the Draft West Mojave Plan area (BLM 2005) and the Desert Renewable Energy Conservation Plan area (BLM 2016). The West Mojave Plan and Desert Renewable Energy Conservation Plan are amendments to the California Desert Conservation Area Plan. The BLM issued a Record of Decision for the West Mojave Plan in 2006, although the West Mojave Plan has not been formally adopted. The project would not conflict with the conservation criteria associated with the California Desert Conservation Area Plan or Desert Renewable Energy Conservation Plan. Therefore, impacts associated with an adopted habitat conservation plan would be less than significant.

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## 7 Mitigation

The project could result in potentially significant impacts to species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS, including special-status plant species such as western Joshua trees, native desert plants protected under the CDNPA, burrowing owl, loggerhead shrike, desert tortoise, desert kit fox, Crotch bumble bee, nesting migratory birds and raptors, and jurisdictional aquatic resources. Implementation of **MM-BIO-1** through **MM-BIO-18** is required to reduce impacts to a less-than-significant level.

**MM-BIO-1** **Western Joshua Tree Fee Payment.** Mitigation for direct impacts to 101 western Joshua trees will be fulfilled through attainment of a Western Joshua Tree Conservation Act (WJTCA) Incidental Tak Permit and a payment of the elected fees as described in Section 1927.3 of the WJTCA. In conformance with the reduced fee schedule prescribed for the project area, mitigation will consist of payment of \$1,000 for each western Joshua tree five meters or greater in height, \$200 for each western Joshua tree less than five meters but greater than 1 meter in height; and \$150 for each western Joshua tree less than 1 meter in height. California Department of Fish and Wildlife (CDFW) determines the final fee. Alternatively, mitigation will occur through off-site conservation or through a CDFW approved mitigation bank, or as required by a Section 2081 Incidental Take Permit, if received.

Other local regulations (i.e., City of Victorville Municipal Code, Chapter 13.33 and San Bernardino County Development Code Chapter 88.01) also require permitting or notification prior to removal of western Joshua trees. Therefore, the project must also receive written consent from the City of Victorville's Director of Parks and Recreation prior to the removal or relocation of western Joshua trees in accordance with City of Victorville Municipal Code, Chapter 13.33, Preservation and Removal of Joshua Trees. Additionally, the project applicant shall submit an application for a Tree or Plant Removal Permit for all western Joshua trees to be removed in compliance with San Bernardino County Development Code Chapter 88.01.050 prior to the issuance of grading permits.

**MM-BIO-2** **Desert Native Plants Removal Permit.** Prior to the commencement of project activities, the project applicant shall apply for a permit with the County of Los Angeles for removal of protected native desert plants as required under California Desert Native Plants Act (Food and Agricultural Code, Division 23). The project shall comply with any conditions of approval imposed by the applicable review authority upon issuance of the permit.

The permit application form shall specify information outlined in the California Desert Native Plant Act Section 80114, which includes but is not limited to, the number and species of native plants to be removed, a description of the real property from which the plants are to be removed, and in the case that relocation is required, the destination of the native plants and the manner in which the plants are to be salvaged. Pursuant to the California Desert Native Plants Act, tags or seals issued by the County must be attached to the native plants at the time of harvesting and before transporting to their permanent relocation site(s) and must remain attached to the plant until transplanted into its ultimate destination. Transport of salvaged plants will occur as prescribed by the County.

If relocation is required by the applicable review authority, the following actions shall also be implemented to ensure successful relocation of desert native plants:

- Salvaged plants shall be transplanted expeditiously to either their final on-site location or to an approved off-site area. If the plants cannot be expeditiously taken to their permanent relocation area at the time of excavation, they may be transplanted in a temporary area (stockpiled) prior to being moved to their permanent relocation site(s).
- Plants designated for relocation shall be marked on their north facing side prior to excavation. Transplanted plants shall be planted in the same orientation as they currently occur on the project site, with the marking on the north side of the trees facing north at the relocation site(s).
- Transplanted plants shall be watered prior to and at the time of transplantation. Watering of the transplanted plants shall continue under the guidance of qualified tree expert and desert native plant expert(s) until it has been determined that the transplants have become established in the permanent relocation site(s) and no longer require supplemental watering.

MM-BIO-3 **Designated Biologist Authority.** The designated biologist shall have authority to immediately stop any activity that does not comply with the biological resources mitigation measures and/or to order any reasonable measure to avoid the unauthorized take of an individual western Joshua tree or other sensitive biological resources.

MM-BIO-4 **Compliance Monitoring.** The designated biologist shall be on site daily when impacts occur. The designated biologist shall conduct compliance inspections to minimize incidental take of western Joshua trees and impacts to other sensitive biological resources; prevent unlawful take of western Joshua trees; ensure that signs, stakes, and fencing are intact; and ensure that impacts are only occurring within the direct impact footprint. Weekly written observation and inspection records that summarize oversight activities, compliance inspections, and monitoring activities required by the Incidental Take Permit shall be prepared.

MM-BIO-5 **Education Program.** An education program (Worker Environmental Awareness Program [WEAP]) for all persons employed or otherwise working in the project site shall be administered before impacts occur. The WEAP shall consist of a presentation from the designated biologist that includes a discussion of the biology and status of western Joshua tree, burrowing owl, loggerhead shrike, desert tortoise, desert kit fox, and Crotch bumble bee, along with other biological resources mitigation measures described in the California Environmental Quality Act document. Interpretation for non-English-speaking workers shall be provided, and the same instruction shall be provided to any new workers before they are authorized to perform work in the project area. Upon completion of the WEAP, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent employees who will be conducting work in the project area.

MM-BIO-6 **Construction Monitoring Notebook.** The designated biologist shall maintain a construction-monitoring notebook on site throughout the construction period, which shall include a copy of the biological resources mitigation measures with attachments and a list of signatures of all personnel who have successfully completed the education program. The notebook will include a sign-off date page for the designated biologist to sign and date each construction date for which the project is in

compliance. The permittee shall ensure that a copy of the construction monitoring notebook is available for review at the project site upon request by the CDFW.

- MM-BIO-7 **Delineation of Property Boundaries.** Before beginning activities that would cause impacts, the contractor shall, in consultation with the designated biologist, clearly delineate the boundaries with fencing, stakes, or flags, consistent with the grading plan, within which the impacts will take place. All impacts outside the fenced, staked, or flagged areas shall be avoided, and all fencing, stakes, and flags shall be maintained until the completion of impacts in that area.
  
- MM-BIO-8 **Hazardous Waste.** The applicant shall immediately stop work and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so.
  
- MM-BIO-9 **Herbicides.** The applicant shall limit herbicide use for invasive plant species and shall use herbicides only if it has been determined that hand or mechanical efforts are infeasible. To prevent drift, the permittee shall apply herbicides only when wind speeds are less than 7 miles per hour. All herbicide application shall be performed by a licensed applicator and in accordance with all applicable federal, state, and local laws and regulations.
  
- MM-BIO-10 **Pre-Construction Burrowing Owl Survey and Avoidance.** One pre-construction burrowing owl survey shall be completed no more than 14 days before initiation of site preparation or grading activities, and a second survey shall be completed within 24 hours of the start of site preparation or grading activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction surveys, the project site shall be re-surveyed. Surveys for burrowing owl shall be conducted in accordance with protocols established in the Staff Report on Burrowing Owl Mitigation prepared by the California Department of Fish and Game (now CDFW) in 2012 or current version.

If burrowing owls are detected, the Burrowing Owl Relocation Plan (Appendix I) shall be implemented in consultation with CDFW. As required by the Burrowing Owl Relocation Plan, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers will be established around occupied burrows as determined by a qualified biologist. No project activities shall be allowed to encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined that occupied burrows have been vacated or the nesting season has completed.

Outside of the nesting season, passive owl relocation techniques approved by CDFW shall be implemented. Owls shall be excluded from burrows in the immediate project area and within a buffer zone if there is a threat to the surface or subterranean burrow structure by installing one-way doors in burrow entrances. These doors will be placed at least 48 hours prior to ground-disturbing activities. The project area shall be monitored daily for 1 week to confirm owl departure from burrows prior to any ground-disturbing activities. Compensatory mitigation for permanent loss of owl habitat will be provided following the guidance in the CDFW 2012 Staff Report on Burrowing Owl Mitigation or current version.



Where possible, burrows will be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any wildlife inside the burrow.

Mitigation for direct impacts to 76.47 acres of occupied breeding habitat shall be fulfilled through conservation of suitable burrowing owl habitat through the purchase of credits at a minimum of 1:1 in-kind habitat replacement of equal or better functions and values to those impacted by the project, for a total of 76.47 acres.

MM-BIO-11 **Pre-Construction Nesting Bird Survey and Avoidance.** Construction activities shall avoid the migratory bird nesting season (typically February 1 through August 31), to reduce any potential significant impact to birds that may be nesting on the survey area. If construction activities must occur during the migratory bird nesting season, an avian nesting survey of the project site and within 500 feet of all impact areas must be conducted to determine the presence/absence of protected migratory birds and active nests. The avian nesting survey shall be performed by a qualified wildlife biologist within 72 hours prior to the start of construction in accordance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503, 3503.5, and 3513. If an active bird nest is found, the nest shall be flagged and mapped on the construction plans along with an appropriate buffer established around the nest, which will be determined by the biologist based on the species' sensitivity to disturbance. The nest area shall be avoided until the nest is vacated and the juveniles have fledged. The nest area shall be demarcated in the field with flagging and stakes or construction fencing. On-site construction monitoring shall also be conducted when construction occurs in close proximity to an active nest buffer. No project activities may encroach into established buffers without the consent of a monitoring biologist. The buffer shall remain in place until it is determined the nestlings have fledged and the nest is no longer considered active.

MM-BIO-12 **Pre-Construction Crotch Bumble Bee Survey and Avoidance.** A pre-construction survey for Crotch bumble bee shall be conducted within the construction footprint prior to the start of initial vegetation removal or initial grading activities occurring during the Crotch bumble bee nesting period (February 1 through October 31). The survey shall ensure that no nests for Crotch bumble bee are located within the construction area. The pre-construction survey shall include 1) a habitat assessment and 2) focused surveys, both of which will be based on recommendations described in the "Survey Considerations for CESA Candidate Bumble Bee Species," released by the CDFW on June 6, 2023, or the most current at the time of construction.

The habitat assessment shall, at a minimum, include historical and current species occurrences; document potential habitat onsite including foraging, nesting, and/or overwintering resources; and identify which plant species are present. For the purposes of this mitigation measure, nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and man-made structures that may support bumble bee colonies such as rock walls, rubble, and furniture. If nesting resources are present in the impact area, focused surveys will be conducted.

The focused survey will be performed by a biologist with expertise in surveying for bumble bees and include at least three (3) survey passes that are not on sequential days or in the same week, preferably spaced two to four weeks apart. The timing of these surveys shall coincide with the

Colony Active Period (April 1 through August 31 for Crotch bumble bee). Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys will not be conducted during wet conditions (e.g., foggy, raining, or drizzling) and surveyors will wait at least 1 hour following rain. Optimal surveys are when there are sunny to partly sunny skies that are greater than 60 degrees Fahrenheit. Surveys may be conducted earlier if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 mph). Within non-developed habitats, the biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist shall watch the nest resources for up to five minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence would be apparent after five minutes of observation. If a bumble bee worker is detected, then a representative shall be identified to species. Biologists should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them depending on their proximity to one another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point which would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes).

Identification will include trained biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee shall be placed in a clear container for observation and photographic documentation if able. The bee will be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee identifying characteristics cannot be adequately captured in the container due to movement, the container will be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee shall be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee shall be released into the same area from which it was captured upon completion of identification. Based on implementation of this method on a variety of other bumble bee species, they become active shortly after removal from the cold environment, so photography must be performed quickly.

If Crotch bumble bee nests are not detected, no further mitigation would be required. The mere presence of foraging Crotch bumble bees would not require implementation of additional minimization measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch bumble bee are detected within the construction area, no construction activities shall occur within 100 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources will be avoided for the duration of the Crotch bumble bee nesting period (February 1 through October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest as the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources.

A written survey report will be submitted to the City and CDFW within 30 days of the pre-construction survey. The report will include survey methods, weather conditions, and survey results, including a

list of insect species observed and a figure showing the locations of any Crotch bumble bee nest sites or individuals observed. The survey report will include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers, detailed habitat assessment, and photo vouchers. If Crotch bumble bee nests are observed, the survey report will also include recommendations for avoidance, and the location information will be submitted to the CNDDDB at the time of, or prior to, submittal of the survey report.

If the above measures are followed, it is assumed that the project shall not need to obtain authorization from CDFW through the California Endangered Species Act Incidental Take Permit process. If the nest resources cannot be avoided during the nesting period, as outlined in this measure, the project applicant will consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch bumble bee may supersede measures provided in this CEQA document and shall be incorporated into the habitat mitigation and monitoring plan.

In the event an Incidental Take Permit is needed, mitigation for direct impacts to Crotch bumble bee will be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the project, or as otherwise determined through the Incidental Take Permit process. Mitigation will be accomplished either through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank, and lands are conserved separately, a cost estimate will be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source will be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount will be established following the completion of a project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record will consider all management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement(s), which are currently in review and development.

- MM-BIO-13 Pre-Construction Mojave Desert Tortoise Clearance Survey and Avoidance. Two consecutive pre-construction clearance survey in accordance with current U.S. Fish and Wildlife Service (USFWS) protocol shall be conducted to reevaluate locations of potential Mojave desert tortoise burrows within the project limits so take of Mojave desert tortoise can be avoided. The first pre-construction clearance survey shall be conducted in areas supporting potentially suitable habitat 14 to 21 days prior to the start of construction activities and a second survey shall be repeated within 72 hours prior to the start of construction activities; or alternatively, pre-construction clearance surveys may be conducted at any time following construction of a desert tortoise-proof fence encompassing the project site that would ensure that tortoises cannot enter the project after clearance surveys are completed. If no Mojave desert tortoises are found during the surveys, no further mitigation would be required; however, desert tortoise-proof fence encompassing the project site shall remain in place until project construction is completed and shall be monitored by a qualified biologist in compliance with current USFWS protocol.

Should Mojave desert tortoise be located during the clearance survey, all methods used for handling desert tortoises during the clearance surveys must be in accordance with the USFWS

Desert Tortoise Field Manual or project-specific guidance contained in a biological opinion or Incidental Take Permit. No take of Mojave desert tortoise shall occur without authorization in the form of an Incidental Take Permit pursuant to California Fish and Game Code Section 2081 and a biological opinion or Habitat Conservation Plan. The project applicant shall adhere to measures and conditions set forth within the Incidental Take Permit. Anyone who handles desert tortoises during clearance activities must have the appropriate authorizations from USFWS. The area cleared and number of Mojave desert tortoises found within that area shall be reported to the local USFWS and appropriate state wildlife agency. Notification shall be made in accordance with the conditions of the biological opinion or Incidental Take Permit.

Should Mojave desert tortoise be located during the clearance survey, the project would result in the loss of 84.34 acres of occupied habitat for Mojave desert tortoise. Mitigation for direct impacts to 84.34 acres shall be fulfilled through conservation of suitable Mojave desert tortoise habitat through the purchase of credits at a minimum of 1:1 in-kind habitat replacement of equal or better functions and values to those impacted by the project, for a total of 84.34 acres or as otherwise determined through coordination with the USFWS and/or California Department of Fish and Wildlife.

MM-BIO-14 **Pre-Construction Desert Kit Fox Survey and Avoidance.** A pre-construction survey for desert kit fox shall be conducted within 10 days before initiation of site preparation or grading activities to determine the presence/absence of desert kit fox.

If an active non-natal desert kit fox den is detected, a 200-foot no disturbance buffer will be established around the active den, unless otherwise authorized by the California Department of Fish and Wildlife. Where required buffering will not be feasible, passive relocation is allowed with concurrence from the City of Victorville and CDFW. If an active natal desert kit fox den is detected, an initial 200-foot no disturbance buffer will be established around the natal den, and this buffer will be maintained until the den can be verified to not host pups. Construction activities will not be permitted in this area until the den has been vacated. Once the den is vacated, and if in danger by construction, it can be collapsed, if deemed necessary by a qualified biologist.

A report to evaluate the success of the relocation efforts and any subsequent re-occupation, if applicable, will be provided (including a comprehensive summary, tables, maps, etc.) at the end of the construction period. Data will be readily available to the CDFW upon request. If an injured, sick, or dead desert kit fox is detected on any area associated with the project, the designated CDFW personnel at both the Ontario office and the Wildlife Investigation Lab will be notified.

MM-BIO-15 **Trash and Debris.** The following avoidance and minimization measures shall be implemented during project construction.

- (1) Fully covered trash receptacles that are animal-proof will be installed and used by the operator to contain all food, food scraps, food wrappers, beverage containers, and other miscellaneous trash. Trash contained within the receptacles will be removed at least once a week from the project site.

(2) Construction work areas shall be kept clean of debris, such as cable, trash, and construction materials. All construction/contractor personnel shall collect all litter, vehicle fluids, and food waste from the project site on a daily basis.

MM-BIO-16 **Lighting.** Lighting for construction activities and post-construction operations within 50 feet of the outside edge of the impact footprint containing habitat for special-status wildlife will be shielded and directed downward.

MM-BIO-17 **Invasive Plant Management.** In order to reduce the spread of invasive plant species, landscape plants within 200 feet of native vegetation communities shall not be on the most recent version of the Cal-IPC California Invasive Plant Inventory (<http://www.cal-ipc.org/ip/inventory/index.php>). Post-construction, the applicant shall continually remove invasive plant species on site by hand or mechanical methods, as feasible.

MM-BIO-18 **Aquatic Resources Mitigation.** The project site supports aquatic resources that are considered jurisdictional under the Regional Water Quality Control Board (RWQCB) and the California Department of Fish and Wildlife (CDFW). Prior to construction activity, the applicant shall coordinate with the Lahontan RWQCB (Region 6) to ensure conformance with the requirements of the Porter–Cologne Water Quality Control Act (waste discharge requirement). Prior to activity within CDFW jurisdictional streambed or associated riparian habitat, the applicant shall coordinate with CDFW (Inland Deserts Region 6) relative to conformance to the Lake and Streambed Alteration permit requirements.

The project shall mitigate to ensure no-net-loss of waters at a minimum of 1:1 with purchase of credits (0.27-acre potential non-wetland waters of the state under RWQCB jurisdiction and 0.65-acre of potential streambed under CDFW jurisdiction) for impacts to aquatic resources as part of an overall strategy to ensure no net loss. Mitigation shall be completed through use of a mitigation bank (e.g., West Mojave Mitigation Bank) or other applicant-sponsored mitigation. Final mitigation ratios and credits shall be determined in consultation with RWQCB and/or CDFW based on agency evaluation of current resource functions and values and through each agency’s respective permitting process. Should applicant-sponsored mitigation be implemented, a Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared in accordance with State Water Resources Control Board guidelines and approved by the agencies in accordance with the proposed program permits. The HMMP shall include a conceptual planting plan including planting zones, grading, and irrigation, as applicable; a conceptual planting plant palette; a long-term maintenance and monitoring plan; annual reporting requirements; and proposed success criteria. Any off-site applicant-sponsored mitigation shall be conserved and managed in perpetuity.

Best management practices shall be implemented to avoid any indirect impacts on jurisdictional waters, including the following:

- Vehicles and equipment shall not be operated in ponded or flowing water except as described in permits.
- Water containing mud, silt, or other pollutants from grading or other activities shall not be allowed to enter jurisdictional waters or be placed in locations that may be subjected to high storm flows.

- Spoil sites shall not be located within 30 feet from the boundaries of jurisdictional waters or in locations that may be subject to high storm flows, where spoils might be washed back into drainages.
- Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources resulting from project-related activities shall be prevented from contaminating the soil and/or entering avoided jurisdictional waters.

No equipment maintenance shall be performed within 100 feet of jurisdictional waters, including wetlands and riparian areas, where petroleum products or other pollutants from the equipment may enter these areas. Fueling of equipment shall not occur on the project site.

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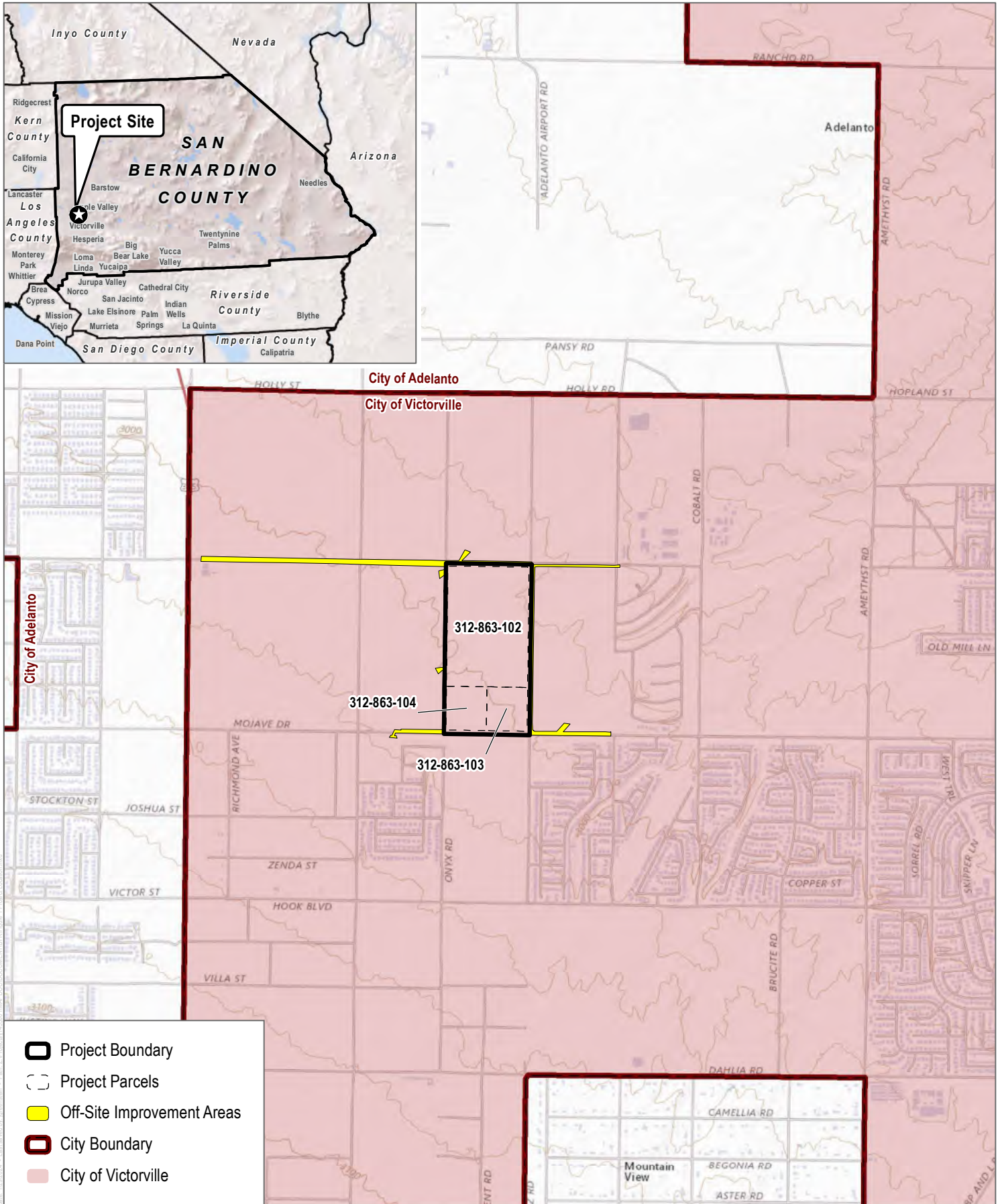
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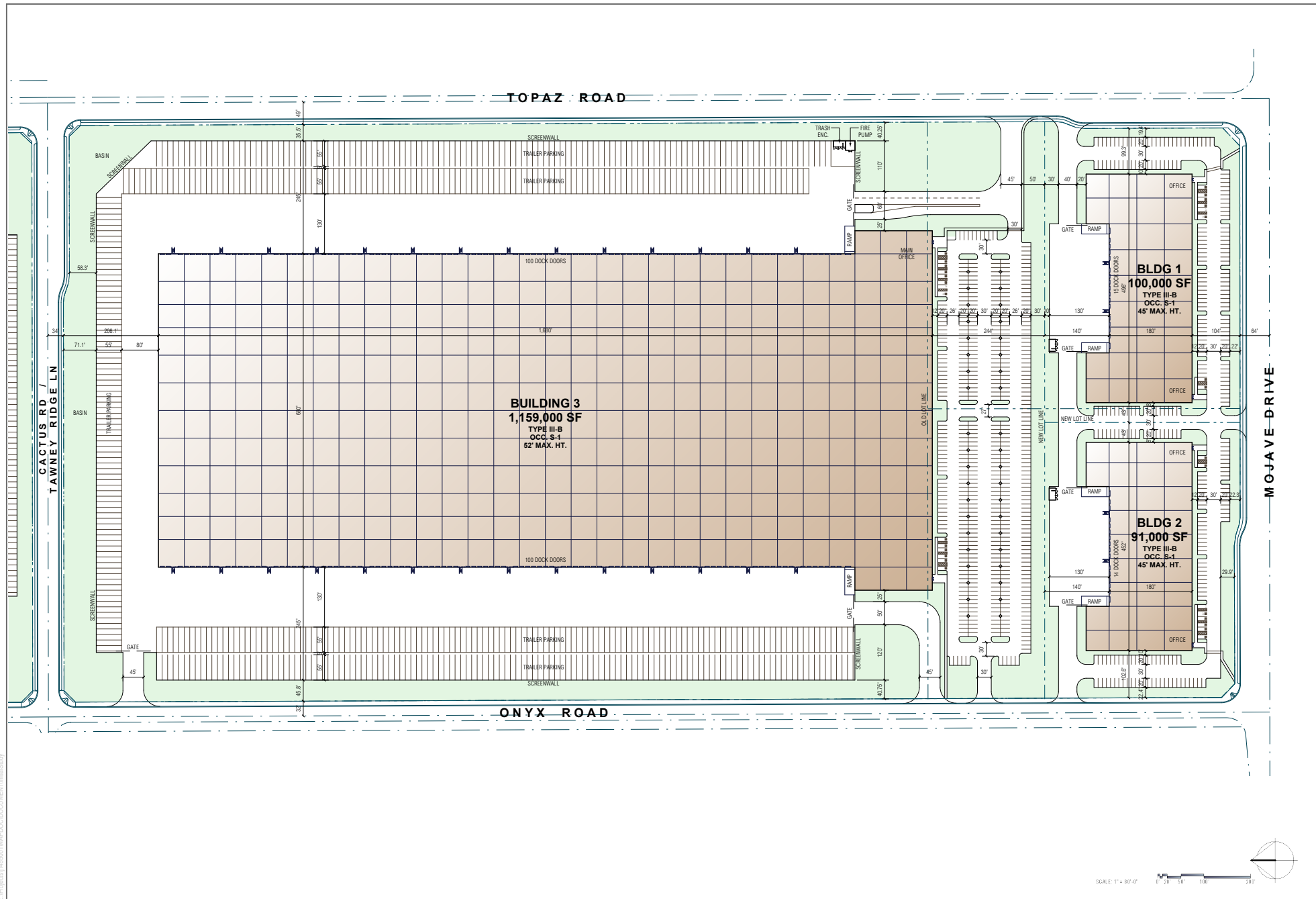
SOURCE: Maxar 2020; County of San Bernardino 2023

**FIGURE 1**

**Project Location**

Mojave Industrial Park Project

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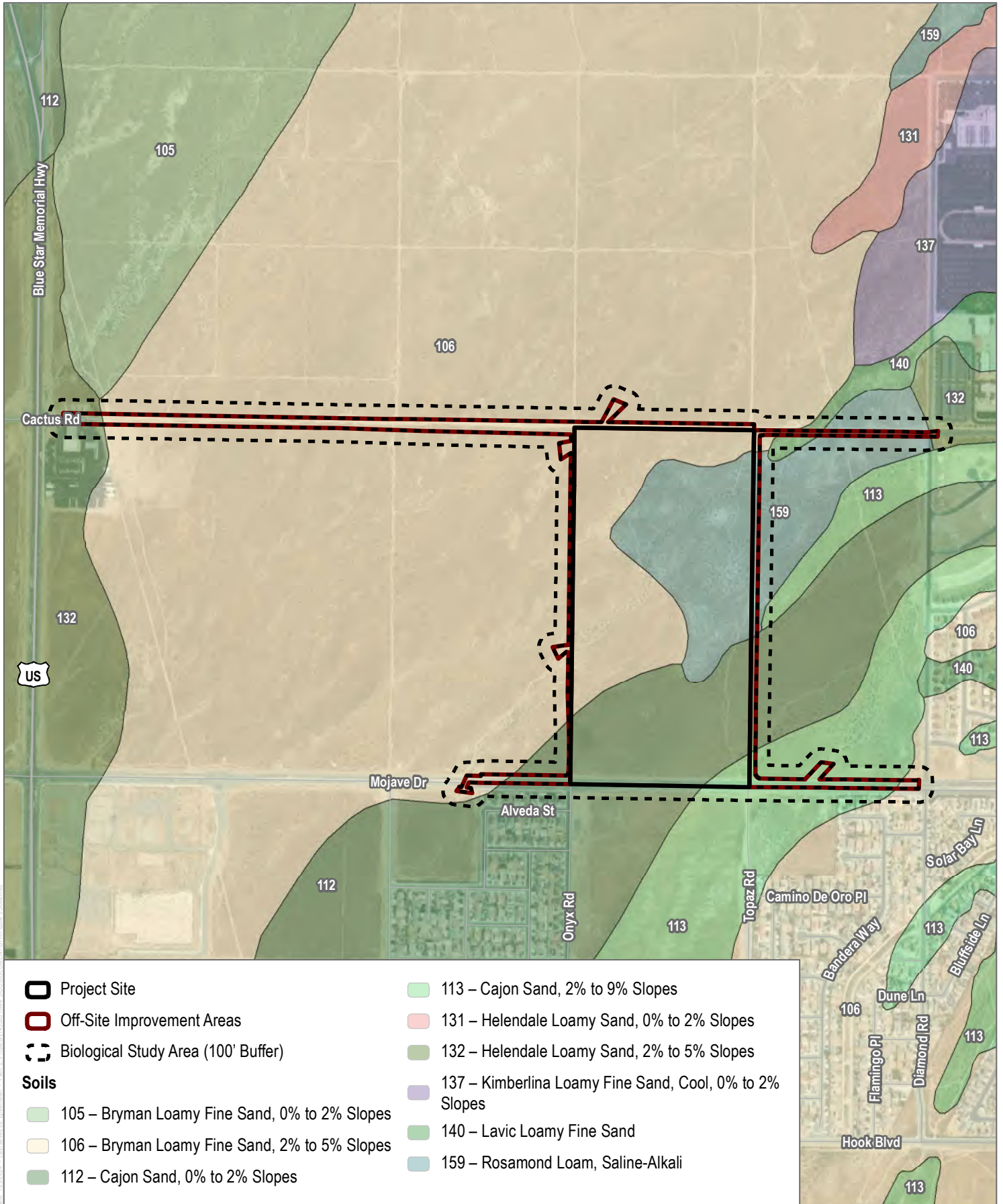


SOURCE: RGA 2023; Covington Development Partners 2023

FIGURE 2  
Project Site Plan  
Mojave Industrial Park Project



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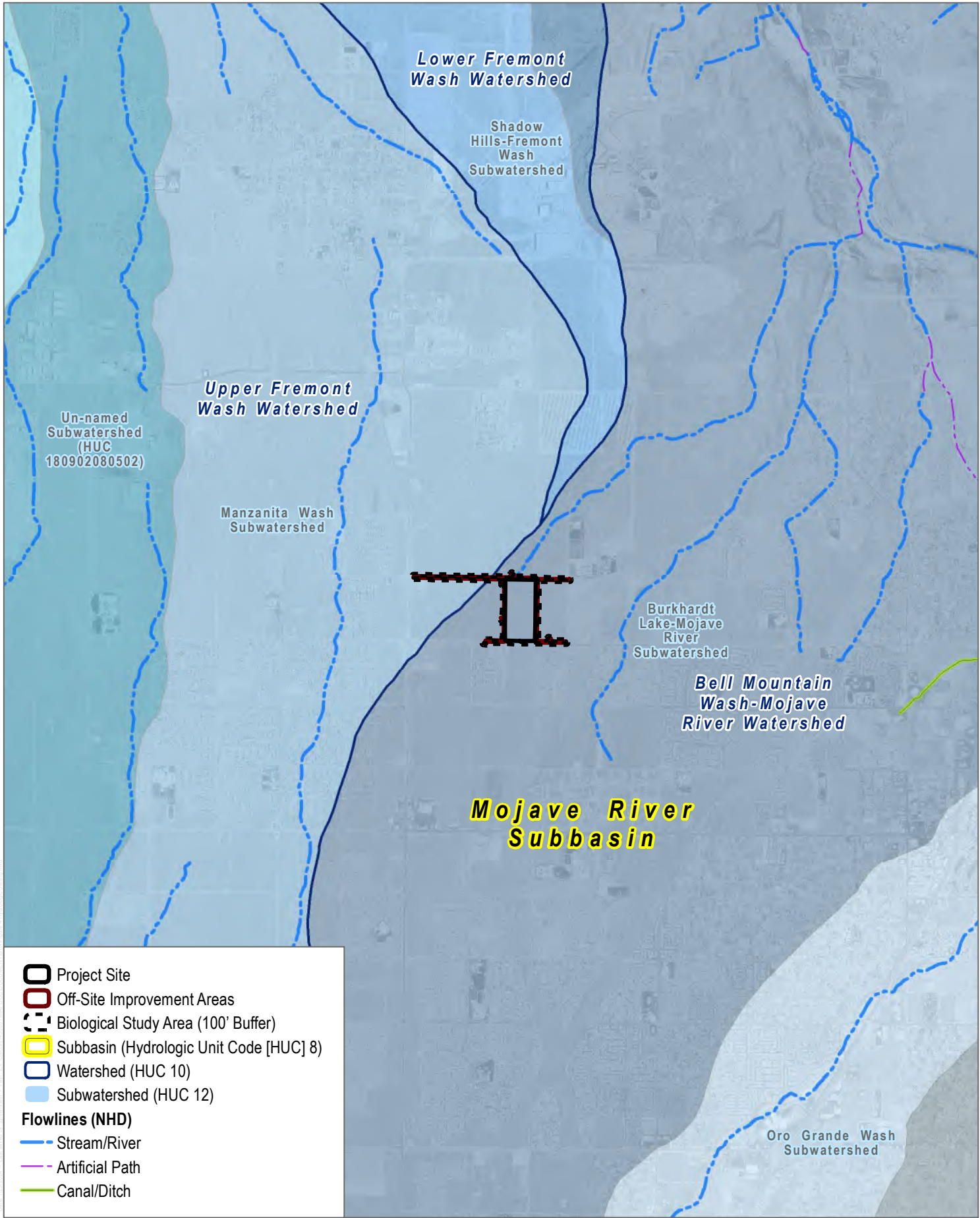
SOURCE: Maxar 2020; Open Street Map 2023; USDA SSURGO

**FIGURE 3**

**Soils**

Mojave Industrial Park Project

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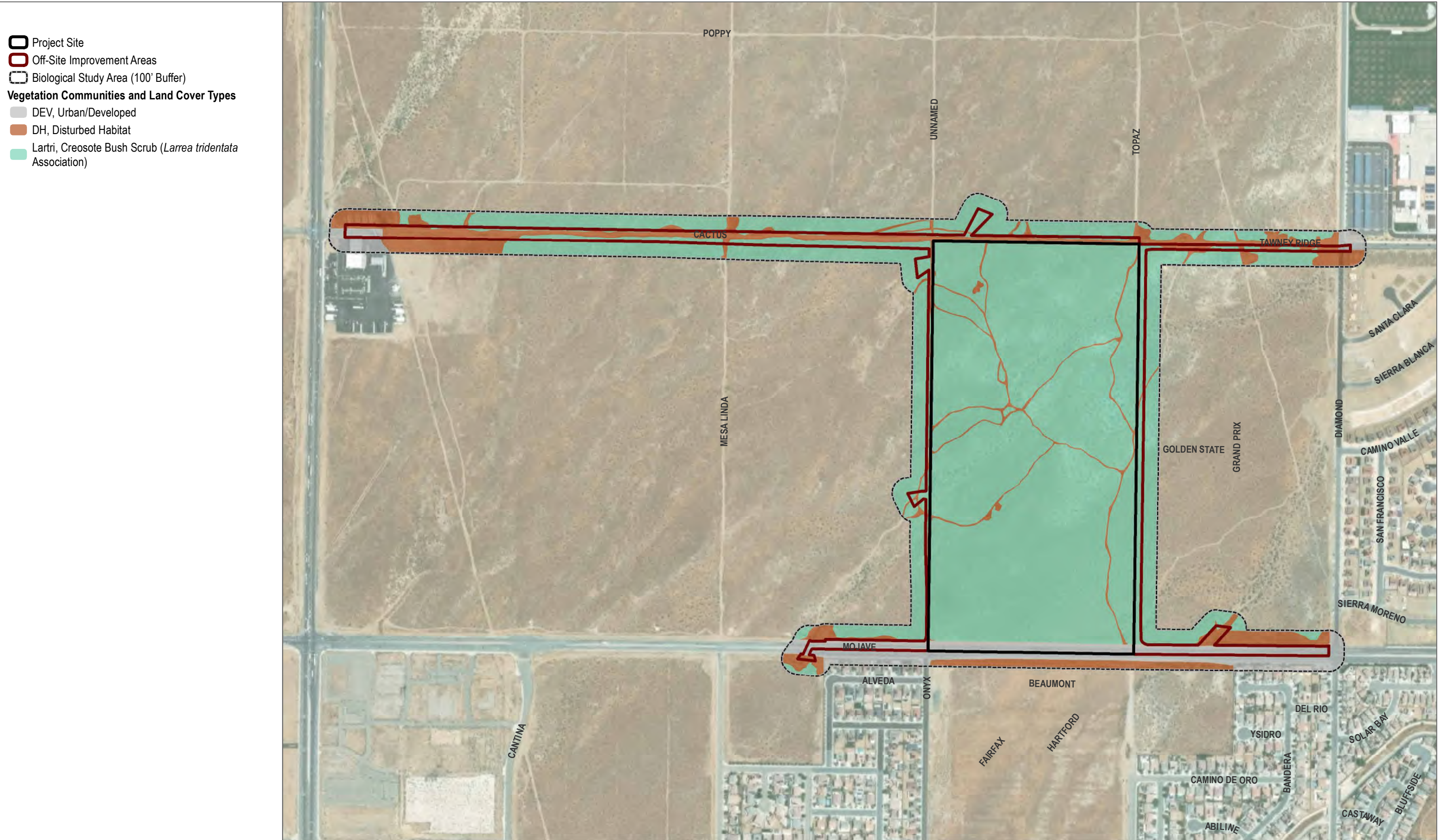


SOURCE: Esri; USGS; NAIP 2020



**FIGURE 4**

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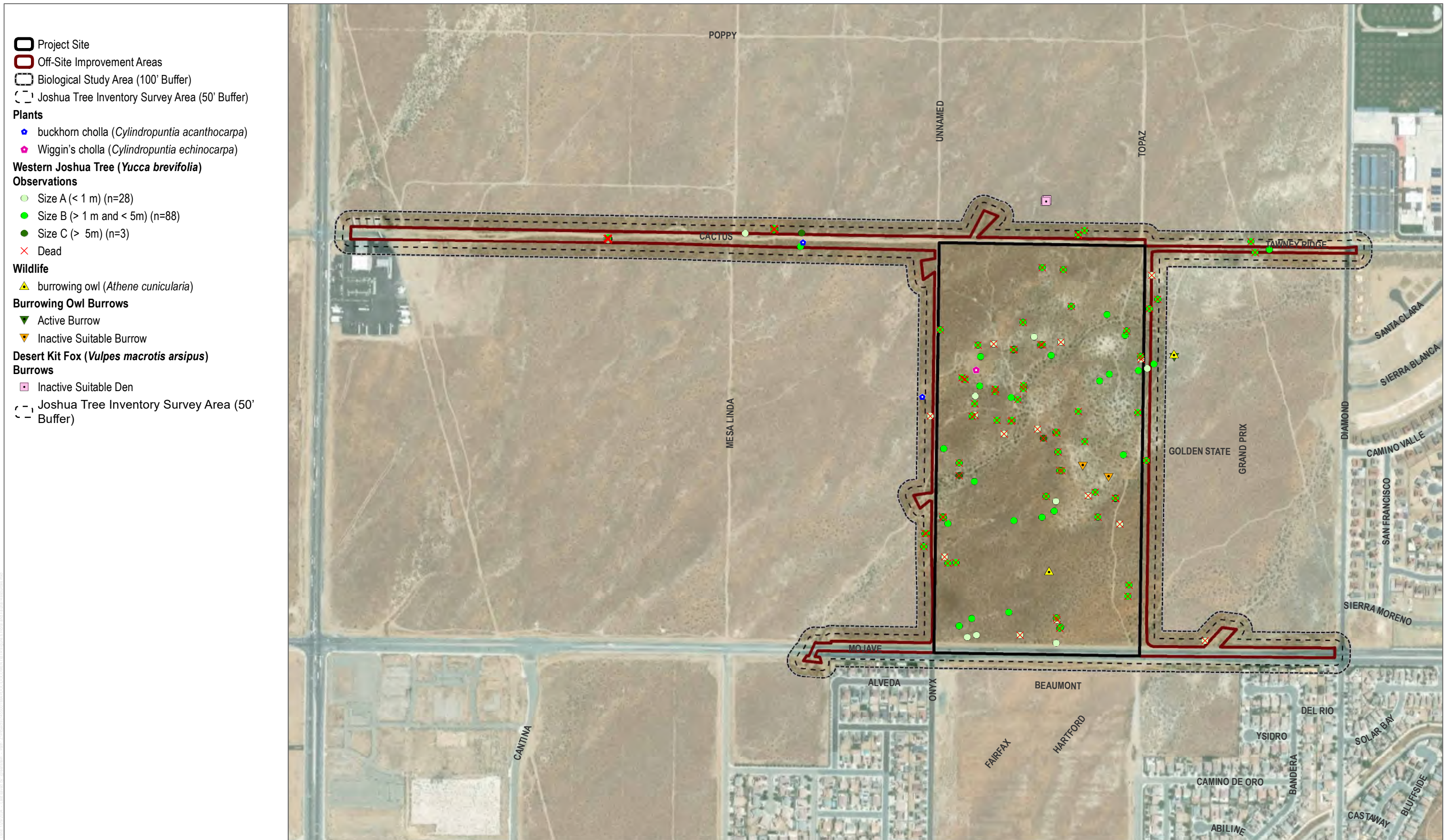


SOURCE: Maxar 2020; Open Street Map 2023



**FIGURE 5**  
Vegetation  
Mojave Industrial Park Project

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SOURCE: Maxar 2020; Open Street Map 2023



**FIGURE 6**  
 Floral and Faunal Resources  
 Mojave Industrial Park Project



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- Off-Site Improvement Areas
- Biological Study Area (100' Buffer)
- OHWM Transect
- ➔ Photo Point
- 30-foot Contour
- CDFW Jurisdictional Features (1.02 acres)**
- Top of Bank
- RWQCB Jurisdictional Features (0.40 acres)**
- Ordinary High Water Mark

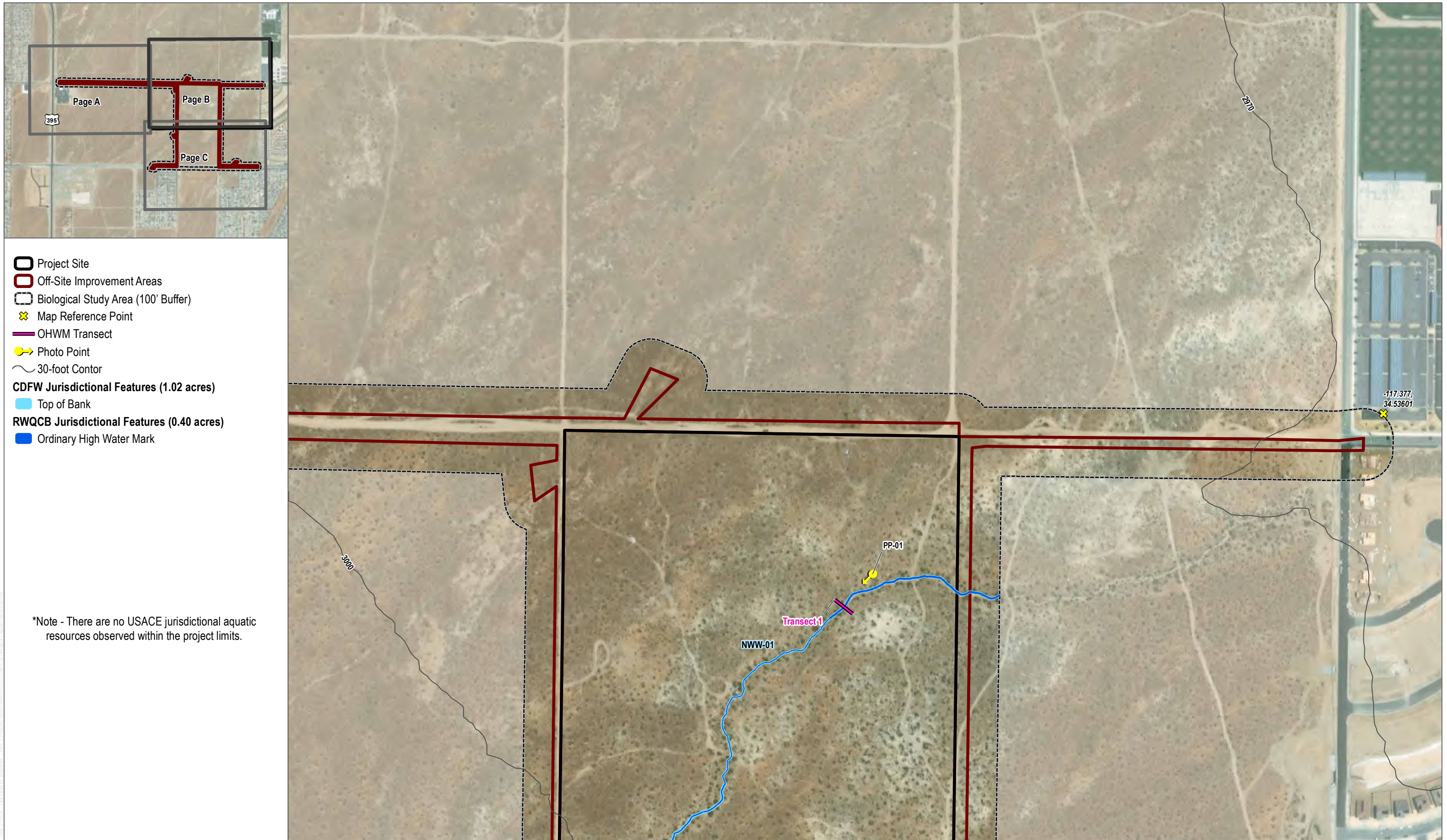
\*Note - There are no USACE jurisdictional aquatic resources observed within the project limits.

SOURCE: Maxar 2020; Open Street Map 2023



**FIGURE 7A**  
**Aquatic Resources**  
 Mojave Industrial Park Project

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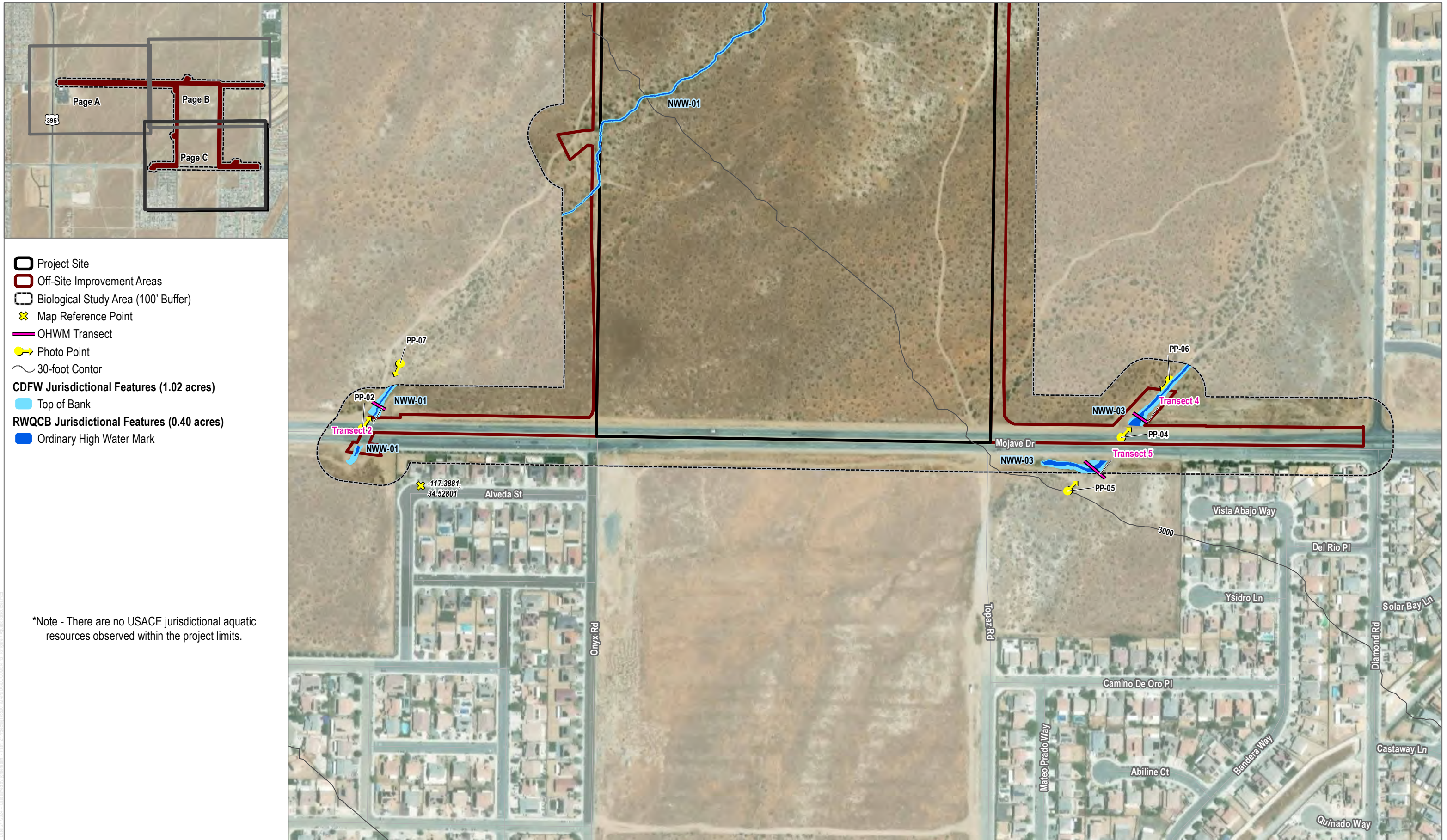


SOURCE: Maxar 2020; Open Street Map 2023



**FIGURE 7B**  
**Aquatic Resources**  
 Mojave Industrial Park Project

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- Project Site
- Off-Site Improvement Areas
- Biological Study Area (100' Buffer)
- Map Reference Point
- OHWM Transect
- Photo Point
- 30-foot Contour
- CDFW Jurisdictional Features (1.02 acres)**
- Top of Bank
- RWQCB Jurisdictional Features (0.40 acres)**
- Ordinary High Water Mark

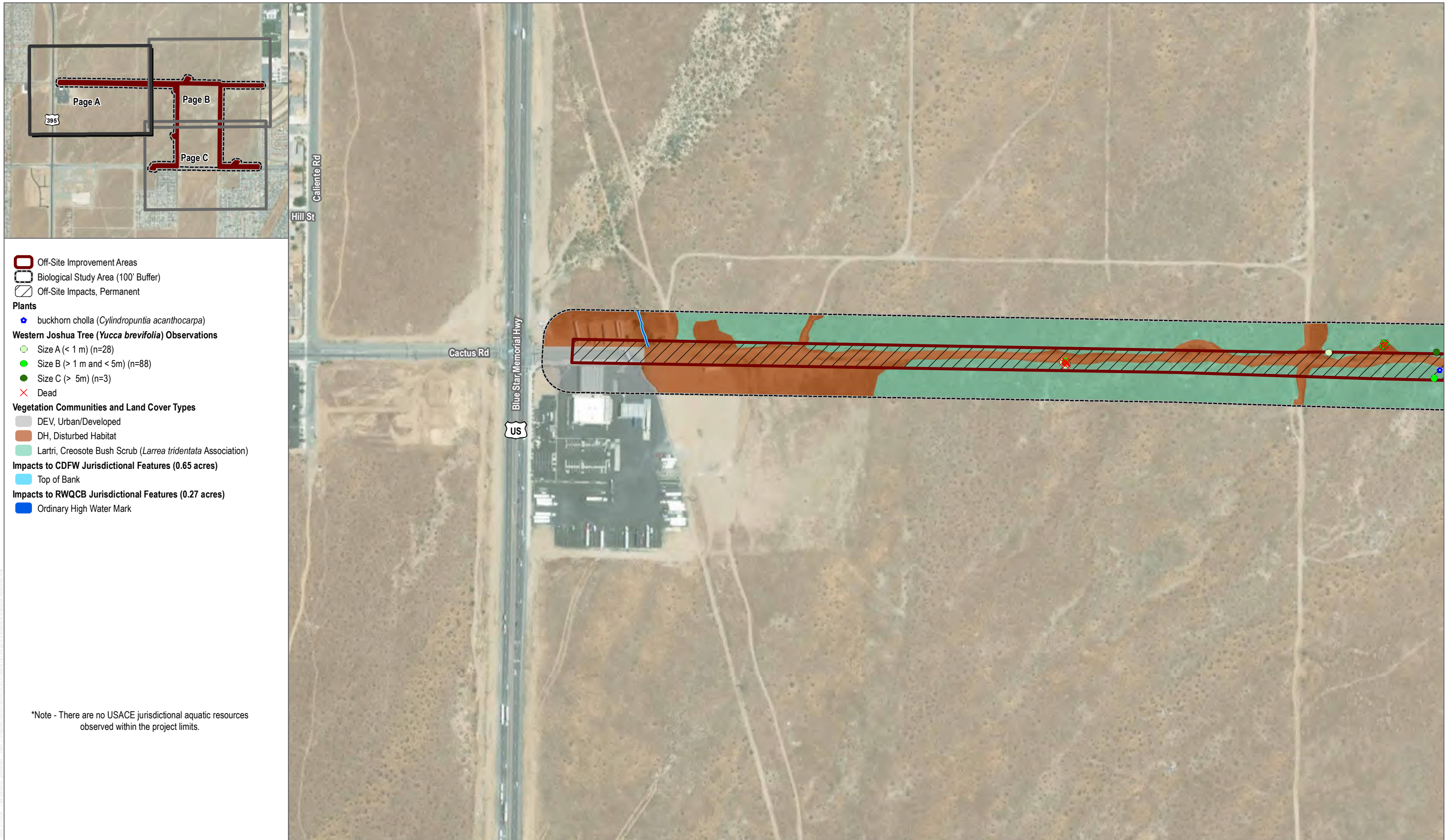
\*Note - There are no USACE jurisdictional aquatic resources observed within the project limits.

SOURCE: Maxar 2020; Open Street Map 2023



**FIGURE 7C**  
**Aquatic Resources**  
 Mojave Industrial Park Project

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- Off-Site Improvement Areas
- Biological Study Area (100' Buffer)
- Off-Site Impacts, Permanent
- Plants**
- buckhorn cholla (*Cylindropuntia acanthocarpa*)
- Western Joshua Tree (*Yucca brevifolia*) Observations**
- Size A (< 1 m) (n=28)
- Size B (> 1 m and < 5m) (n=88)
- Size C (> 5m) (n=3)
- ✕ Dead
- Vegetation Communities and Land Cover Types**
- DEV, Urban/Developed
- DH, Disturbed Habitat
- Lartri, Creosote Bush Scrub (*Larrea tridentata* Association)
- Impacts to CDFW Jurisdictional Features (0.65 acres)**
- Top of Bank
- Impacts to RWQCB Jurisdictional Features (0.27 acres)**
- Ordinary High Water Mark

\*Note - There are no USACE jurisdictional aquatic resources observed within the project limits.

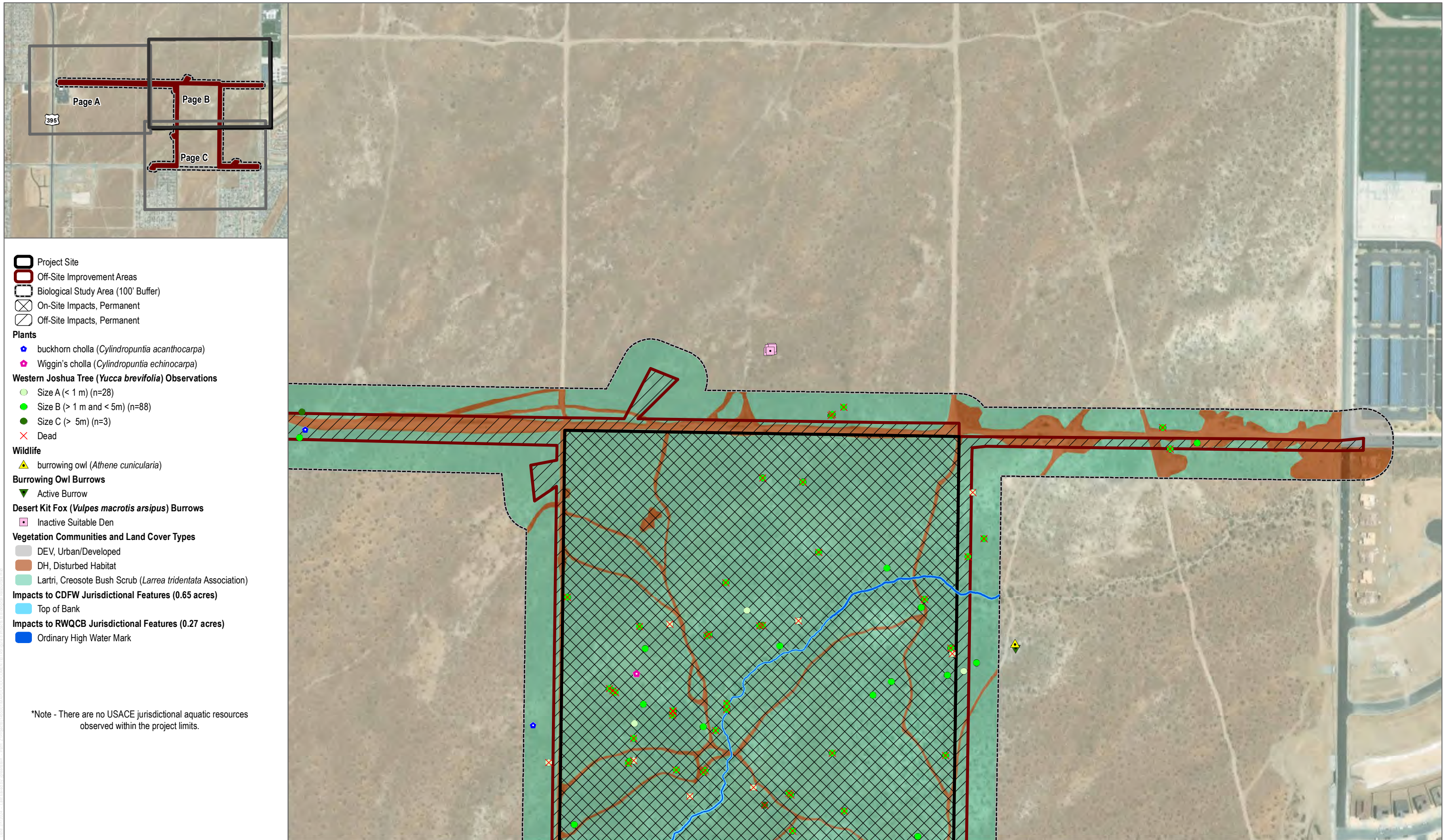
SOURCE: Maxar 2020; Open Street Map 2023



**FIGURE 8A**  
**Impacts to Biological Resources**  
 Mojave Industrial Park Project



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\*Note - There are no USACE jurisdictional aquatic resources observed within the project limits.

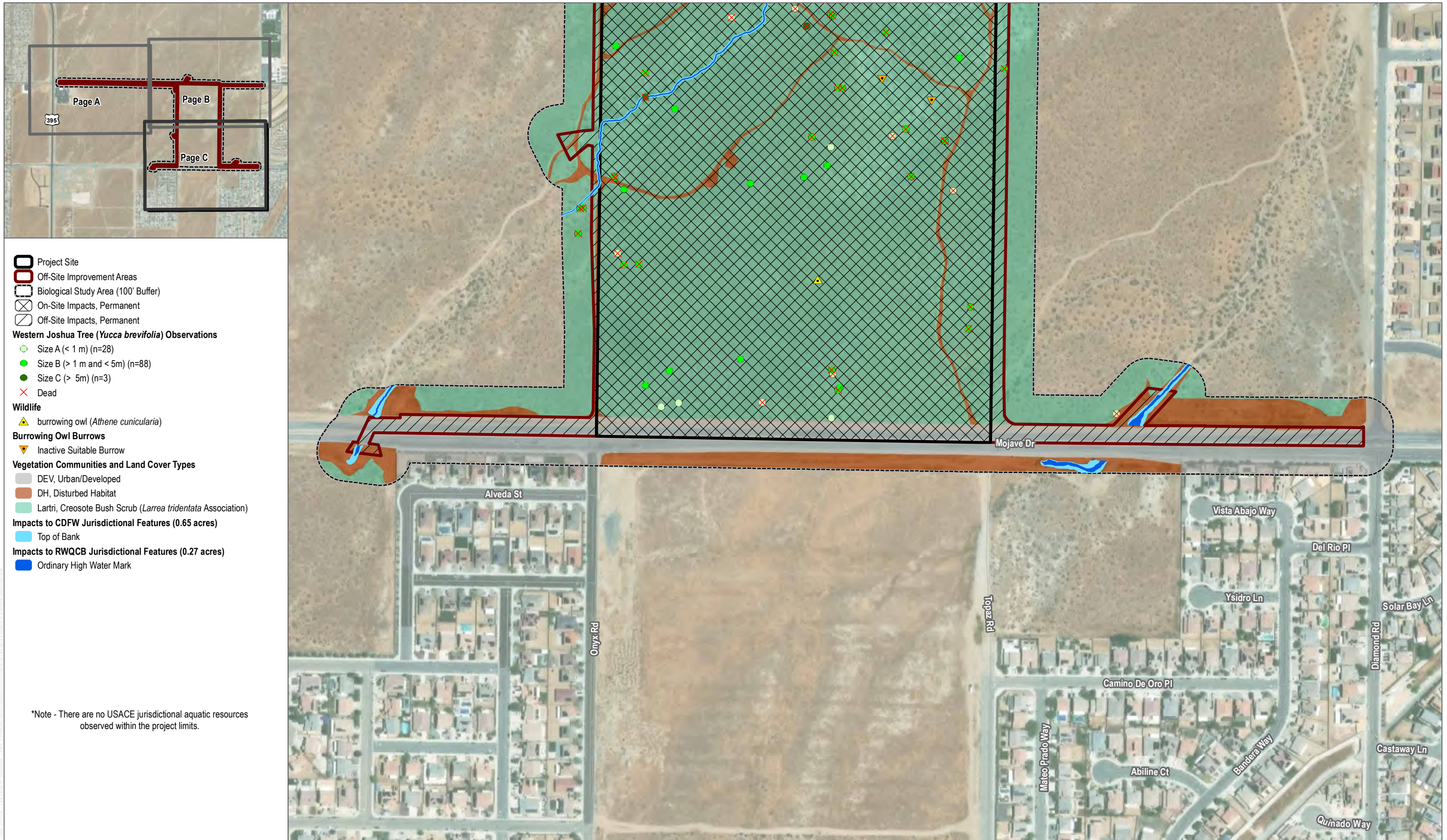
SOURCE: Maxar 2020; Open Street Map 2023



FIGURE 8B

Impacts to Biological Resources  
Mojave Industrial Park Project

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SOURCE: Maxar 2020; Open Street Map 2023

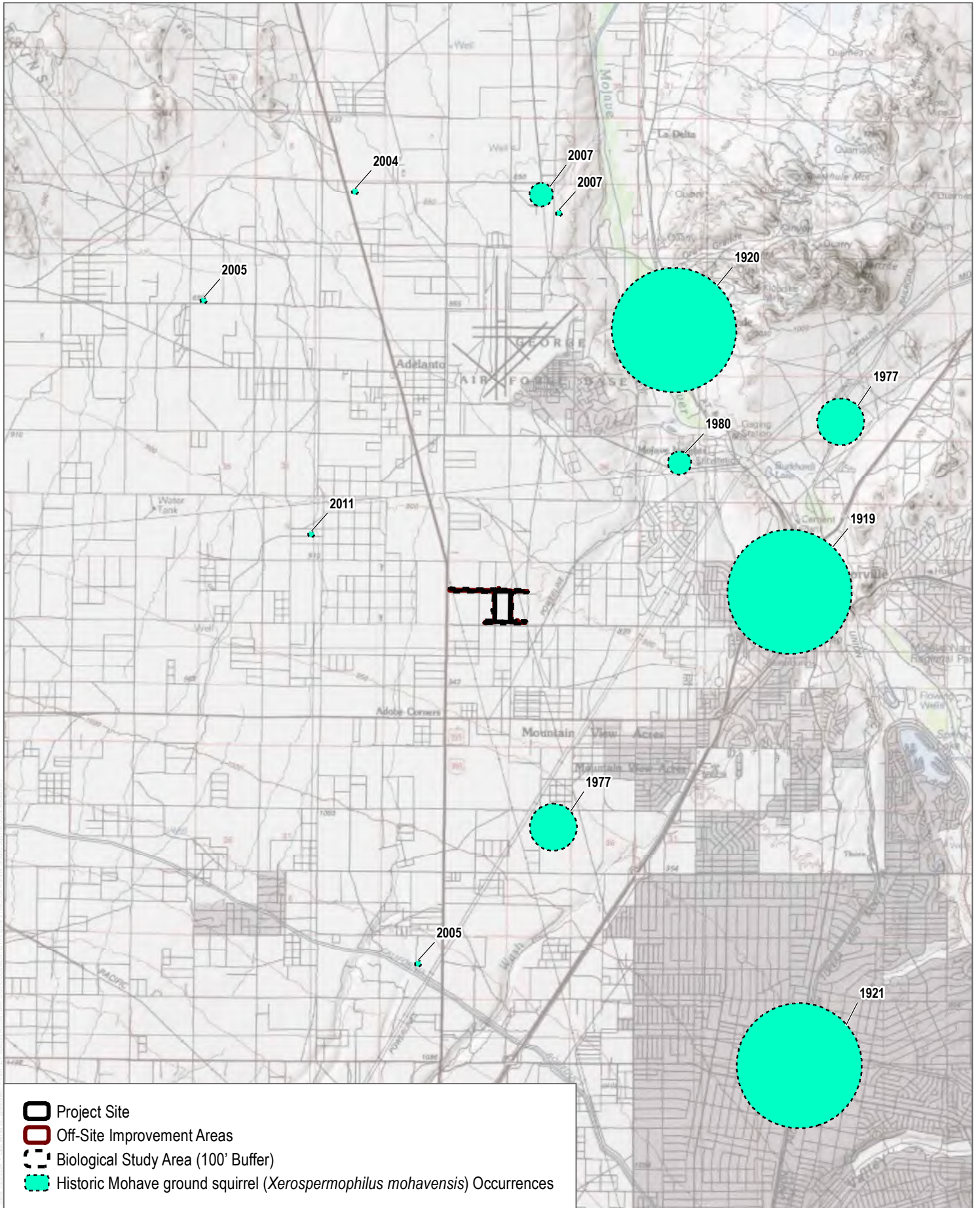


FIGURE 8C

Impacts to Biological Resources

Mojave Industrial Park Project

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SOURCE: USGS Topo Map Series; CDFW 2023

**FIGURE 9**  
**Historical Mohave Ground Squirrel Occurrences**  
 Mojave Industrial Park Project

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