

# Biological Resources Technical Report

## 8<sup>th</sup> Street East Industrial Project City of Palmdale, Los Angeles County, California

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## 1.0 **INTRODUCTION**

This Biological Resources Technical Report has been prepared to support California Environmental Quality Act (CEQA) documentation for the 8<sup>TH</sup> Street East Industrial Project (hereinafter referred to as “the Project”). This information has been reported in accordance with accepted scientific and technical standards that are consistent with the requirements of the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW).

### 1.1 **PROJECT LOCATION**

The Proposed Project is located on approximately 18-acres in the southern portion of the Antelope Valley in the City of Palmdale. The Project site is situated east of Sierra Highway, west of 8<sup>th</sup> Street East, and approximately 800 feet south of East Avenue P (Exhibit 1). The Project site is located on the Palmdale U.S. Geologic Survey 7.5-minute quadrangle map (Exhibit 2).

### 1.2 **PROJECT DESCRIPTION**

The Project consists of the construction and operation of one 384,800 square foot light industrial warehouse building on an 18.1-acre property located along the west side of 8th Street. The Project is identified by the City of Palmdale as Site Plan Review (SPR 22-012) and referred to as the 8th Street East Industrial Project.

### 1.3 **REGULATORY SETTING**

#### 1.3.1 **Federal**

##### ***National Environmental Policy Act***

The National Environmental Policy Act (NEPA) establishes a broad national framework for protecting the environment. NEPA’s basic policy is to assure that all branches of government give proper consideration to the environment prior to undertaking any major federal action that significantly affects the environment (42 *United States Code* [USC] 4321-4347). NEPA established the U.S. Environmental Protection Agency (USEPA) with the following roles and functions: (1) to establish and enforce environmental protection standards consistent with national environmental goals; (2) to conduct research on the adverse effects of pollution and on methods and equipment for controlling it; the gathering of information on pollution; and the use of this information in strengthening environmental protection programs and recommending policy changes; (3) to assist, through grants, technical assistance, and other means, in arresting pollution of the environment; and (4) to assist the Council on Environmental Quality in developing and recommending to the President new policies for the protection of the environment.

##### ***Federal Endangered Species Act***

The Federal Endangered Species Act (FESA) protects plants and animals that the USFWS has listed as “Endangered” or “Threatened.” A federally listed species is protected from unauthorized “take,” which is defined in the FESA as acts to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct” (16 USC Sections 1532[19] and 1538[a]). In this definition, “harm” includes “any act which actually kills or injures fish or wildlife, and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife” (50 *Code of Federal Regulations* [CFR], Title 50, Section 17.3). Unless performed for scientific or conservation purposes with the permission of the USFWS, take of listed species is only permissible if the USFWS issues an Incidental Take Permit (ITP). When issuing an ITP, all federal agencies,



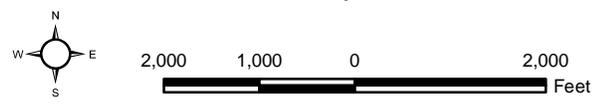
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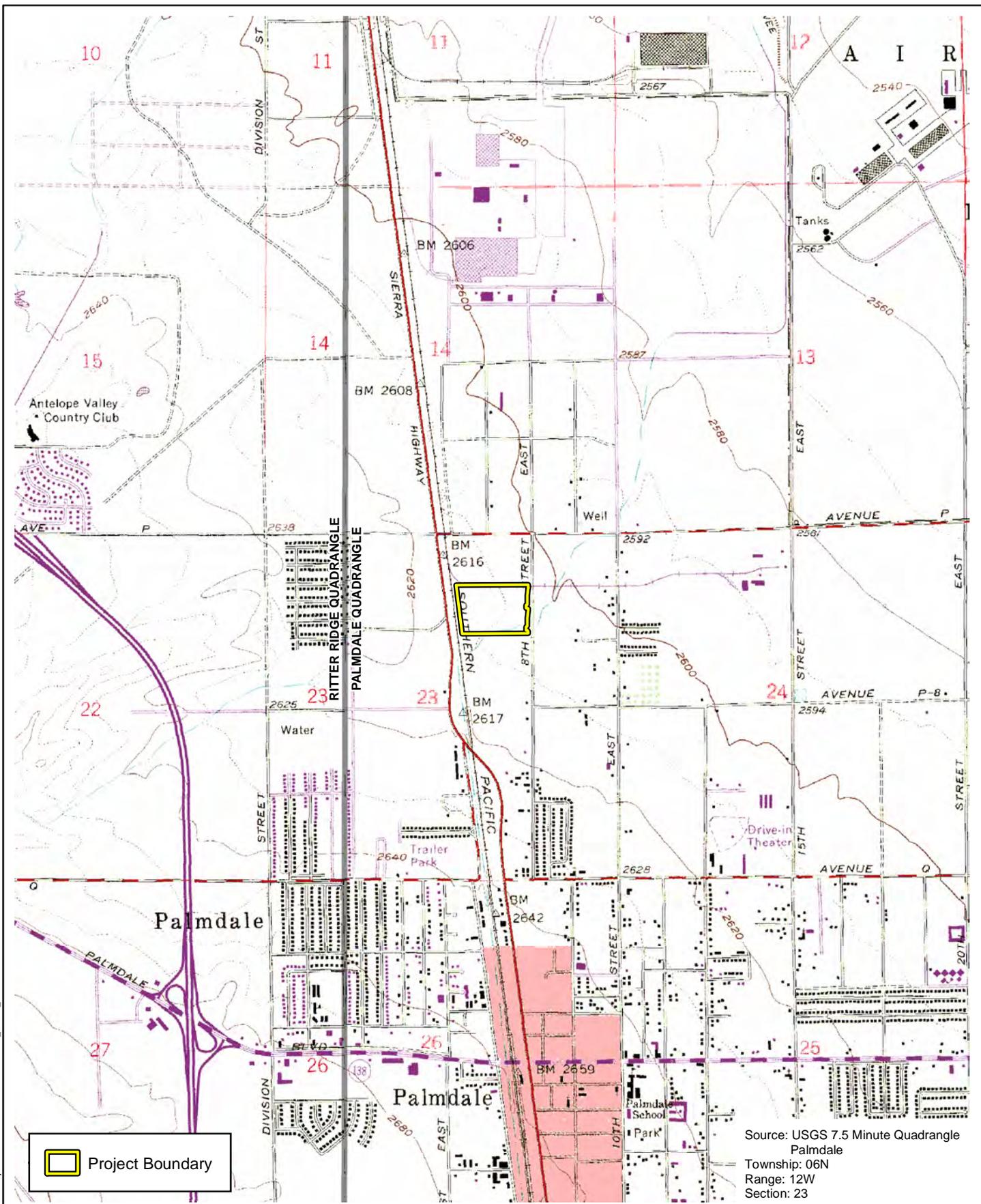
 Project Boundary

## Regional Location and Local Vicinity

## Exhibit 1

8th Street East Industrial Project



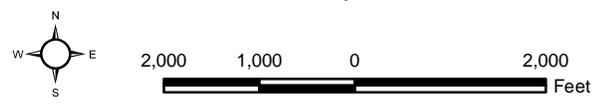


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Source: USGS 7.5 Minute Quadrangle  
 Palmdale  
 Township: 06N  
 Range: 12W  
 Section: 23

**U.S. Geological Survey 7.5-Minute Quadrangle**  
*8th Street East Industrial Project*

**Exhibit 2**



including the USFWS, must ensure that their activities are “not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species” (16 USC 1536[a]). Enforcement of the FESA is administered by the USFWS.

The FESA also provides for designation of Critical Habitat: specific areas within the geographical range occupied by a species where physical or biological features “essential to the conservation of the species” are found and “which may require special management considerations or protection” (16 USC 1538[5][A]). Critical Habitat may also include areas outside the current geographical area occupied by the species that are nonetheless essential for the conservation of the species.

### ***Fish and Wildlife Coordination Act***

The Fish and Wildlife Coordination Act requires consultation with the USFWS and the fish and wildlife agencies of States where the “waters of any stream or other body of water are proposed or authorized, permitted or licensed to be impounded, diverted . . . or otherwise controlled or modified” by any agency under a federal permit or license. Consultation is to be undertaken for the purpose of “preventing loss of and damage to wildlife resources.”

### ***Sections 404 and 401 of the Clean Water Act of 1972***

Section 404 of the Clean Water Act (CWA) (33 USC 1251 et seq.) regulates the discharge of dredged or fill material into waters of the United States, including wetlands. The U.S. Army Corps of Engineers (USACE) is the designated regulatory agency responsible for administering the 404 permit program and for making jurisdictional determinations. This permitting authority applies to all waters of the United States where the material has the effect of (1) replacing any portion of waters of the United States with dry land or (2) changing the bottom elevation of any portion of waters of the United States. These fill materials would include sand, rock, clay, construction debris, wood chips, and materials used to create any structure or infrastructure in waters of the United States. Dredge and fill activities are typically associated with development projects; water resource-related projects; infrastructure development; and wetland conversion to farming, forestry, or urban development.

Under Section 401 of the CWA, an activity requiring a USACE Section 404 permit must obtain a State Water Quality Certification (or waiver thereof) to ensure that the activity will not violate established federal or State water quality standards. The State Water Resources Control Board (SWRCB), in conjunction with the nine California Regional Water Quality Control Boards (RWQCBs), is responsible for administering the Section 401 water quality certification program.

Under Section 401 of the federal CWA, an activity involving discharge into a water body must obtain a federal permit and a State Water Quality Certification to ensure that the activity will not violate established water quality standards. The SWRCB’s and RWQCBs’ jurisdiction also extend to all “waters of the State” when no waters of the United States are present, including wetlands and non-wetland waters of the State (isolated and non-isolated). The USEPA is the federal regulatory agency responsible for implementing the CWA. However, it is the SWRCB, in conjunction with the nine RWQCBs, who essentially has been delegated the responsibility of administering the water quality certification (Section 401) program.

The Navigable Waters Protection Rule was published in the Federal Register on April 21, 2020, and became effective on June 22, 2020. The Navigable Water Protection Rule provides new regulatory text defining waters of the United States. One of the major changes to the definition of waters of the United States is that ephemeral waters are no longer subject to USACE regulation under the CWA.

On May 28, 2020, the SWRCB's issued *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to waters of the State* went into effect. Under these new regulations, the SWRCB and its nine RWQCBs will assert jurisdiction over all existing waters of the United States and all waters that would have been considered waters of the United States under the definition that existed prior to the 2020 Navigable Waters Protection Rule (i.e., ephemeral waters). Thus, the waters of the United States that would no longer be under USACE jurisdiction following the Navigable Waters Protection Rule would still be under the SWRCB's jurisdiction as waters of the State.

### ***Migratory Bird Treaty Act of 1918***

The Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703–711), as amended in 1972, makes it unlawful at any time, by any means or in any manner, unless permitted by regulations, to “pursue; hunt; take; capture; kill; attempt to take, capture, or kill; possess; offer for sale; sell; offer to barter; barter; offer to purchase; purchase; deliver for shipment; ship; export; import; cause to be shipped, exported or imported; deliver for transportation; transport or cause to be transported; carry or cause to be carried; or receive for shipment, transportation, carriage, or export, any migratory bird; any part, nest, or eggs of any such bird; or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof. . . .” (16 USC 703).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. This regulation seeks to protect migratory birds and active nests. The MBTA protects over 800 species, including geese, ducks, shorebirds, raptors, songbirds, and many relatively common species. Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (50 CFR 10.13), as updated by the 1983 American Ornithological Society Checklist and published supplements by the USFWS.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protect all species and subspecies of these families.

### ***Bald and Golden Eagle Protection Act***

The Bald and Golden Eagle Protection Act (16 USC 668) provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds. The 1972 amendments increased penalties for violating provisions of the Act and strengthened other enforcement measures. A 1978 amendment authorizes the Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations.

A 1994 Memorandum from President William Clinton to the heads of Executive Agencies and Departments establishes the policy concerning collection and distribution of eagle feathers for Native American religious purposes.

## **1.3.2 State**

### ***California Environmental Quality Act***

CEQA (13 *Public Resources Code* Sections 21000 et seq.) is a statute that requires State and local agencies to identify the significant environmental impacts of their actions and to avoid or

mitigate those impacts, if feasible. The CEQA Guidelines (14 *California Code of Regulations* Chapter 3) are the regulations that explain and interpret the law for both public agencies and private development required to administer CEQA.

With regards to plants and animals, Section 15380 of the CEQA Guidelines independently defines “Endangered” and “Rare” species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, Endangered species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while Rare species are defined as those that (1) have such low numbers that they could become Endangered if their environment worsens or (2) are likely to become endangered within the foreseeable future (i.e., “threatened” as used in the FESA). In addition, a Lead Agency can consider a non-listed species (e.g., species with a California Rare Plant Rank [CRPR], California Species of Special Concern, or species of Local Concern) to be treated as if it were Endangered, Rare, or Threatened for the purposes of CEQA if the species can be shown to meet the criteria in the definition of “Rare” or “Endangered” in the project region.

The CEQA Guidelines designates certain “trustee agencies” that have jurisdiction by law over natural resources affected by a project which are held in trust for the people of California. The CDFW is the trustee responsible for conservation, protection, and management of wildlife, native plants, and habitat necessary to maintain biologically sustainable populations. Trustee agencies are generally required to be notified of CEQA documents relevant to their jurisdiction, whether or not these agencies have actual permitting authority or approval power over aspects of the underlying project. The CDFW shall provide the requisite biological expertise to review and comment upon environmental documents and impacts arising from project activities and shall make recommendations regarding those resources held in trust for the people of California (*California Fish and Game Code* §1802).

### **California Endangered Species Act**

The State of California implements the CESA which is enforced by the CDFW. While the provisions of the CESA are similar to the FESA, CDFW maintains a list of California Threatened and Endangered species, independent of the FESA Threatened and Endangered species list. It also lists species that are considered Rare and Candidates for listing, which also receive protection. The California list of Endangered and Threatened species is contained in Title 14, Sections 670.2 (plants) and 670.5 (animals) of the *California Code of Regulations*.

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

If it is determined that the take would not jeopardize the continued existence of the species, an ITP can be issued by CDFW per Section 2081 of the *California Code of Regulations*. If a State-listed species is also federally listed, and the USFWS has issued an ITP that satisfies CDFW’s requirements, CDFW may issue a consistency finding in accordance with Section 2080.1 of the *California Fish and Game Code*.

### **California Desert Native Plants Act**

The California Desert Native Plants Act, codified in Sections 80001–80201 of the *California Food and Agricultural Code*, was enacted to protect California desert native plants from unlawful harvesting on both public and privately owned lands. This act is applicable within Imperial, Inyo,

Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego counties. Within these counties, the act prohibits the harvest, transport, sale, or possession of specific native desert plants without a valid permit or wood receipt and with 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.

The following native plants, or any parts thereof, may not be harvested except for scientific or educational purposes under a permit issued by the commissioner of the county in which the native plants are growing:

- All species of Burseraceae family (elephant tree);
- *Carnegiea gigantea* (saguaro cactus);
- *Ferocactus acanthodes* (barrel cactus)<sup>1</sup>;
- *Castela emoryi* (crucifixion thorn);
- *Dudleya saxosa* (Panamint dudleya);
- *Pinus longaeva* (bristlecone pine); and
- *Washingtonia filifera* (fan palm).

The following native plants, or any part thereof, may not be harvested except under a permit issued by the commissioner or the sheriff of the county in which the native plants are growing:

- All species of the family Agavaceae (century plants, nolinias, yuccas);
- 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;
- All species of the family Fouquieriaceae (ocotillo, candlewood);
- All species of the genus *Prosopis* (mesquites);
- All species of the genus *Cercidium* (palos verdes);
- *Acacia greggii* (catclaw);
- *Atriplex hymenelytra* (desert-holly);
- *Dalea spinosa* (smoke tree); and
- *Olneya tesota* (desert ironwood), including both dead and live desert ironwood.

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

The CDFW administers the *California Fish and Game Code*. Particular sections of the Code are applicable to natural resource management.

### **Native Plant Protection**

Sections 1900–1913 of the *California Fish and Game Code* were developed to preserve, protect, and enhance Endangered and Rare plants in the State of California. The act requires all State agencies to use their authority to carry out programs to conserve Endangered and Rare native

<sup>1</sup> *Ferocactus acanthodes* is not currently recognized by the Jepson Flora Project (2022). It is assumed to mean either of the two recognized species of *Ferocactus* in California, the California barrel cactus (*Ferocactus cylindraceus*), or the San Diego barrel cactus (*Ferocactus viridescens*).

plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use that would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

### Unlawful Take or Destruction of Nests or Eggs

These sections duplicate federal protection under the MBTA. Section 3503 of the *California Fish and Game Code* makes it unlawful to take, possess, or destroy any bird's nest or any bird's eggs. Further, any birds in the orders *Falconiformes* or *Strigiformes* (birds of prey, such as hawks, eagles, and owls) and their nests and eggs are protected under Section 3503.5 of the *California Fish and Game Code*. Section 3513 of the *California Fish and Game Code* prohibits the take and possession of any migratory nongame bird, as designated in the MBTA.

### California Fully Protected Species

The State of California created the "Fully Protected" classification in an effort to identify and provide additional protection to those animals that are rare or that face possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under the State and/or federal Endangered Species Acts; however, some have not been formally listed.

Various sections of the *California Fish and Game Code* provide lists of Fully Protected reptile and amphibian (§ 5050), bird (§ 3511), and mammal (§ 4700) species that may not be taken or possessed at any time, except as provided in Sections 2081.7, 2081.9, or 2835. The CDFW is unable to authorize the issuance of permits or licenses to take these species, except for necessary scientific research.

### Fur-Bearing Mammals

Section 460 of the *California Fish and Game Code* prohibits the taking of the following fur-bearing mammals: fisher (*Martes pennanti*), American marten [marten] (*Martes americana*), North American river otter [river otter] (*Lontra canadensis*), desert kit fox (*Vulpes macrotis arsipus*), and red fox (*Vulpes vulpes*).

### Natural Communities Conservation Planning Act

The Natural Community Conservation Planning Act, codified in Sections 2800–2835 of the *California Fish and Game Code* and signed into law on October 1991, authorizes the preparation of Natural Community Conservation Plans (NCCPs). The Act is a State of California effort to protect critical vegetative communities and their dependent wildlife species. The purpose of an NCCP is to sustain and restore those species and their habitat identified by the CDFW that are necessary to maintain the continued viability of those biological communities impacted by human changes to the landscape. The NCCP process provides an alternative to protecting species on a "single species basis" as in the federal and State Endangered Species Acts. Under the Act, the CDFW is responsible for creating process planning and conservation guidelines for NCCP programs. Local governments and landowners may then prepare the NCCPs so that they comply with the CESA.

### California Fish and Game Code (Sections 1600 through 1616)

*California Fish and Game Code* Sections 1600 et seq. establish a process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife

resources or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

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

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

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

### ***California Porter-Cologne Water Quality Control Act***

Pursuant to the California Porter-Cologne Water Quality Control Act, the SWRCB and the nine RWQCBs may require permits (known as "Waste Discharge Requirements" or WDRs) for the fill or alteration of the waters of the State. The term "waters of the State" is defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (*California Water Code*, Section 13050[e]). The SWRCB and RWQCB have interpreted their authority to require WDRs to extend to any proposal to fill or alter waters of the State, even if those same waters are not under USACE jurisdiction. Pursuant to this authority, the State and Regional Boards may require the submission of a "report of waste discharge" under Section 13260, which is treated as an application for WDRs.

The Porter-Cologne Water Quality Control Act charges the SWRCB and the nine RWQCBs statewide with protecting water quality throughout California. Typically, the SWRCB and RWQCB act in concert with the USACE under Section 401 of the CWA in relation to permitting fill of federally jurisdictional waters. SWRCB and the RWQCBs may require permits (i.e., WDRs) for the fill or alteration of the waters of the State.

### **1.3.3 Regional**

#### ***West Mojave Plan***

The West Mojave Plan is an amendment to the California Desert Conservation Area (CDCA) Plan that represents a collaboration of resource agencies, local jurisdictions, and others with a stake in the future of the western Mojave Desert. The Bureau of Land Management (BLM) is the federal Lead Agency, and the state Lead Agencies are the County of San Bernardino and the City of Barstow. The West Mojave Plan includes the West Mojave Desert area encompassing 9.3 million acres in Inyo, Kern, Los Angeles, and San Bernardino Counties: 3.3 million acres of public lands

administered by the BLM, 3.0 million acres of private lands, 102,000 acres administered by the State of California, and the balance of military lands administered by the Department of Defense. A Final Environmental Impact Report and Statement for the West Mojave Plan was prepared in 2005. While the USFWS issued a Biological Opinion for the federal portion of the plan in 2006, the State portion of the plan has not been permitted. Until the State portion of the plan is passed, it cannot be used by State or private entities.

The West Mojave Plan establishes a regional biological strategy to conserve plant and animal species and their habitats and prevent future listing and provides for an efficient, equitable, and cost-effective process for complying with Threatened and Endangered species law. The West Mojave Plan addresses desert tortoise (*Gopherus agassizii*), Mohave ground squirrel (*Xerospermophilus mohavensis*), and over 100 species of plants and animals; designates Areas of Critical Environmental Concern and other special management areas specifically designed to promote species conservation; designates routes of travel on public lands; and establishes other management prescriptions to guide grazing, mineral exploration and development, recreation, and other public land uses.

#### **1.3.4 Local**

##### ***City of Palmdale General Plan***

The City will require biological assessments and reports for projects in known or suspected natural habitat areas prior to project approval. These reports will be used to establish significant natural habitat areas and ecologically sensitive zones in order to prevent disturbance and degradation of these areas. Recommended mitigation measures as identified in the reports will be required to be implemented as development occurs (City of Palmdale 2022a). Stated goals and policies that relate to biological resources include the following:

- Goal CON-1: Protect Significant Ecological Areas in and around the City, including, but not limited to, sensitive flora and fauna habitat areas.
- Policy CON-1.2: Joshua and Juniper trees. Continue enforcing the City's Native Vegetation Ordinance to protect western Joshua trees and Juniper trees.

##### ***Palmdale Municipal Code***

Palmdale Municipal Code Ordinance No. 952, Chapter 14.04, Native Desert Vegetation Preservation, establishes requirements for removal of desert vegetation in the City. This ordinance is designed to protect western Joshua trees (*Yucca brevifolia*) and California Juniper trees (*Juglans californica*) within the City. The Ordinance was originally adopted in 1992 and was amended by Emergency Ordinance No. 1556 in 2020 in response to the California Fish and Game Commission's vote to list the western Joshua tree as a candidate species under the CESA (Fish & G. Code, § 2050 et seq.).

Per the Native Desert Vegetation Ordinance, western Joshua trees (dead trees or dead limbs) and California Junipers trees shall not be removed from any parcel of land unless a permit has been obtained from the City. Furthermore, any development proposal on a parcel of land containing native desert vegetation requires a desert vegetation preservation plan prepared in compliance with the Palmdale Municipal Code. The ordinance also specifies types of projects that will be required to obtain an Incidental Take Permit (2081) from the California Department of Fish and Wildlife. (Ord. 1556 § 1, 2020; Ord. 952 § 2, 1992)(City of Palmdale 2022a).

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### **County of Los Angeles General Plan**

The County of Los Angeles General Plan Natural Environment element provides the following policies and specific actions related to biological resources. Although the proposed Project would not be subject to the County's General Plan policies, the following policies from the County of Los Angeles General Plan Natural Environment element pertain to biological resources in unincorporated parts of the Planning Area (County of Los Angeles 2015):

- Policy C/NR 3.1: Conserve and enhance the ecological function of diverse natural habitats and biological resources.
- Policy C/NR 3.3: Restore upland communities and significant riparian resources, such as degraded streams, rivers, and wetlands to maintain ecological function—acknowledging the importance of incrementally restoring ecosystem values when complete restoration is not feasible.
- Policy C/NR 3.6: Assist state and federal agencies and other agencies, as appropriate, with the preservation of special status species and their associated habitat and wildlife movement corridors through the administration of the SEAs and other programs.
- Policy C/NR 3.7: Participate in inter-jurisdictional collaborative strategies that protect biological resources.

## 2.0 **METHODS**

This section summarizes survey methods employed by Psomas Biologists when present on-site conducting various biological surveys during the periods of December 2021 to July 2022. The Study Area discussed in this report includes the Project area plus a 50-foot buffer. The limits of survey areas for each of the focused surveys and the jurisdictional delineation are discussed below.

### 2.1 **LITERATURE REVIEW**

Prior to the start of surveys, Psomas conducted a literature search to identify special status plants, wildlife, and habitats reported from the vicinity of the study area; the searches were updated as needed. The study area region is generally defined as the U.S. Geological Survey's (USGS') Palmdale, Littlerock, Alpine Butte, Lancaster East, Lancaster West, and Ritter Ridge 7.5-minute quadrangles. The following sources of information were consulted:

- The CDFW's California Natural Diversity Database (CNDDDB) (CDFW 2022a)
- The California Native Plant Society's (CNPS') Inventory of Rare and Endangered Plants (CNPS 2022)
- Calflora (2022)
- The CDFW's *Natural Communities List* (CDFW 2022c), *Special Animals List* (CDFW 2022d), and *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2022b)
- California Desert Native Plant Protection Act list of regulated plant species
- Palmdale 2045 General Plan Update Draft Environmental Impact Report (City of Palmdale 2022a)
- Palmdale Municipal Code (City of Palmdale 2022b)
- California Department of Food and Agriculture noxious weed lists (CDFA 2016)
- West Mojave Plan (BLM 2005; BLM 2012)

### 2.2 **VEGETATION MAPPING AND GENERAL SURVEYS**

Vegetation on the Project site was mapped, and general plant and wildlife surveys were conducted by Psomas Biologists Sarah Thomas and Jack Underwood concurrent with a burrowing owl burrow survey (described in Section 2.3.1 below) on December 10, 2021. The purpose of the surveys was to document existing biological resources in the study area and to evaluate its potential to support special status species. Vegetation was mapped in the field on an aerial photograph at a scale of 1 inch equals 200 feet (1" = 200'). Vegetation classification follows that of *A Manual of California Vegetation (Second Edition)* (Sawyer et al. 2009). This provides the most current naming scheme and is the classification currently used by the CDFW. Representative photographs of the study area are included in Appendix A.

Plant and wildlife species observed during the surveys were recorded in field notes and are listed in Appendix B. Plant species were identified in the field or collected for later identification. Plants were identified using taxonomic keys, descriptions, and illustrations in Baldwin et al. (2012), Hickman (1993), and Munz (1974). Plants were identified to the taxonomic level necessary to determine whether or not they are a special status species. Nomenclature of plant taxa conform to the *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2022b) for special status species, and the Jepson eFlora (Jepson Flora Project 2022) for all other taxa; ornamental species

not listed in the Jepson eFlora are named based on the *Sunset Western Garden Book* (Brenzel 2007).

Active searches for reptiles and amphibians included lifting, overturning, and carefully replacing objects such as rocks, boards, and debris. Birds were identified by visual and auditory recognition. Mammals were identified by visual recognition or evidence of diagnostic sign including scat, footprints, scratch-outs, dust bowls, burrows, and trails. Nomenclature of wildlife taxa conform to the *Special Animals List* (CDFW 2022d) for special status species; nomenclature for non-special status wildlife generally follows Crother (2012) for amphibians and reptiles, AOS (2021) for birds, and the Smithsonian National Museum of Natural History (2011) for mammals.

## 2.3 FOCUSED SURVEYS

### 2.3.1 Special Status Plants/Native Desert Plants

Botanical surveys were floristic in nature and consistent with the protocols created by the CDFW (CDFW 2018). In addition, the surveys were intended to document the plants regulated by the City of Palmdale and the California Desert Native Plants Act and Native Desert Vegetation Preservation Ordinance (Sections 14.04.010-14.04.120). Prior to the field surveys, a literature search was conducted to identify special status plant species reported from the vicinity of the proposed Project site. Sources reviewed include the USGS for Palmdale, Littlerock, Alpine Butte, Lancaster East, Lancaster West, and Ritter Ridge 7.5-minute quadrangles in the CNPS' Locational Inventory of Rare and Endangered Vascular Plants of California (CNPS 2022) and the CDFW's (CNDDB (CDFW 2022a).

According to the National Weather Service, Palmdale received 3.88 inches of precipitation for Water Year 2022 to date (i.e., October 1, 2021, through August 31, 2022), which is about 67 percent of the normal average (National Weather Service 2022). Where available, reference populations were monitored for annual and difficult-to-detect target species to ensure that the scheduled surveys were comprehensive. This is especially relevant during periods of unusual rainfall patterns or below-average rainfall. If conditions at a nearby reference population are suitable for germination and growth, then it can be inferred that conditions would also be suitable in the survey area. Reference populations were not monitored for species with a California Rare Plant Rank (CRPR) of 4; perennials (e.g., *Atriplex* species) which would be identifiable throughout the year; or for species with no extant, publicly accessible reference population in the Project region.

Psomas Biologists Sarah Thomas and Jack Underwood conducted special status plant surveys on April 14; and May 12, 2022. The surveys comprised 4 total person-hours. The potentially suitable habitats for special status plants within the survey area were systematically surveyed to the extent possible during the site visits. A 50-foot buffer from the Project boundary was surveyed by walking meandering transects depending on shrub cover and potentially suitable habitat (Appendix C; Exhibit 3). All plant species observed were recorded in field notes. Plant species were identified in the field or collected for subsequent identification using keys in Hickman (1993) and Munz (1974). Taxonomy follows Hickman (1993) and/or current scientific data (e.g., scientific journals) for scientific and common names.

Detailed methods and results of the special status plant survey are included as Appendix C.

### 2.3.2 Blainville's Horned Lizard

There are currently no agency guidelines or protocols for conducting Blainville's horned lizard surveys. Therefore, Psomas Biologists used approved protocols for similar special status reptile species as guidelines and determined survey methodology based on previous experience and life



history of the species. The presence/absence surveys for the Blainville's horned lizard were conducted by qualified Biologists between June and July when the species are most likely to be observed. To achieve 100 percent visual coverage, appropriate habitat within the Project site was surveyed three times on separate days by using meandering transects. The focused surveys were conducted on June 13, and July 6 and 27, 2022. Surveys were conducted in early morning and afternoon hours when weather conditions were acceptable for reptile activity (e.g., temperatures under 90 degrees Fahrenheit (°F), clear skies, and sustained winds below 10 miles per hour). Table 1 below summarizes weather conditions during each day of the surveys.

**TABLE 1  
BLAINVILLE'S HORNED LIZARD SURVEY WEATHER CONDITIONS**

Survey Number	Date	Surveyor(s)	Survey Time	Weather Conditions		
				Temperature (°F) (Start/End)	Wind (mph) (Start/End)	Cloud Cover (%) (Start/End)
Survey 1	6/13/2022	Thomas	1150–1240	76/80	7/9	15/15
Survey 2	7/6/2022	Thomas	1205–1255	78/80	8/9	25/25
Survey 3	7/17/2022	Thomas	0950–1040	79/84	8/6	10/10

\*F: degrees Fahrenheit; mph: miles per hour; %: percent

Detailed methods and results of the special status plant survey are included as Appendix D.

### 2.3.3 Burrowing Owl

Psomas Biologists Sarah Thomas and Jack Underwood performed a burrow survey concurrently with the initial reconnaissance-level wildlife survey on December 10, 2022. The burrow survey was conducted by walking the Project site in 10- to 20-meter (approximately 33 feet to 65 feet) belt transects (depending on shrub coverage) to achieve 100 percent visual coverage. Potentially suitable burrows were marked with Garmin Global Positional System (GPS) units. Any natural or man-made cavities large enough to allow a burrowing owl (*Athene cunicularia*) to enter were inspected for evidence of occupation. Evidence of occupation may include prey remains, cast pellets, white-wash, feathers, and observations of owls adjacent to burrows. The burrow survey was conducted at least five days after rain, which could have washed away potential sign. Areas containing potentially suitable habitat within 500 feet of the Project site were surveyed with binoculars.

Focused crepuscular surveys for burrowing owl were conducted for the Project site by Psomas in 2022 following the breeding season survey methods in the *Staff Report on Burrowing Owl Mitigation* (CDFG 2012). The CDFW guidelines specify specific time periods in which crepuscular (i.e., occurring near dawn and dusk) surveys should be conducted during the breeding season. The protocol specifies that a total of four surveys should be conducted in three time periods; each survey should be at least three weeks apart. The first survey should be conducted between February 15 and April 15 and three surveys should be conducted between April 15 and July 15, with at least one survey after June 15 (CDFG 2012).

Detailed survey information is included in Table 2 below. Crepuscular surveys were conducted by Psomas Biologists Sarah Thomas and Jack Underwood on February 15; May 2 and 30; June 20, 2022.

**TABLE 2  
SUMMARY OF BURROWING OWL SURVEYS**

Survey Number	Date	Time (Start/End)	Surveyor(s)	Weather Conditions		
				Temperature (°F) (Start/End)	Wind (mph) (Start/End)	Cloud Cover (%) (Start/End)
Habitat Assessment/Burrow Survey	12/10/2021	8:00 AM–12:00 PM	Thomas, Underwood	45/55	0–1/0–1	60/60
Crepuscular Survey 1	2/15/2022	6:05 AM–7:10 AM	Thomas, Underwood	50/58	5/5	Clear/Clear
Crepuscular Survey 2	5/2/2022	6:35 AM–7:30 AM	Thomas	66/73	5/6	Clear/10
Crepuscular Survey 3	5/30/2022	6:50 AM–8:15 AM	Thomas	65/70	0/1	50/30
Crepuscular Survey 4	6/20/2022	7:45 AM–8:40 AM	Thomas	66/74	0–1/0–1	20/Clear

°F: Fahrenheit; mph: miles per hour; %: percent

Crepuscular surveys were conducted from either one hour before sunrise to two hours after, or from two hours before sunset to one hour after. The surveys were conducted when light conditions were sufficient to observe burrowing owl flights. All potentially suitable habitat (e.g., areas where potentially suitable burrows were located) within the Project site and adjacent buffer was surveyed by walking in meandering transects to allow 100 percent visual coverage of the survey area. The transects were spaced no more than approximately 65 feet apart in order to ensure 100 percent visual coverage of the ground surface. At the start of each transect and, at least, every 300 feet, the survey area was scanned for burrowing owls or burrowing owl sign (e.g., pellets, prey remains, whitewash, or decoration) using binoculars. Periodically, binoculars were used to inspect holes; crevices; and potential perches such as rocks, fence posts, and other elevated structures for the presence of owls while listening for owl calls. Any active burrows and/or burrowing owl sightings were mapped on an aerial photograph and recorded with GPS units.

Detailed methods and results of the burrowing owl survey are included as Appendix E.

## 2.4 JURISDICTIONAL DELINEATION

Jurisdictional water resources considered for this report include waters of the United States under the regulatory authority of the USACE; waters of the State under the regulatory authority of the RWQCB; and the bed, bank, and channel of all lakes, rivers, and/or streams (and associated riparian vegetation), under the regulatory authority of the CDFW.

Prior to conducting the delineation and during the course of report preparation, Psomas reviewed the following documents to identify areas that may fall under agency jurisdiction: the USGS' Palmdale 7.5-minute topographic quadrangle map; color aerial photography provided by Google Earth; soil data provided by the U.S. Department of Agriculture's Natural Resources Conservation Service (USDA NRCS 2022a); the National Hydric Soils List (USDA NRCS 2022b); the National Wetlands Inventory's Wetland Mapper (USFWS 2022); and the Water Quality Control Plan for the Lahontan Region (Lahontan RWQCB 1995).

Non-wetland waters of the United States are delineated based on the limits of the ordinary high water mark (OHWM), which can be determined by a number of factors, including the presence of a clear, natural line impressed on the bank; shelving; changes in the character of the soil;

destruction of terrestrial vegetation; and the presence of litter and debris. The OHWM limits (i.e., active floodplain) occurring in the jurisdictional delineation survey area were further verified using methods contained in *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual* (Lichvar and McColley 2008) and the *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Curtis and Lichvar 2010).

Technical methods and guidelines to determine the presence and extent of wetlands is described by the USACE in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008). The presence of wetlands is determined by a three-parameter approach requiring evidence of (1) wetland hydrology, (2) hydrophytic vegetation, and (3) hydric soils. Wetland hydrology is determined by the presence of indicators such as observed surface water; presence of past surface flow; and the depth to saturated soils or free water in soil test pits.

Procedures for determining whether the hydrophytic vegetation criterion is met is based three potential indicators as described in *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008). These include the “Dominance Test”, using the “50/20 Rule”; the “Prevalence Index”; or the presence of “Morphological Adaptation” of vegetation that is present. These indicators are based on determining the presence and relative abundance of plant species that are categorized as Obligate Wetland (typically associated with wetland conditions); Facultative Wetland (predominantly present in wetland conditions); Facultative (equally likely to occur in wetland or non-wetland areas); Facultative Upland (predominantly found in non-wetland areas); or Upland (typically found in mesic to xeric non-wetland habitats). Plant species are categorized in the National Wetland Plant List, created by the USEPA, the USFWS, and the U.S. Department of Agriculture.

Soils are determined to be hydric when they form under conditions of saturation, flooding, or ponding that occurs long enough during the growing season to develop anaerobic conditions (or conditions of limited oxygen) at or near the soil surface and that favor the establishment of hydrophytic vegetation (USDA NRCS 2022c). The presence of hydric soil conditions is determined where various indicators are observed by digging soil test pits to a depth of approximately 20 inches. Common hydric soil indicators include presence of redoximorphic features (i.e., areas where iron is reduced under anaerobic conditions and oxidized following a return to aerobic conditions); buried organic matter; organic streaking; reduced soil conditions; or sulfuric odor.

It should be noted that the RWQCB shares USACE jurisdiction unless isolated conditions are present. Water resources lacking connectivity to a Traditional Navigable Water<sup>2</sup>, whether by definition or through a significant nexus analysis, are considered isolated. If isolated waters are present, the RWQCB takes jurisdiction using the USACE’s definition of the OHWM and/or the three-parameter wetlands method pursuant to the 1987 Wetlands Manual.

Field surveys were conducted by Psomas Regulatory Specialist David Hughes and Biologist Jack Underwood on March 17, 2022. Jurisdictional features were delineated using a 1 inch equals 100 feet (1" = 100') scale aerial photograph. Jurisdictional drainage features were mapped as a line and the width of the agency jurisdiction was noted; other waterbodies (basins) were mapped as polygons.

Detailed methods and results of the jurisdictional delineation are included as Appendix F.

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<sup>2</sup> Traditional Navigable Waters are all waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

### **3.0 EXISTING BIOLOGICAL RESOURCES**

#### **3.1 PHYSICAL ENVIRONMENTAL SETTING**

##### **3.1.1 Regional Environment**

The Project is located in the California Desert Province within the Western Mojave subregion, specifically the City of Palmdale. The Mojave Desert is a large, wedge-shaped basin covering approximately 32 million acres in California, Nevada, Utah, and Arizona. The Great Basin is to the north; the Apache Highlands and Colorado Plateau are to the east; the Colorado Desert, San Gabriel Mountains, and San Bernardino Mountains are to the south; and the Sierra Nevada Mountains and Tehachapi Mountains are to the west.

The Project site is within an area referred to as “the high desert.” Elevations range from 282 feet below mean sea level (msl) in Death Valley to over 11,000 feet above msl in the Spring Mountains of Nevada and the Panamint Range in California. Common vegetation communities in the Mojave Desert include creosote bush scrub, shadscale scrub, alkali sink, and Joshua tree woodland (Schoenherr 1992).

The majority (approximately 85 percent) of land in the Mojave Desert is publicly owned, primarily by the State and federal governments (TNC 2010). The BLM is the largest land manager, covering approximately 46 percent of the region. Private lands and Native American tribal lands represent approximately 14.7 and 0.43 percent of the region, respectively (TNC 2010).

##### **3.1.2 Climate**

California’s deserts are a product of the rain-shadow effect, in which the prevailing winds encounter a barrier, such as a mountain range, that causes them to lose their moisture, thus creating a dry region on the leeward side of the barrier. Desert environments typically have an average precipitation of less than 10 inches; experience temperature extremes; are windy with increased evaporation rates; have a high light intensity; have nutrient-poor, alkaline soil; and have low rates of primary production<sup>3</sup> (Schoenherr 1992).

The Mojave Desert experiences precipitation primarily in the winter, with occasional summer thunderstorms. Annual precipitation is generally less than 10 inches. Snow is common at higher elevations. The average annual precipitation in the vicinity of the Project is 6.67 inches, with over half of this falling in the winter. Temperatures in this region average 80.6°F in the summer and 46.1°F in the winter (Arguez et al. 2010).<sup>4</sup>

##### **3.1.3 Local Environment**

Elevations range from approximately 2,610 feet above msl to approximately 2,620 feet above msl. The Project site is currently undeveloped but has had some previous disturbance and is directly adjacent (south of) a decommissioned portion of the Pacific Union Railroad. The site is surrounded by undeveloped lots with residential and commerce/business centers scattered throughout the area. Sierra Highway runs north-south directly adjacent (west of) the Project site.

Vegetation on the site is comprised mostly of disturbed rubber rabbitbrush scrub, with a small patch of developed/disturbed rubber rabbitbrush scrub in the eastern portion of the site and big sagebrush – rubber rabbitbrush scrub in the drainage that runs along the southern edge of the

<sup>3</sup> Primary production is the rate at which photosynthesis converts the sun’s energy to organic compounds.

<sup>4</sup> Seasons are climatological; winter is considered to be December, January, and February; and summer is considered to be June, July, and August.

site. Most of the site has been disturbed historically (e.g., evidence of heavy machine work such as scraping), and contains many trash piles from illegal dumping. Soil types in the survey area include Hesperia fine sandy loam, 0 to 2 percent slopes; and Rosamond loam. (USDA NRCS 2007) (Exhibit 4).

### 3.2 VEGETATION TYPES AND OTHER AREAS

The following vegetation types and other areas occur in the study area: big sagebrush – rubber rabbitbrush scrub, disturbed rubber rabbitbrush scrub, and developed/disturbed rubber rabbitbrush scrub. (Exhibits 5 and 7; Table 3).

**TABLE 3  
VEGETATION TYPES AND OTHER AREAS IN THE  
STUDY AREA**

Vegetation Types and Other Areas	Project Site (Acres)	Threat Ranking
big sagebrush – rubber rabbitbrush scrub	0.73	G5, S5
disturbed rubber rabbitbrush scrub	0.31	G5, S5
developed/disturbed rubber rabbitbrush scrub	16.98	–/G5, S5
<b>Total</b>	<b>18.02</b>	
G: Global; S: State.		
<b>Threat Ranking</b>		
5 Secure		
– No threat rank		

#### 3.2.1 Big Sagebrush – Rubber Rabbitbrush Scrub

Big sagebrush – rubber rabbitbrush scrub occurs along the banks of, and immediately adjacent to, the drainage in the southern portion of the Project boundary. The majority of the shrubs in this area are large stature big sagebrush (*Artemisia tridentata*) shrubs and rubber rabbitbrush (*Ericameria nauseosa*) shrubs. This area contains a large quantity of trash which likely flows down the drainage during rain events. Other species also occurring sparsely include alkali heliotrope (*Heliotropium curassavicum*) and four-wing saltbush (*Atriplex canescens*). It conforms to *Artemisia tridentata* – *Ericameria nauseosa* Shrubland Alliance in A Manual of California Vegetation (Sawyer et al. 2009). This Alliance is not considered a sensitive natural community by the CDFW (CDFW 2022c).

#### 3.2.1 Disturbed Rubber Rabbitbrush Scrub

Disturbed rubber rabbitbrush scrub occurs throughout the majority of the Project site and is characterized by small- and mid-statured rubber rabbitbrush shrubs scattered sparsely. Species diversity is low and most shrubs that occur are rubber rabbitbrush. Some other shrub species that occur are creosote bush (*Larrea tridentata*) and Nevada ephedra (*Ephedra nevadensis*), but these occur in low numbers. Ground cover species include valley lessingia (*Lessingia glandulifera*), turkey-mullein (*Croton setiger*), and alkali heliotrope. There is a fair amount of trash scattered throughout this vegetation type, including large areas where trash has been deliberately dumped. It conforms to *Ericameria nauseosa* Shrubland Alliance in A Manual of California Vegetation (Sawyer et al. 2009). This Alliance is not considered a sensitive natural community by the CDFW (CDFW 2022c).

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 Project Boundary

**Soil Types**

 HkA: Hesperia fine sandy loam, 0 to 2 percent slopes

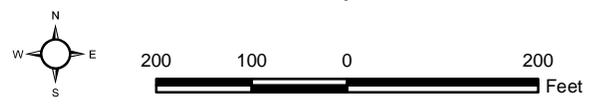
 Rp: Rosamond loam

Data Source: U.S. Department of Agriculture; Natural Resources Conservation Service  
Aerial Source: Esri, Maxar 2021

### Soils Map

### Exhibit 4

8th Street East Industrial Project



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Aerial Source: Esri, Maxar 2021

 Project Boundary

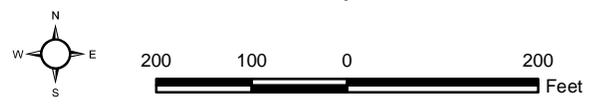
**Vegetation Types and Other Areas**

-  disturbed rubber rabbitbrush scrub
-  big sagebrush - rubber rabbitbrush scrub
-  developed/disturbed rubber rabbitbrush scrub

# Vegetation Types and Other Areas

# Exhibit 5

8th Street East Industrial Project



### 3.2.1 Developed/Disturbed Rubber Rabbitbrush Scrub

Developed/disturbed rubber rabbitbrush scrub is characterized by a cover of decomposed granite (DG) laid over compacted ground. Rubber rabbitbrush shrubs emerge out of the DG throughout this area in a patchy distribution. DG appears to have been placed and spread mechanically in this area. There is no equivalent vegetation community in A Manual of California Vegetation for developed areas. The closest type it conforms to is *Ericameria nauseosa* Shrubland Alliance in A Manual of California Vegetation (Sawyer et al. 2009). This Alliance is not considered a sensitive natural community by the CDFW (CDFW 2022c).

### 3.3 WILDLIFE POPULATIONS AND MOVEMENT PATTERNS

Vegetation in and adjacent to the study area provides potential habitat for a number of wildlife species. Common wildlife species observed or expected to occur in the study area are discussed below. Special Status wildlife are discussed in Section 3.4.5, Special Status Wildlife.

#### 3.3.1 Fish

Surface water is scarce in the Mojave Desert; most water is in underground aquifers (TNC 2010). Streams are ephemeral or intermittent and are fed by springs, snow melt, and rainfall. Drainage features observed in the study area consists of the following: Amargosa Creek, a dry desert wash; and shallow drainage complex that appears to be a paleo-channel that carried overflow water from Amargosa Creek during extreme storm events (Exhibit 6). Because there is no water on the Project site, except immediately following rain, drainage features would not provide suitable habitat for fish, and no fish species are expected to occur.

#### 3.3.2 Amphibians

Amphibians require moisture for at least a portion of their life cycle, and many require standing or flowing water for reproduction. Terrestrial species may or may not require standing water for reproduction; they survive in dry areas by aestivating (i.e., remaining beneath the soil in burrows or under logs and leaf litter and emerging only when temperatures are low and humidity is high). Many of these species' habitats are associated with water, and they emerge to breed once the rainy season begins. Soil moisture conditions can remain high throughout the year in some habitat types, depending on factors such as amount of vegetation cover, elevation, and slope/aspect.

Most desert amphibian species are restricted to areas of permanent water, desert washes, desert oases, or moist areas with riparian habitat. Amphibian species are not expected to occur in the study area due to the lack of permanent water, desert washes, desert oases, moist vegetation types, and landscaped areas.

#### 3.3.3 Reptiles

Reptiles are well-adapted to life in arid habitats. They have several physiological adaptations that allow them to conserve water. Reptiles can also become dormant during weather extremes, allowing them to survive prolonged droughts and paucity of food (Ruben and Hillenius 2005). Reptilian diversity and abundance typically vary with vegetation type and character.

Although desert reptile diversity is generally high, the Project area is largely development so only those species habituated to human disturbance would be expected. Five common reptile species were observed in the study area: Great Basin whiptail (*Aspidoscelis tigris tigris*) and common side-blotched lizard (*Uta stansburiana*). Other common reptiles that may occur include but are not limited to western zebra-tailed lizard (*Callisaurus draconoides*), red racer (*Coluber flagellum*), yellow-backed spiny lizard (*Sceloporus uniformis*), California kingsnake (*Lampropeltis*

*californiae*), gopher snake (*Pituophis catenifer*), and northern Mojave rattlesnake (*Crotalus scutulatus scutulatus*).

### 3.3.4 **Birds**

A variety of bird species are expected to be residents in the study area, using the habitats throughout the year. Other species are present only during certain seasons. Common bird species observed in the study area include Say's phoebe (*Sayornis saya*), common raven (*Corvus corax*), horned lark (*Eremophila alpestris*), cactus wren (*Campylorhynchus brunneicapillus*), northern mockingbird (*Mimus polyglottos*), Bell's sage sparrow (*Artemisiospiza belli canescens*), savannah sparrow (*Passerculus sandwichensis*), western meadowlark (*Sturnella neglecta*), yellow-rumped warbler (*Setophaga coronata*), and white-crowned sparrow (*Zonotrichia leucophry*). Bird species that may breed on or adjacent to the Project site include but are not limited to horned lark, cactus wren, northern mockingbird, and Bell's sage sparrow.

### 3.3.5 **Mammals**

Eight small mammals were observed in the study area, black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Otospermophilus beecheyi*), deer mouse (*Peromyscus maniculatus*), desert cottontail (*Sylvilagus audubonii*), desert pocket mouse (*Chaetodipus penicillatus*), kangaroo rat (*Dipodomys* sp.), southern grasshopper mouse (*Onychomys torridus*), and white-tailed antelope squirrel (*Ammospermophilus leucurus*). Other common small mammals that may occur in the study area include but are not limited to Merriam's kangaroo rat (*Dipodomys merriami*), desert woodrat (*Neotoma lepida*), and Botta's pocket gopher (*Thomomys bottae*). Medium to large-sized mammals, or their sign, observed include coyote (*Canis latrans*). Other medium to large-sized mammals that may occur include bobcat (*Lynx rufus*) and northern raccoon (*Procyon lotor*). Bat species that are either expected to occur or that may occur in the study area for foraging include canyon bat (*Parastrellus hesperus*), and western mastiff bat (*Eumops perotis californicus*). Canyon bat and pallid bat may also occur for roosting, while western mastiff bat would not be expected to roost on site due to the lack of suitable roosting habitat.

### 3.3.6 **Wildlife Movement**

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic information (MacArthur and Wilson 1967; Soule 1987; Harris and Gallagher 1989; Bennett 1990). Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fire or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move in their home ranges in search of food, water, mates, and other necessary resources (Noss 1983; Farhig and Merriam 1985; Simberloff and Cox 1987; Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas or individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (e.g., foraging for food or water; defending territories; or searching for mates, breeding areas, or cover). A number of terms such as "wildlife corridor," "travel route," "habitat linkage," and "wildlife crossing" have been used in various wildlife movement studies to refer to areas in which wildlife move from one area to

another. To clarify the meaning of these terms and to facilitate the discussion on wildlife movement in this analysis, these terms are defined as follows:

- **Travel route** – a landscape feature (such as a ridgeline, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and to provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another. It contains adequate food, water, and/or cover while moving between habitat areas; and it provides a relatively direct link between target habitat areas.
- **Wildlife corridor** – a piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bound by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and to facilitate their movement while in the corridor. Larger, landscape-level corridors (often referred to as “habitat linkages” or “landscape linkages”) can provide both transitory and resident habitat for a variety of species.
- **Wildlife crossing** – a small, narrow area, relatively short in length and generally constricted in nature that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are man-made and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These often represent “choke points” along a movement corridor, which may impede wildlife movement and increase the risk of predation.

It is important to note that in a large, open space area with few or no man-made or naturally occurring physical constraints to wildlife movement, wildlife corridors (as defined above) may not yet exist. Given an open space area that is both large enough to maintain viable populations of species and to provide a variety of travel routes (e.g., canyons, ridgelines, trails, riverbeds, and others), wildlife will use these “local” routes while searching for food, water, shelter, and mates and will not need to cross into other large, open space areas. Based on their size, location, vegetative composition, and availability of food, some of these movement areas (e.g., large drainages and canyons) are used for longer lengths of time and serve as source areas for food, water, and cover, particularly for small- and medium-sized animals. This is especially true if the travel route is within a larger open space area. However, once open space areas become constrained and/or fragmented as a result of urban development or construction of physical obstacles (such as roads and highways), the remaining landscape features or travel routes that connect the larger open space areas become corridors as long as they provide adequate space, cover, food, and water and do not contain obstacles or distractions (e.g., man-made noise, lighting) that would generally hinder wildlife movement.

In general, wildlife corridor discussions typically focus on larger, more mobile mammal species such as southern mule deer (*Odocoileus hemionus*), mountain lion (*Puma concolor*), and coyote. Discussing the needs of larger mammal species typically also captures the needs of mid-sized mammals such as foxes (*Vulpes* sp.), northern raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and American badger (*Taxidea taxus*). Most mammal species have relatively large home ranges through which they move to find adequate food, water, and breeding and wintering habitat. It is assumed that corridors that serve larger, more mobile mammal species also serve as corridors for many smaller, less mobile species, such as reptiles, amphibians, and rodents. Regional movement for these species facilitates gene flow and requires at least some local “stepping stone” movement of individuals between populations.

Discussions of wildlife corridors generally focus less on bird species because they are more mobile and can fly over inhospitable habitat. Long-distance migrants are able to move great distances over unsuitable habitat; however, they must have stopover sites to rest and forage in order to continue their migration. Many resident species are habitat-specific, moving only through their preferred habitat type(s), or similar adjacent habitat; wildlife corridors would be more important for these bird species.

Ideally, an open space corridor should encompass a heterogeneous mix of vegetation types to accommodate the ecological requirements of a wide variety of resident species in any particular region. Most species typically prefer adequate vegetation cover during movement, which can serve as both a food source and as protection from weather and predators. Drainages, riparian areas, and forested canyon bottoms typically serve as natural movement corridors because these features provide cover, food, and often water for a variety of species. Very few species will move across large expanses of open, uncovered habitat unless it is the only option available to them. Landscape linkages must also provide “live-in” habitat (food and cover) to support smaller and less mobile species, such as amphibians, reptiles, and rodents, that require longer periods to traverse a corridor.

Wildlife movement is generally unconstrained surrounding the Project site. While the Project site is surrounded by developed/partially developed land and roadways to the north and east (Sierra Highway), it is still feasible for wildlife to move through the Project area during and after construction through the open area directly to the south of the Project. The open land to the south contains a section of vegetation (Saltbush-Big Sage scrub) that will most likely act as wildlife corridor for the Project site. While the development in this area is apparent, it is low-density. This means that many wildlife species (e.g., coyotes, foxes) can move through this type of development to surrounding areas of open space.

### 3.4 SPECIAL STATUS BIOLOGICAL RESOURCES

The following section addresses special status biological resources that were observed, reported, or have the potential to occur in the study area or in adjacent off-site areas. These resources include plant and wildlife species that have been afforded special status and/or recognition by federal and State resource agencies, as well as private conservation organizations. In general, the principal reason an individual taxon (i.e., species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size, geographic range, and/or distribution resulting in most cases from habitat loss. In addition to species, special status biological resources include vegetation types and habitats that are either unique; of relatively limited distribution in the region; or of particularly high wildlife value. These resources have been defined by federal, State, and local government conservation programs. Sources used to determine the special status of biological resources are listed below.

- **Habitats** – the CNDDDB (CDFW 2022a); *NatureServe Conservation Status Assessments: Methodology for Assigning Ranks* (Faber-Langendoen et al. 2012); and the *California Natural Communities List* (CDFW 2018, 2022c).
- **Plants** –the CNDDDB (CDFW 2022a); the Inventory of Rare and Endangered Plants (CNPS 2022); various USFWS *Federal Register* notices regarding listing status of plant species; and the *List of Special Vascular Plants, Bryophytes, and Lichens* (CDFW 2022b).
- **Wildlife** – the CNDDDB (CDFW 2022a); the California Wildlife Habitat Relationships Database System (CDFW 2014); various USFWS *Federal Register* notices regarding listing status of wildlife species; and the *List of Special Animals* (CDFW 2020d).

### 3.4.1 Definitions

A **federally Endangered species** is one facing extinction throughout all or a significant portion of its geographic range. A **federally Threatened species** is one likely to become Endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally listed Threatened or Endangered species in a project impact area generally imposes severe constraints on development, particularly if development would result in “take” of the species or its habitat. The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct. “Harm” in this sense can include any disturbance of species’ habitats during any portion of its life history.

**Proposed species** or **Candidate species** are those officially proposed by the USFWS for addition to the federal Threatened and Endangered species list. Because proposed species may soon be listed as Threatened or Endangered, these species could become listed prior to or during implementation of a proposed project. The presence of a Proposed or Candidate species within a project impact area may impose constraints on development if they are listed prior to issuance of project permits, particularly if a project would result in “take” of the species or its habitat.

The State of California considers an **Endangered species** to be one whose prospects of survival and reproduction are in immediate jeopardy, a **Threatened species** as one present in such small numbers throughout its range that it is likely to become an Endangered species in the near future in the absence of special protection or management, and a **Rare species** as one present in such small numbers throughout its range that it may become Endangered if its present environment worsens. “Rare species” only applies only to California native plants. State-listed Threatened and Endangered species are protected against take unless an Incidental Take Permit is obtained from the resource agencies. The presence of any State-listed Threatened or Endangered species in a project impact area generally imposes severe constraints on development, particularly if a project would result in “take” of the species or its habitat.

**California Species of Special Concern** is an informal designation used by the CDFW for some declining wildlife species that are not State Candidates for listing. This designation does not provide legal protection but signifies that these species are recognized as special status by the CDFW. A few years ago, the CDFW downlisted several species from Species of Special Concern to the **Watch List**. Although not considered special status, Watch List species are tracked by the CNDDDB.

Species that are **California Fully Protected** and **Protected** include those protected by special legislation for various reasons, such as the mountain lion and white-tailed kite (*Elanus leucurus*). Fully Protected species may not be taken or possessed at any time. California Protected species include those species that may not be taken or possessed at any time except under special permit from the CDFW issued pursuant to Sections 650 and 670.7 of the *California Code of Regulations*, or Section 2081 of the *California Fish and Game Code*.

Species of **Local Concern** are those that have no official status with the resource agencies but are being watched because either the region has a unique population or the species is declining in the region.

**Special Animal** is a general term that refers to species that the CNDDDB is interested in tracking, regardless of legal or protective status. This term includes species designated as any of the above terms but also includes species that may be considered biologically rare; restricted in distribution; declining throughout their range; have a critical, vulnerable stage in their life cycle that warrants monitoring; are on the periphery of their range and are threatened with extirpation in California; are associated with special status habitats; or are considered by other State or federal agencies or private organizations to be sensitive or declining.

The **CRPR**, formerly known as CNPS List, is a ranking system by the Rare Plant Status Review group<sup>5</sup> and managed by the CNPS and the CDFW (CDFW 2020b). A CRPR summarizes information on the distribution, rarity, and endangerment of California’s vascular plants. Plants with a CRPR of **1A** are presumed extirpated from the state because they have not been seen in the wild in California for many years and they are either rare or extinct elsewhere. Plants with a CRPR of **1B** are Rare, Threatened, or Endangered throughout their range. Plants with a CRPR of **2A** are presumed extirpated from California but are more common elsewhere. Plants with a CRPR of **2B** are considered Rare, Threatened, or Endangered in California, but are more common elsewhere. Plants with a CRPR of **3** require more information before they can be assigned to another rank or rejected; this is a “review” list. Plants with a CRPR of **4** are of limited distribution or are infrequent throughout a broader area in California; this is a “watch list”. The Threat Rank is an extension that is added to the CRPR to designate the plant’s endangerment level. An extension of **.1** is assigned to plants that are considered to be “seriously threatened” in California (i.e., over 80 percent of the occurrences are threatened or have a high degree and immediacy of threat). Extension **.2** indicates the plant is “fairly threatened” in California (i.e., between 20 and 80 percent of the occurrences are threatened or have a moderate degree and immediacy of threat). Extension **.3** is assigned to plants that are considered “not very threatened” in California (i.e., less than 20 percent of occurrences are threatened or have a low degree and immediacy of threat or no current threats are known). The absence of a threat code extension indicates that this information is lacking for the plant(s) in question.

In addition to providing an inventory of special status plant and wildlife species, the CNDDDB also provides an inventory of vegetation types that are considered special status by the State and federal resource agencies, academic institutions, and various conservation groups (e.g., the CNPS). Special status natural communities are “of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects”; they may or may not contain special status species (CDFW 2022c). Determination of the level of imperilment (i.e., exposure to injury, loss, or destruction) is based on the NatureServe Heritage Program Status Ranks that rank both species and vegetation types on a global (G) and statewide (S) basis according to their rarity, trend in population size or area, and recognized threats (e.g., proposed developments, habitat degradation, and non-native species invasion) (Faber-Langendoen et al. 2012). Global and state ranks are provided for all native vegetation types on the *California Natural Communities List* (CDFW 2018). The ranks are scaled from 1 to 5. NatureServe considers **G1** and/or **S1** communities to be critically imperiled and at a very high risk of extinction or elimination due to extreme rarity, very steep declines, or other factors; **G2** and/or **S2** communities to be imperiled and at high risk of extinction or elimination due to very restricted range, very few populations or occurrences, steep declines, or other factors; **G3** and/or **S3** communities to be vulnerable and at moderate risk of extinction or elimination due to a restricted range, relatively few populations or occurrences, recent and widespread declines, or other factors; **G4** and/or **S4** communities to be apparently secure and uncommon but not rare with some cause for long-term concern due to declines or other factors; and **G5** and/or **S5** communities to be secure. A question mark (?) denotes an inexact numeric rank, but existing information points to this rank (Faber-Langendoen et al. 2012). Currently, association ranks are not provided, but associations ranked as S3 or rarer are noted. For vegetation alliances<sup>6</sup> that have State ranks of S1–S3, all associations within the alliance are considered to be highly imperiled.

<sup>5</sup> This group consists of over 300 botanical experts from the government, academia, non-governmental organizations, and the private sector.

<sup>6</sup> A vegetation alliance is “a classification unit of vegetation, containing one or more associations and defined by one or more diagnostic species, often of high cover, in the uppermost layer or the layer with the highest canopy cover” (Sawyer et al. 2009). This term is generally interchangeable with vegetation type.

### 3.4.2 Special Status Vegetation Types

Disturbed rubber rabbitbrush scrub, big sagebrush – rubber rabbitbrush scrub, and developed/rubber rabbitbrush scrub are considered “secure” by the CDFW on a global and state level (Table 3). None of these vegetation types would be considered special status by CDFW.

### 3.4.3 Jurisdictional Resources

The Project site contains an unnamed graded channel that flows from west to east. Water conveyed through this channel appears to originate from urban runoff and passes under Sierra Highway and the adjacent railroad before reaching the Project site. Historic aerial photos of the area show that the natural path of the stream was diverted slightly northward around an agricultural field sometime prior to 1948. The current pathway for this channel was established in approximately 2005 and appears to be regularly maintained to allow water to pass westward.

Currently, the channel bed is mostly unvegetated with sparse native desert scrub species growing along the channel banks. Vegetation along the channel consists of big sagebrush, four-wing saltbush, creosote bush (*Larrea tridentata*), and rubber rabbitbrush.

A summary of information related to this channel is provided in Table 4 below and photographs are provided in Appendix F, Attachment B, that illustrate the general conditions on the Project site.

**TABLE 4  
SUMMARY OF JURISDICTIONAL RESOURCES ON THE PROJECT SITE**

Feature	Latitude/Longitude (decimal degrees)		Feature Length (linear feet)	OHWM Width Range (feet)	Area of RWQCB Jurisdiction (acres)		CDFW Jurisdiction Width Range (feet)	Area of CDFW Jurisdiction (acres)
	Upstream End	Downstream End			Wetland	Non- wetland		
Unnamed Channel	34.597591°, -118.119875°	34.598033°, -118.116617°	1,050	13–17	0.00	0.35	27–33	0.72
<b>Total</b>					<b>0.00</b>	<b>0.35</b>		<b>0.72</b>

OHWM: Ordinary High Water Mark; USACE: RWQCB: Regional Water Quality Control Board; CDFW: California Department of Fish and Wildlife

### ***“Waters of the United States” Determination***

#### Connectivity to a Traditional Navigable Water

Water that passes through the unnamed channel on the Project site flows under 8<sup>th</sup> Street East and continues in a northeasterly direction. Water flows through a drainage feature that proceeds northerly along 10<sup>th</sup> Street East and later 15<sup>th</sup> Street East before reaching Palmdale Regional Airport. The drainage is directed underground in a concrete culvert before resurfacing along 15<sup>th</sup> Street East on the northern side of the Palmdale Regional Airport runway. The drainage contains two grade control structures before reaching Columbia Way and turning directly eastward. The drainage transitions to a series of interconnected basins that allow water to percolate into the soil with no connection to downstream waters. Based on a review of aerial photographs, the drainage originally flowed northeasterly from the Project site and flows eventually dissipated in upland areas that are in the approximate location of Palmdale Regional Airport. Therefore, the on-site drainage feature has no connection to downstream waters and would therefore not be considered Waters of the United States (WOTUS).

## Wetlands Determination

A wetland sampling point was located in the bottom of the on-site drainage feature to determine if wetland conditions are present on the Project site. This sampling point was chosen due to the presence of potential wetland hydrology, though no hydrophytic vegetation was observed on the Project site. A wetland data form that documents conditions at this location is provided in Appendix F, Attachment D and the information collected is summarized in Appendix F, Table 2.

Vegetation in the vicinity of the each of the locations consisted of Great Basin sagebrush, four-wing saltbush, and rubber rabbitbrush, all of which are upland (UPL) plant species. No hydric soil indicators were observed, while secondary indicators of wetland hydrology were noted (e.g., presence of sediment deposits and drainage patterns). Due to the lack of hydrophytic vegetation and hydric soils, wetland conditions do not exist on the Project site.

### ***Regional Water Quality Control Board Jurisdiction***

Though the channel is not considered to be WOTUS, the RWQCB has broad latitude to regulate waters via the Porter-Cologne Act. The limits of non-wetland “waters of the State” were defined by the well-established bed and bank with evidence of scour along the banks and sediment deposition.

Based on this boundary, the project site contains 0.35 acre of non-wetland “waters of the State” (Appendix F; Table 1; Exhibit 6).

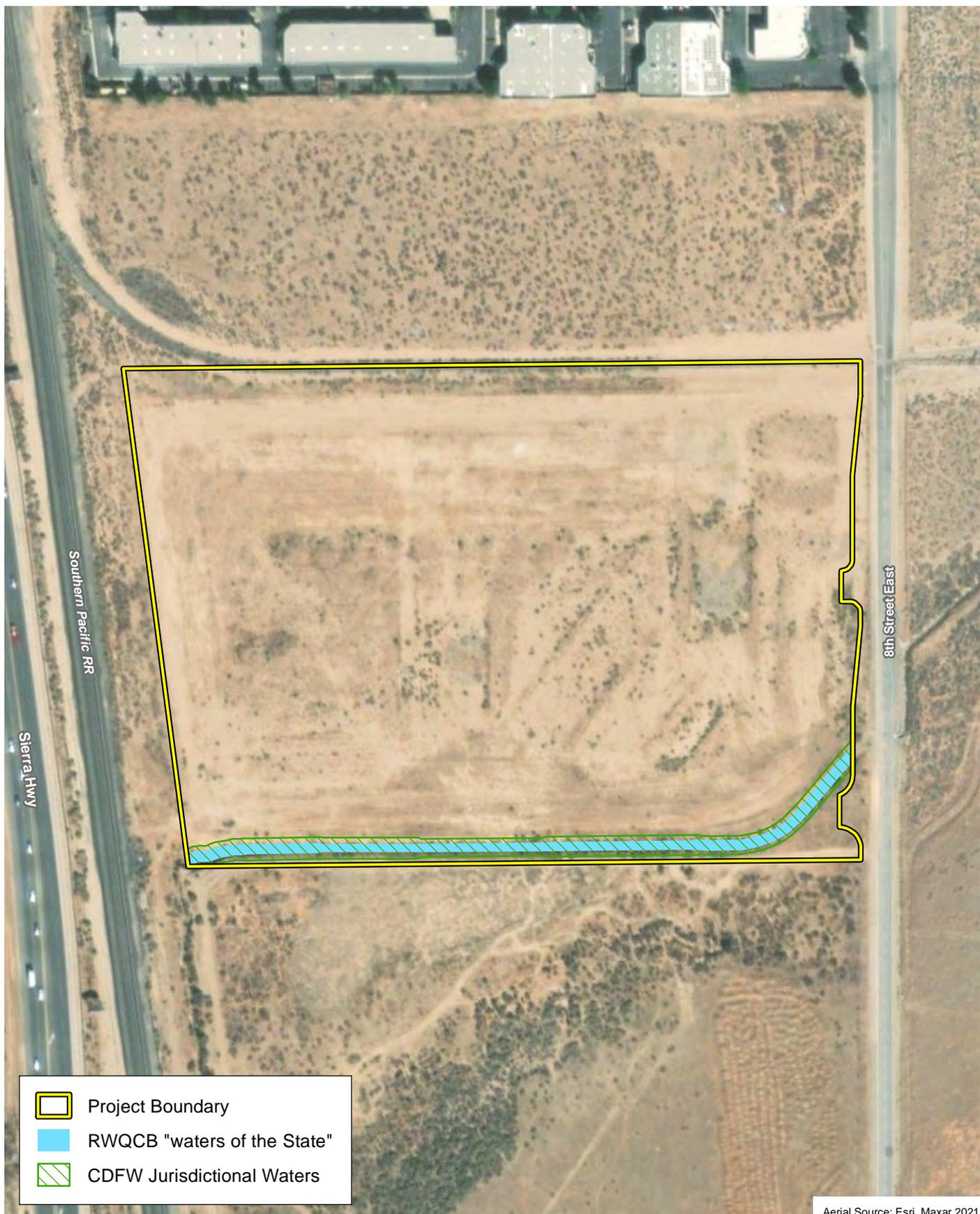
### ***California Department of Fish and Wildlife Jurisdiction***

The limits of CDFW jurisdiction on the Project site were mapped to the top of the bank on each site of the unnamed channel. There is no adjacent riparian habitat present along the channel so that CDFW’s jurisdiction is limited to the top of the channel’s banks. Therefore, the total amount of CDFW’s jurisdictional area is 0.72 acre (Appendix F; Table 1; Exhibit 6).

#### **3.4.4 Special Status Plants**

Table 5 provides a summary of special status plant species reported to occur in the Project region (i.e., the USGS’ Palmdale, Littlerock, Alpine Butte, Lancaster East, Lancaster West, and Ritter Ridge 7.5-minute quadrangles) and includes information on the status, species background, potential for occurrence, and results of focused survey efforts. This list includes species reported by the CNDDDB and the CNPS, supplemented with species from the Project Biologist’s experience that either occur nearby or could occur based on the presence of potentially suitable habitat. Note that these species are listed alphabetically according to their scientific name.

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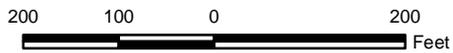


Aerial Source: Esri, Maxar 2021

# Jurisdictional Resources

# Exhibit 6

8th Street East Industrial Project



**TABLE 5  
SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR  
IN THE SURVEY AREA VICINITY**

Scientific Name	Common Name	CDFW	CRPR	Species Background	Potential
<i>Astragalus hornii</i> var. <i>hornii</i>	Horn's milk-vetch		1B.1	Annual herb. Lake margins and alkaline soils in meadows, seeps, and playas; 196–2,788 ft. Southern California County Distribution: Kern, San Bernardino (Presumed extirpated). Blooming period: May–October	No suitable habitat present. Not observed during focused surveys.
<i>Astragalus preussii</i> var. <i>laxiflorus</i>	Lancaster milk-vetch		1B.1	Perennial herb. Chenopod scrub; elevation range unknown due to lack of records. Southern California County Distribution: Kern, Los Angeles, Riverside, San Bernardino. Blooming period: March–May	No suitable habitat present. Not observed during focused surveys.
<i>Calochortus striatus</i>	alkali mariposa lily		1B.2	Perennial bulbiferous herb. Alkaline and mesic soils in chaparral, chenopod scrub, Mojavean desert scrub, meadows, seeps, desert grasslands; 230–5,232 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: April–June	No suitable habitat present. Not observed during focused surveys.
<i>Calystegia peirsonii</i>	Peirson's morning-glory		4.2	Perennial rhizomatous herb. Chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, grassland; 98–4,920 ft. Southern California County Distribution: Los Angeles. Blooming period: April–June	No suitable habitat present. Not observed during focused surveys.
<i>Canbya candida</i>	white pygmy-poppy		4.2	Annual herb. Gravelly, sandy, or granitic soils in Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland; 1,968–4,789 ft. Southern California County Distribution: Imperial, Kern, Los Angeles, San Bernardino. Blooming period: March–June	Marginally suitable habitat. Not observed during focused surveys.
<i>Chorizanthe spinosa</i>	Mojave spineflower		4.2	Annual herb. Sometimes alkaline soils in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and playas; 20–4,264 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–July	No suitable habitat present. Not observed during focused surveys.
<i>Cymopterus deserticola</i>	desert cymopterus		1B.2	Perennial herb. Sandy soil in Joshua tree woodland and Mojavean desert scrub; 2,066–4,920 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–May.	No suitable habitat present. Not observed during focused surveys.
<i>Eriastrum rosamondense</i>	Rosamond eriastrum		1B.1	Annual herb. Alkaline hummocks in often sandy soil in openings of chenopod scrub and the edges of vernal pools; 2,296–2,345 ft. Southern California County Distribution: Kern, Los Angeles. Blooming period: April–July	No suitable habitat present. Not observed during focused surveys.
<i>Eriophyllum mohavense</i>	Barstow woolly sunflower		1B.2	Annual herb. Chenopod scrub, Mojavean desert scrub, and playas; 1,640–3,149 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–May	No suitable habitat present. Not observed during focused surveys.
<i>Gilia latiflora</i> ssp. <i>cuyamensis</i>	Cuyama gilia		4.3	Annual herb. Sandy soil in Pinyon and juniper woodland; 1,952–6,560 ft. Southern California County Distribution: Kern, Los Angeles, Ventura. Blooming period: April–June	No suitable habitat present. Not observed during focused surveys.
<i>Goodmania luteola</i>	golden goodmania		4.2	Annual herb. Alkaline or clay soils in Mojavean desert scrub, meadows, seeps, playas, and grassland; 66–7,216 ft. Southern California County Distribution: Kern, Los Angeles. Blooming period: April–August	No suitable soils. Not observed during focused surveys.
<i>Loeflingia squarrosa</i> var. <i>artemisiarum</i>	sagebrush loeflingia		2B.2	Annual herb. Sandy soil in desert dunes, great basin scrub, and Sonoran desert scrub; 2,296–5,297 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: April–May	Marginally suitable habitat. Not observed during focused surveys.
<i>Lycium torreyi</i>	Torrey's box-thorn		4.2	Perennial shrub. Coastal scrub and Sonoran desert scrub; -10–3,660 ft. Southern California County Distribution: Imperial, Riverside, San Bernardino, San Diego. Blooming period: January–November	Marginally suitable habitat. Not observed during focused surveys.
<i>Muilla coronata</i>	crowned muilla		4.2	Perennial cormous herb. Chenopod scrub, Mojavean desert scrub, Joshua tree and Pinyon and juniper woodland; 2,509–6,429 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–May	Marginally suitable habitat. Not observed during focused surveys.
<i>Opuntia basilaris</i> var. <i>brachyclada</i>	short-joint beavertail		1B.2	Stem succulent shrub. Chaparral, Mojavean desert scrub, Joshua tree, Pinyon and juniper woodland; 1,394–5,904 ft. Southern California County Distribution: Los Angeles, San Bernardino. Blooming period: April–August	No suitable habitat present. Not observed during focused surveys.
<i>Perideridia pringlei</i>	adobe yampah		4.3	Perennial herb. Serpentine or often clay soils in chaparral, cismontane woodland, coastal scrub, Pinyon and juniper woodland; 984–5,904 ft. Southern California County Distribution: Kern, Los Angeles, Ventura. Blooming period: April–July	No suitable soils. Not observed during focused surveys.
<i>Puccinellia simplex</i>	California alkali grass		1B.2	Annual herb. Saline flats, mineral springs; <2,953 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–May	No suitable habitat present. Not observed during focused surveys.
<i>Yucca brevifolia</i>	western Joshua tree	CST		Perennial herb. Desert flats, slopes; 1,312–7,546 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino, Riverside. Blooming period: March–June	Potentially suitable habitat present. Not observed during focused surveys.
CDFW: California Department of Fish and Wildlife; CRPR: California Rare Plant Rank			<b>CRPR</b>		
<b>Species Status:</b>			1B	Plants Rare, Threatened, or Endangered in California and elsewhere	
<b>State (CDFW)</b>			2B	Plants Rare, Threatened, or Endangered in California, but more common elsewhere	
CST Candidate State Threatened			4	Plants of limited distribution - watch list	
			.1	Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)	
			.2	Moderately threatened in California (20–80% of occurrences threatened; moderate degree and immediacy of threat)	
			.3	Not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known)	

## **Project Site**

No special status plant species were observed on the Project site.

### **California Desert Native Plant Species**

An inventory of plants protected by the California Desert Native Plants Act was made during the 2022 focused plant surveys. This survey identified no plants protected by the California Desert Native Plants Act occurring in the survey area.

#### **3.4.5 Special Status Wildlife**

Table 6 provides a summary of special status wildlife species reported to occur in the Project region (i.e., the USGS' Palmdale, Littlerock, Alpine Butte, Lancaster East, Lancaster West, Ritter Ridge 7.5-minute quadrangles) and includes information on the status, species background, nearest reported location, potential for occurrence, and results of focused survey efforts (where applicable). This list includes species reported by the CNDDDB, supplemented with species from the Project Biologist's experience that either occur nearby or could occur based on the presence of suitable habitat. Note that these species are listed taxonomically. Species observed in the study area are discussed further below.

**TABLE 6  
SPECIAL STATUS WILDLIFE SPECIES  
REPORTED FROM THE PROJECT REGION**

Species	Status		Species Background	Potential to Occur/Results of Focused Surveys (Project Site)
	USFWS	CDFW		
<b>Amphibians</b>				
<i>Anaxyrus californicus</i> arroyo toad	FE	SSC	Occurs in semi-arid regions near washes or intermittent streams. Streams must be of low velocity with sand or gravel substrate.	Not expected to occur; outside species' range and lack of suitable habitat.
<i>Rana draytonii</i> California red-legged frog	FT	SSC	Occurs in deep ponds and slow-moving streams with emergent vegetation in forests, woodlands, grasslands, streams, wetlands, ponds, and lakes from sea level to 8,000 feet above msl.	Not expected to occur; outside species' range and lack of suitable habitat.
<i>Rana muscosa</i> Southern mountain yellow-legged frog	FE	SSC	Occurs in small, isolated populations in the San Gabriel, San Bernardino, and San Jacinto Mountains in narrow, rock-walled rivers, perennial creeks, and permanent plunge pools with intermittent creeks and pools in montane riparian and/or chaparral between 1,200 and 7,500 feet above msl.	Not expected to occur; outside species' range and lack of suitable habitat.
<b>Reptiles</b>				
<i>Actinemys pallida</i> southwestern pond turtle	—	SSC	Occurs in ponds, lakes, marshes, rivers, streams, and irrigation ditches with a rocky or muddy bottom and aquatic vegetation at elevations from sea level to approximately 6,696 feet above msl.	Not expected to occur; outside species' range and lack of suitable habitat.
<i>Arizona elegans occidentalis</i> California glossy snake	—	SSC	Occurs in chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grass, elevation from below sea level to 7,000 feet. Prefer open sandy areas with scattered brush, but also found in rocky areas.	Not expected to occur; outside species' range.

**TABLE 6  
SPECIAL STATUS WILDLIFE SPECIES  
REPORTED FROM THE PROJECT REGION**

Species	Status		Species Background	Potential to Occur/Results of Focused Surveys (Project Site)
	USFWS	CDFW		
<i>Anniella pulchra</i> northern legless lizard	—	SSC	Requires areas with loose sandy soil, moisture, warmth, and plant cover, including leaf litter. Occurs in pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks at elevations between sea level and approximately 6,000 feet.	May occur in the southern edge of the Project site.
<i>Gopherus agassizii</i> desert tortoise	FT	ST	Occurs in creosote bush scrub, Joshua tree woodland, and Mojave-saltbush-allscale scrub.	Not expected to occur. The Project site has been previously disturbed, and the soils have been largely compacted.
<i>Phrynosoma blainvillii</i> Blainville's horned lizard	—	SSC	Valley-foothill hardwood, conifer, and riparian habitats, pine-cypress, juniper, and annual grassland habitats from sea level to 6,000 feet above msl and open country, especially sandy areas, washes, floodplains, and windblown deposits.	Not expected to occur, limited marginally suitable habitat at the edge of species' range; not observed on site during 2022 surveys (Psomas 2022b).
<i>Thamnophis hammondi</i> two-striped garter snake	—	SSC	Occurs in wetlands, freshwater marsh, and riparian habitats with perennial water.	Not expected to occur; outside species' range and lack of suitable habitat.
<b>Birds</b>				
<i>Accipiter cooperii</i> Cooper's hawk (nesting)	—	WL	Forages in deciduous and mixed forests and open, interrupted, or marginal woodlands; Nests primarily in riparian growths of deciduous trees.	May occur for foraging; suitable foraging habitat.  Not expected to occur for nesting on the Project site; lack of suitable nesting habitat (riparian trees).

**TABLE 6  
SPECIAL STATUS WILDLIFE SPECIES  
REPORTED FROM THE PROJECT REGION**

Species	Status		Species Background	Potential to Occur/Results of Focused Surveys (Project Site)
	USFWS	CDFW		
<i>Aquila chrysaetos</i> golden eagle (nesting and wintering)	—	FP, WL	Breeds in open and semi-open habitats such as tundra, shrublands, grasslands, woodland-brushlands, coniferous forest, farmland, and riparian habitats (Kochert et al. 2002). Nests primarily in rugged mountainous areas with large trees or on cliffs (Johnsgard 2001). Forages in open habitats like grasslands or steppe-like vegetation (Hunt et al. 1999).	Not expected to occur for nesting or foraging; no suitable nesting or foraging habitat. May occur as a flyover.
<i>Artemisospiza belli belli</i> Bell's sage sparrow	—	WL	Uncommon to fairly common but localized resident breeder in dry chaparral and coastal sage scrub along coastal lowlands, inland valleys, and in lower foothills of local mountains in California (Grinnell and Miller 1986, Unit 1984).	Not expected to occur; outside species' range.
<i>Athene cunicularia</i> burrowing owl (burrow sites and some wintering sites)	—	SSC	Occurs in arid and semi-arid environments (e.g., grassland, steppes, deserts, prairies, and agricultural land) with well-drained, level to gently sloping areas with sparse vegetation (Haug et al. 1993; Dechant et al. 2003). Nests in mammal burrows and man-made cavities such as dry culverts.	Not expected to occur on or adjacent to the site; no sign or individuals observed during 2022 focused surveys (Psomas 2022c).
<i>Asio flammeus</i> short-eared owl (nesting)	—	SSC	Breeds in open country (e.g., prairie and coastal grasslands, heathlands, shrub-steppe, and tundra) in northern U.S. and Canada; nests on the ground. Winters in open areas within woodlots, stubble fields, fresh and saltwater marshes, weedy fields, dumps, gravel pits, rock quarries, and shrub thickets (Wiggins et al. 2006).	Not expected to occur for nesting; does not breed in the Project region.  May occur for foraging during non-breeding season on rare occasion.

**TABLE 6  
SPECIAL STATUS WILDLIFE SPECIES  
REPORTED FROM THE PROJECT REGION**

Species	Status		Species Background	Potential to Occur/Results of Focused Surveys (Project Site)
	USFWS	CDFW		
<i>Buteo regalis</i> ferruginous hawk (wintering)	—	WL	Breeds in Flat and rolling terrain in grassland or shrubsteppe regions of the northwestern US and southwestern Canada. In California winters in open terrain from grasslands to arid desert, and near cultivated fields, where pocket gophers, ground squirrels, and lagomorphs are abundant.	Not expected to occur for nesting; does not nest in the Project region.  Not expected to occur for wintering; no potentially suitable wintering habitat.
<i>Buteo swainsoni</i> Swainson's hawk (nesting)	—	ST	Forages in open stands of grass-dominated vegetation; sparse shrublands; and small, open woodlands and has adapted well to foraging in agricultural areas (e.g., wheat and alfalfa) (Woodbridge 1991). Nests in scattered trees within these grassland, shrubland, or agricultural landscapes (e.g., along stream courses or in open woodlands) (Bechard et al. 2010).	Not expected to occur for nesting or foraging on the Project site; no suitable nesting (large trees) or foraging habitat (agricultural fields). May occur as a flyover.
<i>Charadrius montanus</i> mountain plover (wintering)	—	SSC	Breeds outside California and winters from north-central California to the Mexican border. Forages in open, flat, dry tablelands with low, sparse vegetation (e.g., prairies, alkaline flats, and tilled fields), including disturbed areas (Knopf and Wunder 2006)	Low potential to occur for foraging in winter; marginally suitable foraging habitat due to urban surroundings.  Not expected to occur for nesting; does not nest in the Project region.
<i>Circus hudsonius</i> northern harrier	—	SSC	Forages and breeds in open habitats, making use of freshwater or brackish marshes, and wet meadows or pastures, grasslands, and cold-desert scrublands (Allen et al. 2016). Within the Project region breeding is known from Piute Ponds and agricultural areas (Allen et al. 2016).	Not expected to occur for nesting; no potentially suitable nesting habitat present on or adjacent to the Projects site.  May occur for foraging; potentially suitable foraging habitat.

**TABLE 6  
SPECIAL STATUS WILDLIFE SPECIES  
REPORTED FROM THE PROJECT REGION**

Species	Status		Species Background	Potential to Occur/Results of Focused Surveys (Project Site)
	USFWS	CDFW		
<i>Falco columbarius</i> merlin (wintering)	—	WL	During migration, found in a wide variety of habitats, including open grasslands, semi-open forests, coastal areas (beach dunes, marshes, and tidal flats); much like winter habitats (Raim et al. 1989).	Not expected to occur for nesting; does not nest in the Project region.  May occasionally occur for foraging; potentially suitable foraging habitat.
<i>Falco peregrinus anatum</i> American peregrine falcon (nesting)	delisted	delisted, FP	Breeds in habitats that contain cliffs, for nesting on ledges, with open gulfs of air and generally open landscapes for foraging. Typically forages less than 5 miles from nesting sites (White et al. 2002).	Not expected to occur for nesting; no suitable nesting habitat (cliffs).  May occur for foraging outside breeding season; potentially suitable foraging habitat.
<i>Lanius ludovicianus</i> loggerhead shrike (nesting)	—	SSC	Breeds in grasslands and other dry, open habitats. Nests in trees and shrubs that provide cover, usually with thorns. Forages in open landscapes characterized by well-spaced, often spiny, shrubs and low trees, usually interspersed with short grasses, forbs, and bare ground (Yosef 1996).	One adult observed on the Project site in December. May occur for nesting and foraging on the southern edge of the site, or in the areas surrounding the Project site where large shrubs occur.
<i>Falco mexicanus</i> prairie falcon (nesting)	—	WL	Breeds in open habitat, including shrub-steppe desert, grasslands, mixed shrub and grasslands, and alpine tundra (Steenhof 2013). Forages in grassland and scrub. Nests on cliffs (Clark and Wheeler 2001).	May occur for foraging; potentially suitable foraging habitat.  Not expected to occur for nesting; no suitable nesting habitat (cliffs).
<i>Toxostoma lecontei</i> LeConte's thrasher	—	SSC	Occurs in sparsely vegetated desert flats, dunes, alluvial fans, and gently rolling hills typically with saltbush ( <i>Atriplex</i> spp.) and/or cholla. Rarely found in creosote scrub. Nests in dense and thorny desert shrubs or cholla (Sheppard 1996).	Not expected to occur for nesting; no potentially suitable nesting habitat. Marginal potentially suitable nesting habitat immediately south and north of the site where large thorny shrubs and cactus occur. Lack of recent records in the Project vicinity (CDFW 2022a; eBird 2022).  May occur for foraging; potentially suitable foraging habitat.

**TABLE 6  
SPECIAL STATUS WILDLIFE SPECIES  
REPORTED FROM THE PROJECT REGION**

Species	Status		Species Background	Potential to Occur/Results of Focused Surveys (Project Site)
	USFWS	CDFW		
<b>Mammals</b>				
<i>Antrozous pallidus</i> pallid bat	—	SSC	Occurs in a variety of habitats such as grasslands, shrublands, and woodlands, but most commonly in open habitats with rocky areas for roosting (Zeiner et al. 1990). Roosts in caves, crevices, mines, and occasionally hollow trees and buildings (Whitaker 1980; Zeiner et al. 1990).	May occur for foraging; potentially suitable foraging habitat  Not expected to occur for roosting; no suitable roosting habitat.
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	—	SSC	Occurs in a variety of habitats such as oak woodlands, arid deserts, grasslands, and high-elevation forests and meadows (Hall 1981). Roosts in mine tunnels, limestone caves, lava tubes, buildings, and other man-made structures (Williams 1986).	May occur for foraging; potentially suitable foraging habitat.  Not expected to occur for roosting; no suitable roosting habitat (caves).
<i>Chaetodipus fallax pallidus</i> pallid San Diego pocket mouse	—	SSC	Primarily found on the eastern slopes of the Peninsular Ranges in Eastern Riverside County and the San Felipe Valley in San Diego County. This species can occur in a variety of habitats such as coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent scrub, and pinyon-juniper. It is associated with sandy herbaceous areas with rocks and course grave (Blood 2022).	Not expected to occur; outside species' range.
<i>Euderma maculatum</i> spotted bat	—	SSC	Occurs in a variety of habitats such as arid desert, grassland, and mixed conifer forest (Zeiner et al. 1990). Roosts in rock crevices (Williams 1986).	Not expected to occur for foraging due to lack of records in the Project region; only one museum record in Los Angeles County and audio detections outside the Project region (Blood 2022).  Not expected to occur for roosting; no suitable roosting habitat (rock crevices).

**TABLE 6  
SPECIAL STATUS WILDLIFE SPECIES  
REPORTED FROM THE PROJECT REGION**

Species	Status		Species Background	Potential to Occur/Results of Focused Surveys (Project Site)												
	USFWS	CDFW														
<i>Eumops perotis californicus</i> western mastiff bat	—	SSC	Forages in dry desert washes, floodplains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas. Roosts primarily in cliffs high above the ground (WBWG 2005).	May occur for foraging; potentially suitable foraging habitat.  Not expected to occur for roosting; no suitable roosting habitat (cliffs).												
<i>Xerospermophilus mohavensis</i> Mohave ground squirrel	—	ST	Occurs in Mojave desert scrub, alkali scrub, and Joshua tree woodland between 1,800 and 5,000 feet, in sandy to gravelly soils and they forage primarily on the leaves and seeds of forbs and shrubs (BLM 2006).	Not expected to occur due to lack of potentially suitable habitat (compacted soils).												
<i>Vulpes macrotis arsipus</i> desert kit fox	—	FBM	Occurs in open desert, areas of desert scrub, grasslands, and sand dunes, in sandy and loamy soils and forages in the same habitat and primarily eats rodents (McGrew 1979).	Not expected to occur for denning on site; lack of potentially suitable denning habitat (compacted soils). May occur for denning within 200 feet of the Project site, large mammal burrows observed under box-thorn shrubs during site reconnaissance survey.												
<i>Taxidea taxus</i> American badger	—	SSC	Occurs in a wide range of habitats, but is most abundant in drier, open stages of most shrub, forest, and herbaceous habitats with friable soil (CDFW 2014).	Not expected to occur for denning on site; lack of potentially suitable denning habitat (compacted soils). May occur for denning within 200 feet of the Project site, large mammal burrows observed under box-thorn shrubs during site reconnaissance survey.												
<p>USFWS: U.S. Fish and Wildlife Service; CDFW: California Department of Fish and Wildlife; msl: mean sea level</p> <p><b>LEGEND:</b></p> <table border="0"> <tr> <td><b>Federal (USFWS)</b></td> <td><b>State (CDFW)</b></td> </tr> <tr> <td>FE      Endangered</td> <td>ST      Threatened</td> </tr> <tr> <td>FT      Threatened</td> <td>FP      Fully Protected</td> </tr> <tr> <td></td> <td>SSC    Species of Special Concern</td> </tr> <tr> <td></td> <td>WL      Watch List</td> </tr> <tr> <td></td> <td>FBM    Fur-bearing Mammal (protected by Fur-bearing Mammal Act)</td> </tr> </table>					<b>Federal (USFWS)</b>	<b>State (CDFW)</b>	FE      Endangered	ST      Threatened	FT      Threatened	FP      Fully Protected		SSC    Species of Special Concern		WL      Watch List		FBM    Fur-bearing Mammal (protected by Fur-bearing Mammal Act)
<b>Federal (USFWS)</b>	<b>State (CDFW)</b>															
FE      Endangered	ST      Threatened															
FT      Threatened	FP      Fully Protected															
	SSC    Species of Special Concern															
	WL      Watch List															
	FBM    Fur-bearing Mammal (protected by Fur-bearing Mammal Act)															

## Loggerhead Shrike

Loggerhead shrike is a California Species of Special Concern. This species has a wide distribution across the United States, including south-central Canada and much of Mexico, but it has declined throughout much of this range in recent decades. The loggerhead shrike was considered to be a fairly common year-round resident in Southern California (Garrett and Dunn 1981). It still occupies much of its former California range but has been extirpated locally or has shown reduction in overall numbers at many locations (Shuford and Gardali 2008). Loggerhead shrikes breed mainly in shrublands or in open woodlands with a fair amount of grass cover and areas of bare ground (Shuford and Gardali 2008).

A loggerhead shrike was observed foraging during the initial site reconnaissance survey surveys on the Project site. Potentially suitable nesting habitat for this species is located on the southern edge of the Projects site. Potentially suitable foraging habitat occurs throughout the study area.

## **Los Angeles County Sensitive Bird Species**

Several additional species have been recognized by the Los Angeles Audubon Society as “at-risk” in the region (Allen et al 2016). In addition to the species listed in Table 6, the Audubon “at-risk” species that have the potential to occur on the Project Site include greater roadrunner (*Geococcyx californianus*), mountain bluebird (*Sialia currucoides*), vesper sparrow (*Pooecetes gramineus*), western meadowlark (*Sturnella neglecta*) (observed adjacent to the site), lesser nighthawk (*Chordeiles acutipennis*), cactus wren (*Campylorhynchus brunneicapillus*) (observed adjacent to the site), California towhee (*Melospiza crissalis*), and black-throated sparrow (*Amphispiza bilineata*). Although not recognized by State or federal agencies, the Los Angeles County Department of Regional Planning considers these species worthy of consideration as sensitive.

## 4.0 **PROJECT IMPACTS**

### 4.1 INTRODUCTION

This section presents an impact analysis of the Project. All construction activities, including staging and equipment areas, will occur on the Project site such there are no off-site direct impacts. Construction of the Project would lead to the permanent removal of all existing vegetation on the Project site.

Both “direct” and “indirect” impacts on biological resources have been evaluated. Direct impacts are those that involve the initial loss of habitat or individuals due to vegetation clearing and construction-related activities. Indirect impacts would be those related to impacts on the adjacent remaining habitat due to construction activities (e.g., noise, dust) or operation of a project (e.g., human activity).

Biological impacts associated with the Project were evaluated with respect to the following special status (synonymous with “sensitive”) biological issues:

- Species listed under federal or State Endangered Species Acts;
- Species proposed for listing under federal or State Endangered Species Acts
- Non-listed species that meet the criteria in the definition of “Rare” or “Endangered” in the CEQA Guidelines (i.e., 14 *California Code of Regulations*, Section 15380)<sup>7</sup>;
- Species designated as California Species of Special Concern;
- Vegetation types (synonymous with “habitat” and “community”) suitable to support a federally or State-listed Endangered or Threatened plant or wildlife species;
- Streambeds, waterbodies, wetlands, and their associated vegetation;
- Vegetation types, other than wetlands, considered special status by regulatory agencies (e.g., the USFWS, the CDFW) or resource conservation organizations; and
- Other species or issues of concern to regulatory agencies or conservation organizations.

The actual and potential occurrence of these resources in the study area were correlated with the significance criteria listed in the next section in order to determine whether Project impacts on these resources would be considered significant.

<sup>7</sup> Section 15380 of the CEQA Guidelines indicates that a lead agency can consider a non-listed species (e.g., plant with a CRPR of 1B.1) to be Endangered, Rare, or Threatened if the species can be shown to meet the criteria in the definition of Rare or Endangered. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered in determining if a non-listed species meets the definitions for Rare and Endangered according to Section 15380 of the CEQA Guidelines.

## 4.2 SIGNIFICANCE CRITERIA

The environmental impacts relative to biological resources are assessed using impact significance criteria that mirror the policy contained in CEQA (*California Public Resources Code* §21001[c]). Accordingly, the State Legislature has established it to be the policy of the State to:

Prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities.

Determining whether a project would have a significant effect plays a critical role in the CEQA process. According to Section 15064.7 of the CEQA Guidelines (Thresholds of Significance), each public agency is encouraged to develop and adopt—by ordinance, resolution, rule, or regulation—their own significance thresholds that the agency would use in determining the level of significance of environmental effects. A significance threshold defines the quantitative, qualitative, or performance limits of an environmental effect. If these thresholds are exceeded, the agency would consider the effect to be significant.

In the development of significance thresholds for impacts to biological resources, CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and Appendix G, the Environmental Checklist Form, of the CEQA Guidelines. Section 15065(a) states that a project may have a significant effect where:

The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, reduce the number or restrict the range of an endangered, rare, or threatened species.

Appendix G of the CEQA Guidelines is more specific in addressing biological resources and encompasses a broader range of resources to be considered, including candidate, sensitive, or special status species; riparian habitat or other special status natural communities; federally protected wetlands; fish and wildlife movement corridors; local policies or ordinances protecting biological resources; and adopted Habitat Conservation Plans. These factors are considered through the checklist of questions answered during the Initial Study process used to determine a project's appropriate environmental documentation (i.e., Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report [EIR]). Because these questions are derived from standards employed in other laws, regulations, and commonly used thresholds, it is reasonable to use these standards as a basis for defining significance thresholds in a CEQA document. For each of the thresholds identified below, the section of the CEQA Guidelines upon which the threshold is based has been provided. For the purpose of this analysis, impacts to biological resources are considered significant (before calculating the offsetting impacts of mitigation measures [MMs]) if one or more of the following conditions would result from implementation of the Project:

1. The project has the potential to substantially degrade the quality of the environment (§15065[a]);
2. The project has the potential to substantially reduce the habitat of any fish or wildlife species (§15065[a]);
3. The project will cause fish or wildlife populations to drop below self-sustaining levels (§15065[a]);

4. The project will threaten to eliminate a plant or animal community (§15065[a]);
5. The project will reduce the number or restrict the range of an Endangered, Rare, or Threatened species (§15065[a])<sup>8</sup>;
6. The project has a substantial adverse effect, either directly or through habitat modifications, on any species identified as a Candidate or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS (Appendix G, IV[a]);
7. The project has a substantial adverse effect on any riparian habitat or other special status natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS (Appendix G, IV[b]);
8. The project 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 (Appendix G, IV[c]);
9. The project interferes substantially with the movement of any native or migratory fish or wildlife species, inhibits established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites (Appendix G, IV[d]);
10. The project conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (Appendix G, IV[e]); or
11. The project conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan (Appendix G, IV[f]).

In order to evaluate whether an impact on biological resources would result in a “substantial adverse effect,” both the resource itself and how that resource fits into a regional context must be considered. The Project’s regional setting includes the portion of the Mojave Desert encompassed by the USGS’ Palmdale, Littlerock, Alpine Butte, Lancaster East, Lancaster West, Ritter Ridge 7.5-minute quadrangles. This generally extends north to East Avenue F, east to 140<sup>th</sup> Street East, south to the north slope San Gabriel Mountains, and west to 70<sup>th</sup> Street West.

For impact analysis purposes, a “substantial adverse effect” is defined as the loss or harm of a magnitude which, based on current scientific data and knowledge, would (1) substantially diminish population numbers of a species or distribution of a habitat type within the region or (2) eliminate the functions and values of a biological resource in the region.

### 4.3 DIRECT IMPACTS

The actual and potential occurrence of biological resources in the study area vicinity was correlated with the significance criteria described above to determine whether impacts from the Project on these resources would be significant. Potential direct impacts are described below.

<sup>8</sup> “Endangered” and “Threatened” species, as used in this threshold, are those listed by the USFWS and/or CDFW as Threatened or Endangered. Section 15380 of the CEQA Guidelines indicates that a lead agency can consider a non-listed species (e.g., plants with a CRPR of 1B.1) to be Endangered, Rare, or Threatened for the purposes of CEQA if the species can be shown to meet the criteria in the definition of “Rare” or “Endangered”. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered in determining if a non-listed species met the definitions for “Rare” and “Endangered” according to Section 15380 of the CEQA Guidelines.

### 4.3.1 Vegetation Types and Other Areas

Vegetation types and other areas that would be impacted by the Project are shown in Table 7 and Exhibit 7. These impacts are discussed in more detail below.

**TABLE 7  
VEGETATION TYPES AND OTHER AREAS  
IMPACTED BY THE PROJECT**

Vegetation Types and Other Areas	Existing (Acres)	Impacted (Acres)	Unimpacted (Acres)
big sagebrush – rubber rabbitbrush scrub	0.73	0.73	0
disturbed rubber rabbitbrush scrub	16.98	16.98	0
developed/disturbed rubber rabbitbrush scrub	0.31	0.31	0
<b>Total</b>	18.02	18.02	0
G: Global; S: State; “–”: not applicable.			

The Project would impact all 0.73 acres of big sagebrush – rubber rabbitbrush scrub on the Project site. This vegetation type is ranked as G5, SS and is considered secure by the CDFW (CDFW 2022c). In addition, the acreage impacted is a relatively small percentage of the regional acreage of this vegetation type. Therefore, this impact is considered less than significant, and no mitigation would be required.

The Project would impact 16.98 acres of disturbed rubber rabbitbrush scrub on the Project site. This vegetation type is ranked as G5, SS and is considered secure by the CDFW (CDFW 2022c). In addition, the acreage impacted is a relatively small percentage of the regional acreage of this vegetation type. Therefore, this impact is considered less than significant, and no mitigation would be required.

The Project would impact 0.31 acres of developed/disturbed rubber rabbitbrush scrub on the Project site. Developed is not a vegetation type and is therefore not ranked by CDFW. Disturbed rubber rabbitbrush scrub is ranked as G5, SS and is considered secure by the CDFW (CDFW 2022c). In addition, the acreage impacted is a relatively small percentage of the regional acreage of this vegetation type. Therefore, this impact is considered less than significant, and no mitigation would be required.

### 4.3.2 Wildlife

To assess impacts on wildlife, the total impact on particular vegetation types that provide habitat for wildlife was assessed. The following discussion of wildlife impacts focuses on the common wildlife species occurring in the study area.

#### **General Habitat and Wildlife Loss**

Native and non-native vegetation provide valuable nesting, foraging, roosting, and denning opportunities for a variety of wildlife species. The Project would permanently impact approximately 1.04 acres of native vegetation types (big sagebrush – rubber rabbitbrush scrub, and disturbed rubber rabbitbrush scrub) and 16.98 acres of a partially developed (developed/disturbed rubber rabbitbrush scrub) on the Project site. Removing or altering habitats on the Project site would likely result in the loss of small mammals, reptiles, amphibians, and other slow-moving wildlife that live in the Project’s direct impact area. More mobile wildlife species that are now using the Project site would be forced to move into the remaining areas of open space, which would

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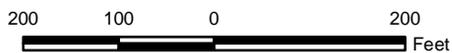
Aerial Source: Esri, Maxar 2021

	Project Boundary
	Direct Impact Area
	CDFW Jurisdictional Waters
	RWQCB "waters of the State"
<b>Vegetation Types and Other Areas</b>	
	disturbed rubber rabbitbrush scrub
	big sagebrush - rubber rabbitbrush scrub
	developed/disturbed rubber rabbitbrush scrub

# Project Impacts

# Exhibit 7

8th Street East Industrial Project



consequently increase competition for available resources in those areas. This situation would result in the loss of individuals that cannot successfully compete. The loss of native and partially developed vegetation that provides wildlife habitat is considered an adverse impact. However, the loss of habitat on the Project site would not be expected to reduce populations of common wildlife species below self-sustaining levels in the Project region. Therefore, this impact would be considered adverse but less than significant, and no mitigation would be required.

Several common bird species, including raptors, have the potential to nest in the vegetation or on the ground on the Project site. The loss of an active migratory bird nest, including nests of common species, would be considered a violation of the MBTA and Sections 3503, 3503.5, and 3513 of *California Fish and Game Code*. The MBTA and *California Fish and Game Code* prohibits the taking of migratory birds, nests, and eggs. The potential loss of an active nest would, therefore, be considered significant. **MM BIO-1** is included to restrict the time frame in which construction can occur to avoid active nests and includes a requirement for pre-construction surveys and avoidance of active nests if detected. Implementation of **MM BIO-1** would reduce the impact to less than significant and ensure that construction impacts would not violate the provisions of the MBTA and *California Fish and Game Code*.

### ***Wildlife Movement***

The Project site occurs in an area of partially developed land and along the heavily used, Sierra Highway. The Project would remove approximately 18.02 acres of habitat suitable for occupation and open space that wildlife currently moves through; however, it would not create a barrier to movement because wildlife would be able to move around the Project site during construction and operation of the Project using adjacent areas of open space. Therefore, the impact on wildlife movement would be considered less than significant, and no mitigation would be required.

### **4.3.3 Special Status Biological Resources**

#### ***Special Status Vegetation Types***

No special status vegetation types (i.e., CDFW sensitive communities) occur in the study area. Therefore, no impact on special status vegetation would occur, and no mitigation would be required.

#### ***Jurisdictional Resources***

The Project site contains an unnamed graded channel that flows from west to east. Water conveyed through this channel appears to originate from urban runoff and passes under Sierra Highway and the adjacent railroad before reaching the Project site (Exhibits 6 and 7). These features are potentially under the regulatory authority of the RWQCB and/or the CDFW; the regulatory agencies make the final determination on their jurisdictional extent.

Approximately 0.35 acres of waters of the State potentially under the jurisdiction of the RWQCB occur in the study area. Approximately 0.72 acres of waters potentially under the jurisdiction of the CDFW occur in the study area (Table 8) (Psomas 2022a). It is anticipated that 1,050 linear feet of jurisdictional resources on the Project site would be impacted by construction activities; and 0.35 acres of RWQCB Waters of the State, and 0.72 acres of potential CDFW jurisdictional resources on the Project site would be impacted by construction activities.

**TABLE 8  
IMPACTS TO JURISDICTIONAL RESOURCES**

<b>Jurisdiction</b>	<b>Existing</b>	<b>Impacted</b>	<b>Unimpacted</b>
<b>Total USACE waters of the United States</b>			
Acres	0.000	0.000	n/a
Linear Feet	0.000	0.000	n/a
<b>Total RWQCB waters of the State*</b>			
Acres	0.35	0.35	<b>0.00</b>
Linear Feet	1,050	1,050	<b>0.00</b>
<b>Total Potential CDFW Jurisdictional Resources</b>			
Acres	0.72	0.72	<b>0.00</b>
Linear Feet	1,050	1,050	<b>0.00</b>
USACE: U.S. Army Corps of Engineers; RWQCB: Regional Water Quality Control Board; CDFW: California Department of Fish and Wildlife; n/a: not applicable.			
* RWQCB jurisdictional boundaries are defined as those determined for the USACE under waters of the United States; however, the RWQCB also takes jurisdiction over isolated waters.			

Impacts are considered significant according to the significance criteria and would require regulatory authorization from the applicable agencies. Thus, the following permit/agreement are required from resource agencies prior to initiation of Project activities that involve impacts to jurisdictional waters:

- RWQCB Report of Waste Discharge for issuance of Waste Discharge Requirements under the State's Porter-Cologne Water Quality Control Act
- CDFW Section 1602 Notification of Lake or Streambed Alteration for a Lake or Streambed Alteration Agreement between CDFW and the Project Applicant/Developer

**MM BIO-2** which requires permitting consultation with the RWQCB and the CDFW would ensure compliance with the Porter-Cologne Water Quality Control Act and Section 1602 of the California Fish and Game Code through habitat preservation, enhancement, and/or creation/restoration. Implementation of **MM BIO-2** would reduce impacts to less than significant levels.

### ***Special Status Plant Species***

No special status plant species were observed in the survey area during focused plant surveys (Psomas 2022d). No impacts to special status plants are expected to occur through Project implementation; therefore, no mitigation would be required.

### ***Desert Native Plants Act***

The Project would not impact species protected by the California Desert Native Plants Act (CDNPA). Therefore, the impact on CDNPA would be considered less than significant, and no mitigation would be required.

### ***Special Status Wildlife Species***

Twenty-six special status wildlife species have been reported from the study area vicinity. Suitable or marginally suitable habitat for 15 of these species occurs on or adjacent to the Project site.

Seven special status raptor species have potential to forage throughout the Project site: Cooper's hawk (*Accipiter cooperii*), short-eared owl (*Asio flammeus*), northern harrier (*Circus hudsonius*), burrowing owl, merlin (*Falco columbarius*), American peregrine falcon (*Falco peregrinus anatum*), and prairie falcon (*Falco mexicanus*). Potentially suitable foraging habitat occurs throughout the Project site. Approximately 18.02 acres of potentially suitable foraging habitat for these species would be permanently impacted. Impacts to raptor foraging habitat within the Project site would be considered adverse but less than significant because the Project would impact a limited amount of habitat relative to the amount of foraging habitat available in the region.

None of the seven special status raptors that may forage on the Project site are expected to nest on or adjacent to the Project site.

One special status bird species has low potential to occur for foraging but would not be expected to nest on the Project site: mountain plover (*Charadrius montanus*). The mountain plover occurs in the Project region only during winter. It most commonly winters in agricultural fields and disturbed areas (Allen et al. 2016). The Project site provides limited, marginal, potentially suitable foraging habitat throughout the site. Approximately 18.02 acres of potentially suitable foraging habitat (e.g., big sagebrush – rubber rabbitbrush scrub, disturbed rubber rabbitbrush scrub, developed/disturbed rubber rabbitbrush scrub) for mountain plover would be permanently impacted through Project implementation. This impact would be considered adverse but less than significant because the Project would impact a limited amount of habitat relative to the amount of habitat available for these species in the region. Therefore, no mitigation would be required for the loss of habitat.

Two additional special status bird species have potential to forage on the Project site: loggerhead shrike and LeConte's thrasher. Loggerhead shrike was observed on site and is the only one of the two with potential to occur for nesting on the Project site. Potentially suitable nesting habitat for the Loggerhead shrike occurs in large shrubs on the southern boundary of the site and areas adjacent, and they may forage throughout the site.

LeConte's thrasher prefers to nest in large thorny shrubs in sandy substrate (Allen et al. 2016), which is marginally available in boxthorn shrubs (*Lyceum* spp.) immediately adjacent to the Project site (north and south). LeConte's thrasher may forage throughout the site. Approximately 0.73 acres of potentially suitable nesting habitat (e.g., big sagebrush – rubber rabbitbrush scrub) for loggerhead shrike would be permanently impacted through Project implementation. Approximately 18.02 acres of potentially suitable foraging habitat (e.g., all vegetation types) for each species would be permanently impacted through Project implementation. This impact would be considered adverse but less than significant because the Project would impact a limited amount of habitat relative to the amount of habitat available for these species in the region. Therefore, no mitigation would be required for the loss of habitat. However, active nests are protected by the MBTA and *California Fish and Game Code* and could be affected by adjacent construction activities. Implementation of **MM BIO 1** would ensure that measures are taken to avoid and minimize impacts on active nests.

Several bird species Los Angeles Audubon Society considers "at-risk" in the region may occur for foraging on the Project site (Allen et al. 2009). In addition to the species listed in Table 6, the Audubon "at-risk" species that have the potential to occur on the Project Site for foraging include the following: cactus wren (*Campylorhynchus brunneicapillus*), greater roadrunner (*Geococcyx californianus*), mountain bluebird (*Sialia currucoides*) (wintering), vesper sparrow (*Pooecetes gramineus*), western meadowlark (*Sturnella neglecta*) (observed adjacent to the Project site), and black-throated sparrow (*Amphispiza bilineata*). None of these species have the potential to nest on the Project site. The cactus wren and the western meadowlark were both observed adjacent to the site; however, breeding habitat for neither species occurs on site (cactus and grasslands respectively). Although not recognized by State or federal agencies, the Los Angeles County

Department of Regional Planning considers these species worthy of consideration as sensitive. 18.02 acres of marginal foraging habitat (e.g., all vegetation types) for each species would be permanently impacted through Project implementation. This impact would be considered adverse but less than significant because the Project would impact a limited amount of habitat relative to the amount of habitat available for these species in the region. Therefore, no mitigation would be required for the loss of habitat.

Three special status bat species have potential to forage throughout the Project site: pallid bat, Townsend's big-eared bat (*Corynorhinus townsendii*), and western mastiff bat. Approximately 18.02 acres of potentially suitable foraging habitat (e.g., all vegetation types) for these species would be permanently impacted within the Project site. These impacts would be considered adverse but less than significant because the Project would impact a limited amount of foraging habitat relative to the amount of foraging habitat available for these species in the region. Therefore, no mitigation would be required for the loss of foraging habitat.

Desert kit fox and American badger may occur adjacent to the Project site. The Project would not directly impact any potentially suitable denning habitat for these species. However, vibration from construction equipment could cause burrows in adjacent habitat to collapse, potentially entombing individuals in their burrows. Individuals could also potentially move through the construction area and be hit by construction vehicles. The loss of habitat would be considered adverse but less than significant because the Project would impact a limited amount of habitat relative to the amount of available for these species in the region. However, the desert kit fox is protected by *California Fish and Game Code*, which prohibits take of individuals of this species. While American badgers are not afforded the same protection under *California Fish and Game Code*, the measures to protect active desert kit fox dens can also be applied to protect active American badger dens; thus, this species is typically included in measures to protect active dens. **MM BIO-3** would require measures that would avoid and minimize impacts on desert kit foxes and American badgers and active dens.

One special status reptile species may occur on the Project site: northern legless lizard. The northern legless lizard is found in moist areas underground. On the Project site, they may occur near the roots of large shrubs in the southern border of the site where moisture content is highest. 0.73 acres of potentially suitable habitat (e.g., big sagebrush – rubber rabbitbrush scrub) for this species would be permanently impacted within the Project site. These impacts would be considered adverse but less than significant because the Project would impact a limited amount of habitat relative to the amount of habitat available for these species in the region. Therefore, no mitigation would be required.

#### **4.3.4 West Mojave Plan**

While the Project site is located within the geographic boundaries of the West Mojave Plan (WM Plan), the Project would not be processed under the WM Plan because it is a private project and the WM Plan can only be used for projects on federal land. However, the Project would not interfere with any conservation areas designed by the WM Plan including Habitat Conservation Areas, Special Review Areas, critical habitat on Military Lands, existing Area of Critical Environmental Concern, or BLM Wilderness Area.

### **4.4 INDIRECT IMPACTS**

Indirect impacts, often called “edge effects,” are those that affect the quality of nearby wildlife habitat resulting from disturbance by construction (such as noise, night lighting, and human activity) and/or the long-term use of the Project site and utility alignment. It is anticipated that some indirect impacts may result from the Project construction and operation; these are described below.

#### **4.4.1 Water Quality**

Drainages in the vicinity of the Project could be impacted as a result of changes in water quality. During construction, runoff carrying excessive silt or petroleum residues from construction equipment could potentially impact water quality and, in turn, affect plant and wildlife species using habitat adjacent to the Project. These are potentially significant impacts. Implementation of **MM BIO-4**, which includes BMPs that would reduce construction-related pollutants, would reduce this impact to a less than significant level.

#### **4.4.2 Noise and Vibration**

During active construction, temporary noise impacts have the potential to disrupt foraging, nesting, roosting, and/or denning activities for a variety of wildlife species. Construction noise could deter wildlife from using habitat adjacent to construction. This impact would be considered adverse but less than significant because a substantial amount of similar habitat is present in the vicinity where the animals may disperse. Therefore, no mitigation would be required.

Following construction of the Project, the ambient noise levels adjacent to the Project site are expected to incrementally increase. Wildlife species stressed by noise may disperse from the habitat immediately adjacent to the Project site. This impact would be considered adverse but less than significant because it is expected to impact a limited area and a substantial amount of similar habitat remains in the adjacent areas where the animals may disperse. Therefore, no mitigation would be required.

Common and special status bird species have the potential to nest in habitat adjacent to the Project site. The loss of an active bird nest would be considered a violation of the MBTA and *California Fish and Game Code* (Sections 3503, 3503.5, and 3513). Implementation of MM BIO 1 would ensure that construction impacts would not violate the provisions of the MBTA or *California Fish and Game Code* Sections 3503, 3503.5, and 3513 through project planning (i.e., construction schedule) and use of pre-construction surveys and measures to protect active nests.

#### **4.4.3 Night Lighting**

Night lighting may impact the behavioral patterns of nocturnal and crepuscular (i.e., active at dawn and dusk) wildlife adjacent to night lighting. Of greatest concern is the effect on small, ground-dwelling animals that use the darkness to hide from predators and/or owls, which are specialized night foragers. Due to the nature of the Project, it is expected to include substantial night lighting of the area immediately adjacent to the Project site. These additional light sources may negatively affect wildlife in the surrounding open space. However, with mandatory compliance of Palmdale Municipal Code Chapter 17.86.030, Lighting Requirements, these impacts would be reduced to a level of less than significant and no mitigation would be required.

#### **4.4.4 Invasive Exotic Plant Species**

Landscaping that includes the installation of non-native, invasive plant species (e.g., species listed in the California Invasive Plant Council's [Cal-IPC's] invasive plant inventory) can be detrimental to surrounding native habitat. Invasive species have the potential to spread into the surrounding natural open space and displace native species, hybridize with native species (thereby impacting the genetic integrity of the native species), alter biological communities, or alter ecosystem processes (e.g., tamarisk [*Tamarix* sp.] affects hydrology). This could degrade the quality of the adjacent vegetation, including vegetation communities that provide suitable habitat for special status species. If landscaping is included as part of the Project, this could be a potentially significant impact on adjacent habitat. Implementation of **MM BIO-5** would prohibit the

use of non-native, invasive plant species in landscaping associated with the Project. This measure would reduce this potential impact to a less than significant level.

Construction activities create disturbance, which in turn provides a place for non-native weedy species to spread. Additionally, construction equipment can introduce non-native weed seeds to the area if equipment is not properly cleaned. Weeds from the construction may then spread to adjacent habitat areas which would degrade habitat quality for native species. In addition to the negative effects on habitat quality, non-native weeds can also increase the potential for large fires to spread. This impact would be considered potentially significant. **MM BIO-6** would require use of Best Management Practices associated with prevention of the spread of weed seeds to reduce this potential impact to a less than significant level.

#### **4.4.5 Human Activity**

Construction activities would increase the amount of human activity on the Project site. This increased human activity could potentially disrupt foraging, nesting, roosting, and/or denning activities for a variety of wildlife species. Increased human activity could deter wildlife from using habitat adjacent to construction. This impact would be considered adverse but less than significant because a substantial amount of similar habitat is present in the vicinity where the animals may disperse. Therefore, no mitigation would be required.

Common and special status bird species have the potential to nest in habitat adjacent to the Project site. Human activity in the vicinity of an active nest could result in the loss of an active bird nest. This would be considered a violation of the MBTA and *California Fish and Game Code* (Sections 3503, 3503.5, and 3513). Implementation of **MM BIO-1** would ensure that construction impacts resulting from increased human activity would not violate the provisions of the MBTA or *California Fish and Game Code* Sections 3503, 3503.5, and 3513 through the use of pre-construction surveys and measures to protect active nests.

Following construction of the Project, human activity adjacent to the Project site is not expected to increase; human activity is expected to be limited within the Project site as the project design prevents people from walking off the site into adjacent undeveloped land. Therefore, no mitigation would be required.

## 5.0 MITIGATION MEASURES

Implementation of the following measures are required for the Project and would avoid, minimize, or mitigate impacts on biological resources discussed above.

**BIO-1 Nesting Birds/Raptors.** To avoid impacts on active nests for common and special status birds and raptors, Covington shall schedule vegetation clearing and blasting during the non-breeding season (i.e., September 16 to January 31) to the extent feasible. If Project timing requires that vegetation clearing and/or blasting occur between February 1 and September 15, Covington or its designee shall retain a qualified Biologist to conduct a pre-construction survey for nesting birds and raptors. The pre-construction survey shall be conducted by a qualified Biologist within three days prior to vegetation clearing. The pre-construction nesting bird survey area shall include the Project impact area (i.e., disturbance footprint) plus a 250-foot buffer to search for nesting birds and a 500-foot buffer to search for nesting raptors. If no active nests are found, no further mitigation would be required.

If an active nest is located in the pre-construction nesting bird survey area, the Biologist shall delineate an appropriate buffer to protect the nest based on the sensitivity of the species. A protective buffer of 500 feet shall be used to protect nesting raptors. If appropriate, a smaller buffer may be considered based on site topography, existing disturbance, sensitivity of the individuals (established by observing the individuals at the nest), and the type of construction activity. No construction activities shall be allowed in the designated buffer until the Biologist determines that nesting activity has ended. Construction may proceed within the buffer once the Biologist determines that nesting activity has ceased (i.e., fledglings have left the nest or the nest has failed). The designated buffer will be clearly marked in the field and will be mapped as Environmentally Sensitive Areas (ESAs) on construction plans.

Prior to the initiation of construction activities, an email summary of the results shall be submitted to the City with a map of any active nests found and their designated buffers. Construction shall be allowed to proceed if standard buffer distances are employed for any active nests. The Biologist shall then prepare a formal Letter Report describing methods used, results of the survey, recommended buffers, and/or justification for buffer reductions. The Letter Report shall be submitted to the City within one week of completion of the survey. If an active nest is observed during the survey, the Letter Report shall include a map showing the designated protective buffer.

**BIO-2 Jurisdictional Permits.** Prior to any impacts on waters under the regulatory authority of the Regional Water Quality Control Board (RWQCB) or the California Department of Fish and Wildlife (CDFW), Covington, shall prepare and process an RWQCB Report of Waste Discharge and a CDFW Section 1602 Notification of Lake or Streambed Alteration, as applicable. As part of the permitting process, it is recommended that Covington schedule a pre-application meeting with RWQCB and CDFW staff to discuss site conditions, the Project, biological and jurisdictional resources, impacts to jurisdictional resources resulting from implementation of the Project, proposed avoidance and minimization measures, the proposed compensatory mitigation program to offset Project impacts, and the regulatory permit process.

Covington shall implement and comply with all measures required by the RWQCB and CDFW permits. Compensatory mitigation may include restoration (i.e., re-establishment or rehabilitation), establishment (i.e., creation), enhancement, and/or preservation of jurisdictional resources. Compensatory mitigation may occur through permittee-responsible mitigation, payment to an in-lieu fee program, or purchase of compensatory mitigation credits from an approved mitigation bank. Mitigation ratios (i.e., the amount of mitigation acreage compared to the amount of impacted habitat) shall be negotiated with the regulatory agencies, but shall be no less than 1:1, replacing impacted jurisdictional resources with jurisdictional resources of equivalent or higher quality habitat value.

**BIO-3**

**Desert Kit Fox/American Badger Burrows.** Covington shall retain a qualified Biologist to conduct a pre-construction burrow survey for desert kit fox and American badger no less than 14 days and no more than 30 days prior to initiation of ground disturbance/construction activities. Ideally, this survey shall be conducted prior to the initiation of the breeding season (i.e., February 1) to allow for passive exclusion, if necessary. The pre-construction survey shall include the Project site plus a 200-foot buffer (if access is available). If no active burrows are found, no further mitigation would be required.

If an active burrow is observed outside the breeding season (i.e., September 16 to January 31) and it cannot be avoided, the burrow shall be closed using passive exclusion. One-way doors shall be used to exclude American badgers from their burrows; doors shall be left in place for at least five nights. Progressive soil blocking shall be used to discourage use by desert kit fox. Once the burrow is determined to be unoccupied (i.e., not used for five nights), as verified by site monitoring (e.g., wildlife cameras), the burrow shall be closed by a qualified Biologist who shall excavate the burrow using hand tools.

If an active burrow is observed outside the breeding season (i.e., September 16 to January 31) and it can be avoided, a 50-foot protective buffer shall be delineated around the burrow. The designated buffer will be clearly marked in the field and will be mapped as an ESA on construction plans. Covington shall consult with CDFW to determine whether a reduced buffer can be accommodated without adversely impacting occupied burrows.

If an active den is observed during the breeding season (i.e., February 1 to September 15), the active den shall be protected with a 100-foot buffer until breeding activity has ended. The designated buffer will be clearly marked in the field and will be mapped as an ESA on construction plans. Covington shall contact CDFW to determine whether a reduced buffer can be accommodated without adversely impacting the occupied den. Construction shall be allowed to proceed when the qualified Biologist has determined that the burrow is no longer active based on site monitoring (i.e., no activity has been observed at the burrow for five nights).

Upon completion of the pre-construction burrow survey, a Letter Report shall be prepared and submitted to CDFW documenting the results of the survey within two weeks of completing the survey effort. If an active burrow/den is observed, the Letter Report shall include a description of the protective buffer that has been designated and a summary of any additional correspondence with the CDFW.

**BIO-4**      **Best Management Practices.** Covington or its designee shall incorporate Best Management Practices (BMPs), including applicable measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged by Project activities does not adversely affect the Project area. In particular, BMPs shall be designed to prevent (to the extent feasible) the runoff of toxins, chemicals, petroleum products, or other elements that might degrade water quality. Additionally, BMPs shall be used to minimize erosion.

The areas where stockpiling can occur shall be selected in consultation with the monitoring Biologist. Spoils shall be stockpiled in disturbed areas lacking native vegetation. The construction contractor shall clearly mark stockpile areas to define the limits where stockpiling can occur.

The construction contractor shall designate an area for vehicle maintenance that is not within or adjacent to drainages or native vegetation. Fueling and maintenance of equipment shall take place within the vehicle maintenance area. Impervious ground surfaces or plastic covering shall be used to prevent spillage or leakage onto the ground surface. Any spilled hazardous materials shall be immediately cleaned and hazardous materials properly disposed of. Contractor equipment shall be checked for leaks prior to operation and repaired as necessary.

**BIO-5**      **Landscaping.** Covington or its designee shall retain a qualified Biologist to review the landscaping plan to ensure that any landscaping component of the Project does not include the planting of exotic, invasive species that would potentially degrade the quality of the surrounding natural open space. A list of potential landscaping plant species shall be submitted to the Biologist for review; the Biologist shall ensure that exotic plant species known to be invasive (e.g., those on the California Invasive Plant Council's [Cal-IPC's] invasive plant inventory) are not included on the list. The Biologist shall make recommendations for more suitable plant species if necessary. Once a final plant palette is prepared, landscaping installed in the development area shall include only species on the approved palette.

**BIO-6**      **Prevention of the Spread of Weed Seeds.** The introduction of exotic plant species shall be avoided and minimized to the extent practicable. Weed seeds entering the construction area via vehicles shall be minimized by requiring construction vehicles to be washed prior to delivery to the Project site. Track-clean or other methods of vehicle cleaning shall be used by the construction contractor to prevent weed seeds from entering/exiting the construction areas on vehicles. Additionally, wattles used for erosion control shall be certified as weed-free.

## **6.0 LEVEL OF SIGNIFICANCE AFTER MITIGATION**

Implementation of the recommended measures will mitigate biological impacts to a level that is considered less than significant.

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**APPENDIX A**  
**REPRESENTATIVE PHOTOGRAPHS**



Overview of the Project site showing disturbed rubber rabbitbrush scrub; taken from the southwestern portion of the site facing northeast.



Overview of the Project site showing disturbed rubber rabbitbrush scrub; taken from the southeastern portion of the site facing northwest.

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## Representative Site Photographs

*8th Street East Industrial Project*

Attachment A-1





Photograph taken from the northwestern portion of the site facing southeast, showing large furniture illegally dumped.



View of the drainage that runs along the southern boundary of the site; taken from the eastern end of the drainage facing west.

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## Representative Site Photographs

*8th Street East Industrial Project*

Attachment A-2





Another view of the drainage; taken from the western portion of the site facing east. Photo shows trash accumulating in the drainage.



Photograph of the eastern portion of the site showing developed/rubber rabbitbrush scrub area, facing north.

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## Representative Site Photographs

*8th Street East Industrial Project*

Attachment A-3





View of illegal dumping disturbance in the center portion of the site.

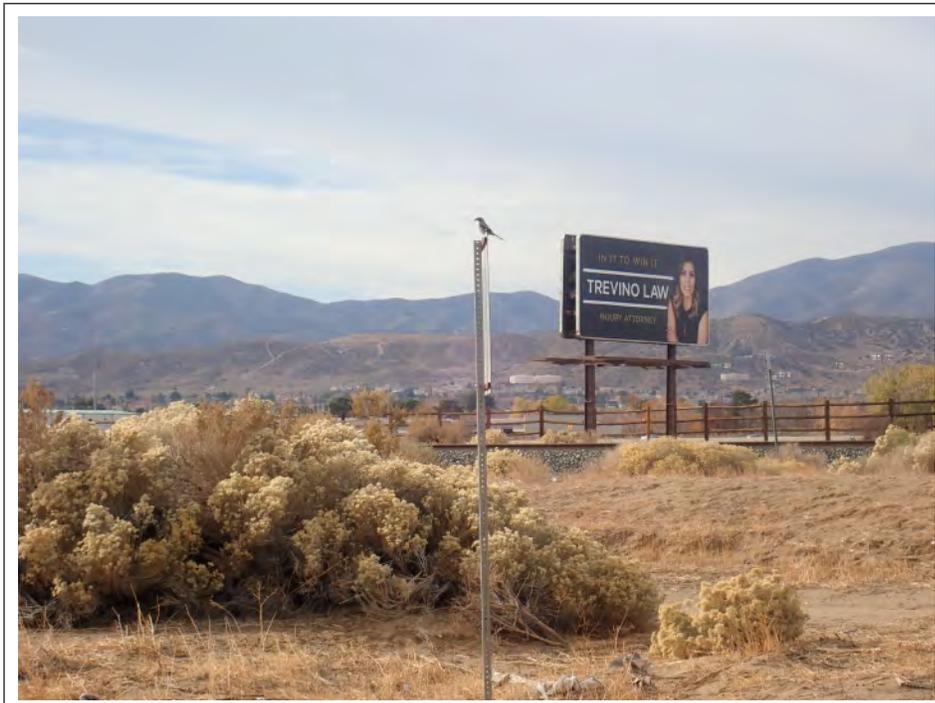


Photo of a loggerhead shrike perched on a metal sign in the southwestern corner of the site.

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## Representative Site Photographs

*8th Street East Industrial Project*

Attachment A-4



**APPENDIX B**  
**PLANT AND WILDLIFE COMPENDIA**

**PLANTS OBSERVED WITHIN THE SURVEY AREA  
DURING FOCUSED PLANT SURVEYS**

Species	
Scientific Name	Common Name
<b>GYMNOSPERMS</b>	
EPHEDRACEAE – EPHEDRA FAMILY	
<i>Ephedra nevadensis</i>	Nevada ephedra
<b>EUDICOTS</b>	
ASTERACEAE – SUNFLOWER FAMILY	
<i>Artemisia tridentata</i>	big sagebrush
<i>Ericameria nauseosa</i>	rubber rabbitbrush
<i>Lessingia glandulifera</i>	glandular lessingia
<i>Senecio flaccidus</i>	threadleaf ragwort
BORAGINACEAE – BORAGE FAMILY	
<i>Heliotropium curassavicum var. oculatum</i>	seaside heliotrope
BRASSICACEAE – MUSTARD FAMILY	
<i>Hirschfeldia incana*</i>	grayish shortpod mustard
<i>Sisymbrium altissimum*</i>	tumble mustard
CHENOPODIACEAE – GOOSEFOOT FAMILY	
<i>Atriplex canescens</i>	four-wing saltbush
EUPHORBIACEAE – SPURGE FAMILY	
<i>Croton setiger</i>	turkey-mullein
ZYGOPHYLLACEAE – CALTROP FAMILY	
<i>Larrea tridentata</i>	creosote bush
<b>MONOCOTS</b>	
POACEAE – GRASS FAMILY	
<i>Bromus diandrus*</i>	ripgut grass
* Non-native or invasive species	

## WILDLIFE SPECIES OBSERVED DURING SURVEYS

Species	
Scientific Name	Common Name
<b>BIRDS</b>	
TYRANNIDAE – TYRANT FLYCATCHER FAMILY	
<i>Sayornis saya</i>	Say's phoebe
LANIIDAE – SHRIKE FAMILY	
<i>Lanius ludovicianus</i>	loggerhead shrike
CORVIDAE – JAY AND CROW FAMILY	
<i>Corvus corax</i>	common raven
ALAUDIDAE – LARK FAMILY	
<i>Eremophila alpestris</i>	horned lark
HIRUNDINIDAE – SWALLOW FAMILY	
<i>Petrochelidon pyrrhonota</i>	cliff swallow
TROGLODYTIDAE – WREN FAMILY	
<i>Campylorhynchus brunneicapillus</i>	cactus wren
MIMIDAE – MOCKINGBIRD AND THRASHER FAMILY	
<i>Mimus polyglottos</i>	northern mockingbird
FRINGILLIDAE – FINCH FAMILY	
<i>Haemorhous mexicanus</i>	house finch
PASSERELLIDAE – NEW WORLD SPARROW FAMILY	
<i>Zonotrichia leucophrys</i>	white-crowned sparrow
<i>Artemisospiza nevadensis</i>	sagebrush sparrow
<i>Artemisospiza belli canescens</i>	Bell's sparrow
ICTERIDAE – BLACKBIRDS AND ORIOLES	
<i>Sturnella neglecta</i>	western meadowlark
PARULIDAE – WOOD-WARBLER FAMILY	
<i>Setophaga coronata</i>	yellow-rumped warbler
<b>MAMMALS</b>	
LEPORIDAE – HARE AND RABBIT FAMILY	
<i>Lepus californicus</i>	black-tailed jackrabbit
<i>Sylvilagus audubonii</i>	desert cottontail
CANIDAE – CANID FAMILY	
<i>Canis latrans</i>	Coyote
* Non-native or invasive species	

**APPENDIX C**  
**SPECIAL STATUS PLANT SURVEY REPORT**

September 16, 2022

Connie Anderson  
T&B Planning, Inc  
Director of New Business Services/Project Manager  
3200 El Camino Real, Suite 100  
Irvine, California 92602

VIA EMAIL  
canderson@tbplanning.com

Subject: Results of the Focused Special Status Plant/Desert Native Plant Survey Conducted for the 8<sup>th</sup> Street East Industrial Project in the City of Palmdale, Los Angeles County, California

Dear Ms. Anderson:

This Letter Report presents the findings of special status plant/desert native plant surveys conducted for the 8<sup>th</sup> Street East Industrial Project located in the City of Palmdale, Los Angeles County, California (Exhibit 1).

## PROJECT LOCATION

The Proposed Project is located on approximately 18-acres in the southern portion of the Antelope Valley in the City of Palmdale. The Project site is situated east of Sierra Highway, west of 8<sup>th</sup> Street East, and approximately 800 feet south of East Avenue P in the city of Palmdale (Exhibit 1). The Project site is located on the Palmdale U.S. Geologic Survey 7.5-minute quadrangle map (Exhibit 2).

## METHODS

Botanical surveys were floristic in nature and consistent with the protocols created by the California Department of Fish and Wildlife (CDFW) (CDFG 2009). In addition, the survey was intended to document the plants regulated by the City of Palmdale and the California Desert Native Plants Act and Native Desert Vegetation Preservation Ordinance (Sections 14.04.010-14.04.120). Prior to the field surveys, a literature search was conducted to identify special status plant species reported from the vicinity of the proposed Project site. Sources reviewed include the USGS for Palmdale, Lancaster East, Lancaster West, Alpine Butte, Littlerock, and Ritter Ridge 7.5-minute quadrangles in the California Native Plant Society's (CNPS') Locational Inventory of Rare and Endangered Vascular Plants of California (CNPS 2022) and the CDFW's California Natural Diversity Database (CNDDB) (CDFW 2022).

Plants regulated by the City of Palmdale and the California Desert Native Plants Act include:

- All species of Burseraceae family (elephant tree)
- *Carnegiea gigantea* (sahuaro cactus)
- *Ferocactus acanthodes* (barrel cactus)
- *Castela emoryi* (crucifixion thorn)

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Connie Anderson  
September 16, 2022  
Page 2

- *Dudleya saxosa* (Panamint dudleya)
- *Pinus longaeva* (bristlecone pine)
- *Washingtonia filifera* (fan palm)
- All species of the family Agavaceae (century plants, nolinias, yuccas)
- 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
- All species of the family Fouquieriaceae (ocotillo, candlewood)
- All species of the genus *Prosopis* (mesquites)
- All species of the genus *Cercidium* (palos verdes)
- *Acacia greggii* (catclaw)
- *Atriplex hymenelytra* (desert-holly)
- *Dalea spinosa* (smoke tree)
- *Olneya tesota* (desert ironwood), including both dead and live desert ironwood

According to the National Weather Service, Palmdale received 3.88 inches of precipitation for Water Year 2022 to date (October 1, 2021, through August 31, 2022), which is about 67 percent of the normal average (National Weather Service 2022). Where available, reference populations were monitored for annual and difficult-to-detect target species to ensure that the scheduled surveys were comprehensive. This is especially relevant during periods of unusual rainfall patterns or below-average rainfall. If conditions at a nearby reference population are suitable for germination and growth, then it can be inferred that conditions would also be suitable in the survey area. Reference populations were not monitored for species with a California Rare Plant Rank (CRPR) of 4; perennials (e.g., *Atriplex* species) which would be identifiable throughout the year; or for species with no extant, publicly accessible reference population in the Project region.

Psomas Biologists Sarah Thomas and Jack Underwood conducted special status plant surveys on April 14; and May 12, 2022. The surveys comprised 4 total person-hours. The potentially suitable habitats for special status plants within the survey area were systematically surveyed to the extent possible during the site visits (Exhibit 3). All plant species observed were recorded in field notes. Plant species were identified in the field or collected for subsequent identification using keys in Hickman (1993) and Munz (1974). Taxonomy follows Hickman (1993) and/or current scientific data (e.g., scientific journals) for scientific and common names.

## SITE DESCRIPTION

Elevations range from approximately 2,610 feet above mean sea level (msl) to approximately 2,620 feet above msl. The Project site is currently undeveloped but has had some previous disturbance and is directly adjacent (south of) a decommissioned portion of the Pacific Union Railroad. Vegetation on the site is comprised mostly of disturbed rubber rabbitbrush scrub, with a small patch of developed/disturbed rubber rabbitbrush scrub in the eastern portion of the site and big sagebrush - rubber rabbitbrush scrub in the drainage that runs along the southern edge of the site (Exhibit 4).

Most of the site has been disturbed historically (e.g., evidence of heavy machine work such as scraping), and contains many trash piles from illegal dumping. Throughout most of the site, the soils have been heavily compacted, making it unsuitable for special status plants. The only potentially suitable habitat

Connie Anderson  
September 16, 2022  
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occurs within, and immediately adjacent to the drainage in the southern portion of the site. Soil types in the survey area include Hesperia fine sandy loam, 0 to 2 percent slopes; and Rosamond loam. (USDA NRCS 2007). Exhibit 5 shows a map of soil types throughout the survey area.

### **SURVEY RESULTS**

No special status plants were observed during the survey. No plants regulated by the City of Palmdale and the California Desert Native Plants Act and Native Desert Vegetation Preservation Ordinance were observed on-site during the survey.

A list of all plants observed within the survey area during the focused plant surveys can be found in Attachment. Table 1 below lists the special status plant species known to occur in the vicinity of the Project site along with habitat suitability within the survey area and survey results.

**TABLE 1  
SPECIAL STATUS PLANT SPECIES KNOWN TO OCCUR  
IN THE SURVEY AREA VICINITY**

Scientific Name	Common Name	CDFW	CRPR	Species Background	Potential
<i>Astragalus hornii</i> var. <i>hornii</i>	Horn's milk-vetch		1B.1	Annual herb. Lake margins and alkaline soils in meadows, seeps, and playas; 196–2,788 ft. Southern California County Distribution: Kern, San Bernardino (Presumed extirpated). Blooming period: May–October	No suitable habitat present. Not observed during focused surveys.
<i>Astragalus preussii</i> var. <i>laxiflorus</i>	Lancaster milk-vetch		1B.1	Perennial herb. Chenopod scrub; elevation range unknown due to lack of records. Southern California County Distribution: Kern, Los Angeles, Riverside, San Bernardino. Blooming period: March–May	No suitable habitat present. Not observed during focused surveys.
<i>Calochortus striatus</i>	alkali mariposa lily		1B.2	Perennial bulbiferous herb. Alkaline and mesic soils in chaparral, chenopod scrub, Mojavean desert scrub, meadows, seeps, desert grasslands; 230–5,232 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: April–June	No suitable habitat present. Not observed during focused surveys.
<i>Calystegia peirsonii</i>	Peirson's morning-glory		4.2	Perennial rhizomatous herb. Chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, grassland; 98–4,920 ft. Southern California County Distribution: Los Angeles. Blooming period: April–June	No suitable habitat present. Not observed during focused surveys.
<i>Canbya candida</i>	white pygmy-poppy		4.2	Annual herb. Gravelly, sandy, or granitic soils in Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland; 1,968–4,789 ft. Southern California County Distribution: Imperial, Kern, Los Angeles, San Bernardino. Blooming period: March–June	Marginally suitable habitat. Not observed during focused surveys.
<i>Chorizanthe spinosa</i>	Mojave spineflower		4.2	Annual herb. Sometimes alkaline soils in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and playas; 20–4,264 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–July	No suitable habitat present. Not observed during focused surveys.
<i>Cymopterus deserticola</i>	desert cymopterus		1B.2	Perennial herb. Sandy soil in Joshua tree woodland and Mojavean desert scrub; 2,066–4,920 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–May.	No suitable habitat present. Not observed during focused surveys.
<i>Eriastrum rosamondense</i>	Rosamond eriastrum		1B.1	Annual herb. Alkaline hummocks in often sandy soil in openings of chenopod scrub and the edges of vernal pools; 2,296–2,345 ft. Southern California County Distribution: Kern, Los Angeles. Blooming period: April–July	No suitable habitat present. Not observed during focused surveys.
<i>Eriophyllum mohavense</i>	Barstow woolly sunflower		1B.2	Annual herb. Chenopod scrub, Mojavean desert scrub, and playas; 1,640–3,149 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–May	No suitable habitat present. Not observed during focused surveys.
<i>Gilia latiflora</i> ssp. <i>cuyamensis</i>	Cuyama gilia		4.3	Annual herb. Sandy soil in Pinyon and juniper woodland; 1,952–6,560 ft. Southern California County Distribution: Kern, Los Angeles, Ventura. Blooming period: April–June	No suitable habitat present. Not observed during focused surveys.
<i>Goodmania luteola</i>	golden goodmania		4.2	Annual herb. Alkaline or clay soils in Mojavean desert scrub, meadows, seeps, playas, and grassland; 66–7,216 ft. Southern California County Distribution: Kern, Los Angeles. Blooming period: April–August	No suitable soils. Not observed during focused surveys.
<i>Loeflingia squarrosa</i> var. <i>artemisiarum</i>	sagebrush loeflingia		2B.2	Annual herb. Sandy soil in desert dunes, great basin scrub, and Sonoran desert scrub; 2,296–5,297 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: April–May	Marginally suitable habitat. Not observed during focused surveys.
<i>Lycium torreyi</i>	Torrey's box-thorn		4.2	Perennial shrub. Coastal scrub and Sonoran desert scrub; -10–3,660 ft. Southern California County Distribution: Imperial, Riverside, San Bernardino, San Diego. Blooming period: January–November	Marginally suitable habitat. Not observed during focused surveys.
<i>Muilla coronata</i>	crowned muilla		4.2	Perennial cormous herb. Chenopod scrub, Mojavean desert scrub, Joshua tree and Pinyon and juniper woodland; 2,509–6,429 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–May	Marginally suitable habitat. Not observed during focused surveys.
<i>Opuntia basilaris</i> var. <i>brachyclada</i>	short-joint beavertail		1B.2	Stem succulent shrub. Chaparral, Mojavean desert scrub, Joshua tree, Pinyon and juniper woodland; 1,394–5,904 ft. Southern California County Distribution: Los Angeles, San Bernardino. Blooming period: April–August	No suitable habitat present. Not observed during focused surveys.
<i>Perideridia pringlei</i>	adobe yampah		4.3	Perennial herb. Serpentine or often clay soils in chaparral, cismontane woodland, coastal scrub, Pinyon and juniper woodland; 984–5,904 ft. Southern California County Distribution: Kern, Los Angeles, Ventura. Blooming period: April–July	No suitable soils. Not observed during focused surveys.
<i>Puccinellia simplex</i>	California alkali grass		1B.2	Annual herb. Saline flats, mineral springs; <2,953 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino. Blooming period: March–May	No suitable habitat present. Not observed during focused surveys.
<i>Yucca brevifolia</i>	western Joshua tree	CST		Perennial herb. Desert flats, slopes; 1,312–7,546 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino, Riverside. Blooming period: March–June	Potentially suitable habitat present. Not observed during focused surveys.

CDFW: California Department of Fish and Wildlife; CRPR: California Rare Plant Rank

**Species Status:**

**State (CDFW)**

CST Candidate State Threatened

**CRPR**

- 1B Plants Rare, Threatened, or Endangered in California and elsewhere
- 2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere
- 4 Plants of limited distribution - watch list
- .1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
- .2 Moderately threatened in California (20–80% of occurrences threatened; moderate degree and immediacy of threat)
- .3 Not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known)

Connie Anderson  
September 16, 2022  
Page 5

Psomomas appreciates the opportunity to assist on this project. If you have any comments or questions, please call Marc Blain at (626) 351-2000.

Sincerely,

**P S O M A S**



Marc T. Blain  
Senior Project Manager



Sarah Thomas  
Biologist

Enclosures:    Exhibit 1 – Regional Location and Local Vicinity  
                  Exhibit 2 – USGS Quadrangle Map  
                  Exhibit 3 – Survey Area  
                  Exhibit 4 – Vegetation Map and Other Areas  
                  Exhibit 5 – Soils Map  
                  Attachment A – Plant Compendium

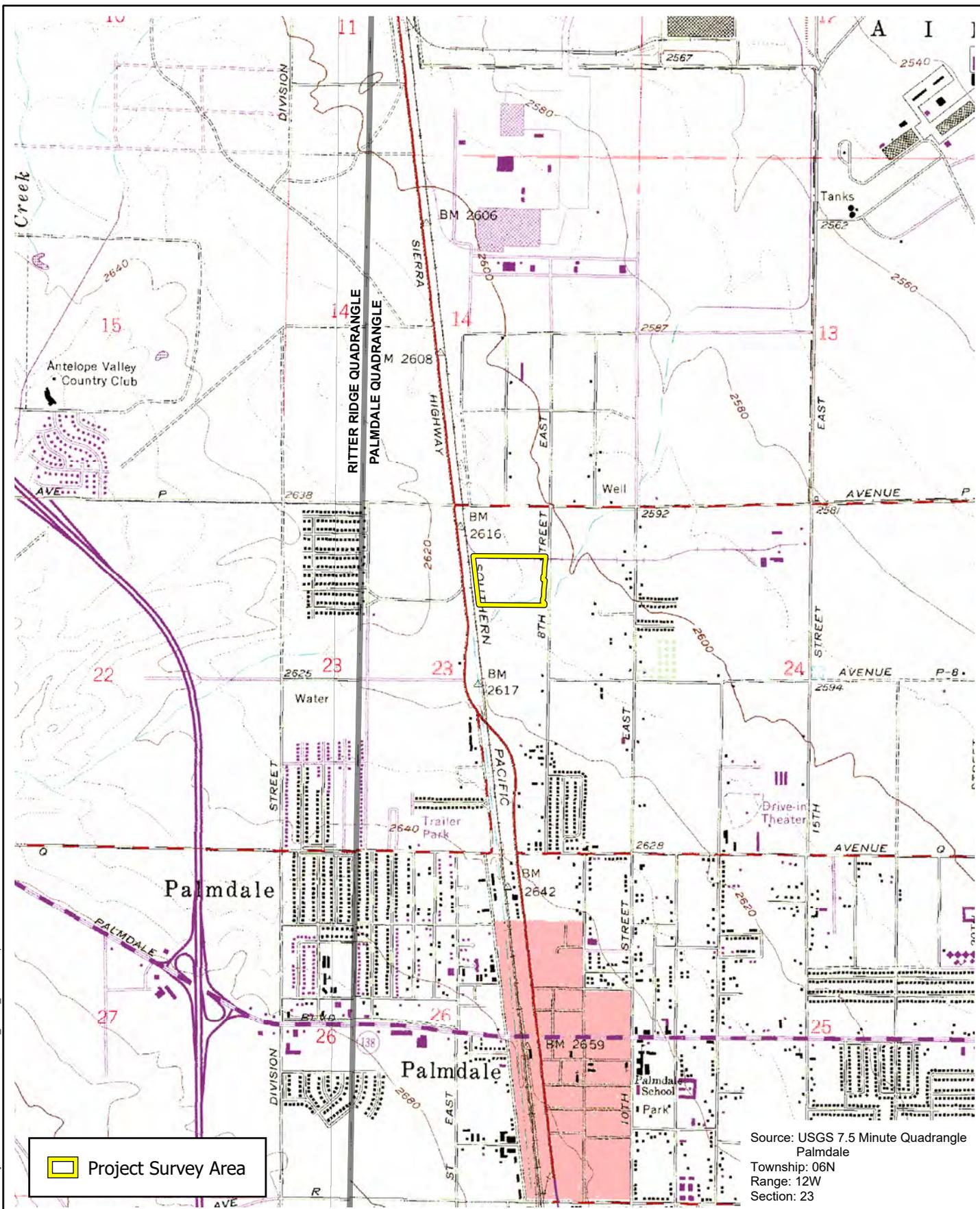
Connie Anderson  
September 16, 2022  
Page 6

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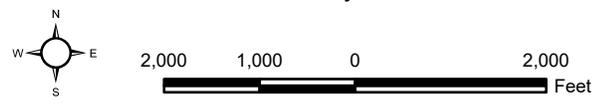
 Project Survey Area

Source: USGS 7.5 Minute Quadrangle  
 Palmdale  
 Township: 06N  
 Range: 12W  
 Section: 23

# USGS 7.5-Minute Digital Quadrangle

8th Street East Industrial Project

# Exhibit 2



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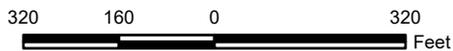


Aerial Source: Esri, Maxar 2021

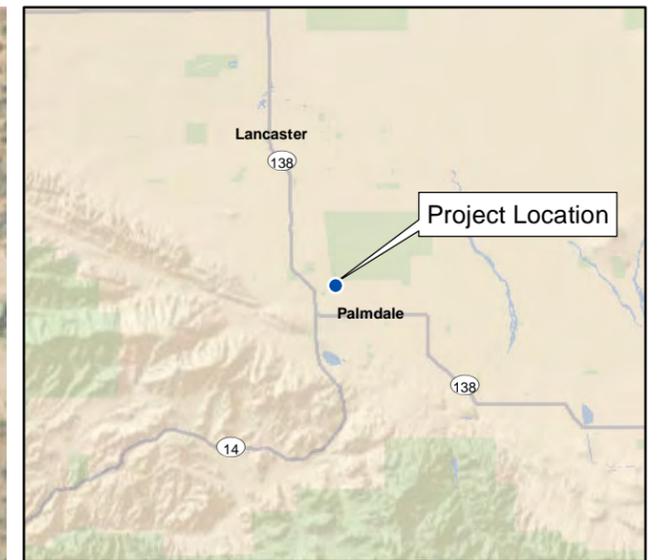
## Survey Area

*8th Street East Industrial Project*

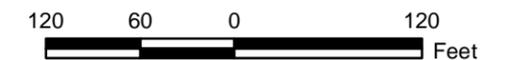
## Exhibit 3



(Rev: 09/16/2022 JVR) R:\Projects\TBP\3TBP010300\Graphics\Plantex\_Survey\_Area.pdf



-  Project Survey Area
- Vegetation Types and Other Areas**
-  big sagebrush - rubber rabbitbrush scrub
-  developed/ disturbed rubber rabbitbrush scrub
-  disturbed rubber rabbitbrush scrub



Aerial Source: Esri, Maxar 2021

**Vegetation Types and Other Areas** **Exhibit 4**  
*8th Street East Industrial Project*



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 Project Survey Area

**Soil Types**

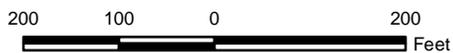
 HkA: Hesperia fine sandy loam, 0 to 2 percent slopes

 Rp: Rosamond loam

Data Source: U.S. Department of Agriculture;  
Natural Resources Conservation Service  
Aerial Source: Esri, Maxar 2021

# Soils Map

8th Street East Industrial Project



# Exhibit 5



**ATTACHMENT A**  
**PLANT COMPENDIUM**

**PLANTS OBSERVED WITHIN THE SURVEY AREA  
DURING FOCUSED PLANT SURVEYS**

Species	
Scientific Name	Common Name
<b>GYMNOSPERMS</b>	
EPHEDRACEAE – EPHEDRA FAMILY	
<i>Ephedra nevadensis</i>	Nevada ephedra
<b>EUDICOTS</b>	
ASTERACEAE – SUNFLOWER FAMILY	
<i>Artemisia tridentata</i>	big sagebrush
<i>Ericameria nauseosa</i>	rubber rabbitbrush
<i>Lessingia glandulifera</i>	glandular lessingia
<i>Senecio flaccidus</i>	threadleaf ragwort
BORAGINACEAE – BORAGE FAMILY	
<i>Heliotropium curassavicum var. oculatum</i>	seaside heliotrope
BRASSICACEAE – MUSTARD FAMILY	
<i>Hirschfeldia incana*</i>	grayish shortpod mustard
<i>Sisymbrium altissimum*</i>	tumble mustard
CHENOPODIACEAE – GOOSEFOOT FAMILY	
<i>Atriplex canescens</i>	four-wing saltbush
EUPHORBIACEAE – SPURGE FAMILY	
<i>Croton setiger</i>	turkey-mullein
ZYGOPHYLLACEAE – CALTROP FAMILY	
<i>Larrea tridentata</i>	creosote bush
<b>MONOCOTS</b>	
POACEAE – GRASS FAMILY	
<i>Bromus diandrus*</i>	ripgut grass
* Non-native or invasive species	

**APPENDIX D**

**BLAINVILLE'S HORNED LIZARD SURVEY REPORT**

September 15, 2022

Connie Anderson  
T&B Planning, Inc  
Director of New Business Services/Project Manager  
3200 El Camino Real, Suite 100  
Irvine, California 92602

VIA EMAIL  
canderson@tbplanning.com

Subject: Results of a Focused Survey for Blainville’s Horned Lizard for the 8<sup>th</sup> Street East Industrial Project, City of Palmdale, Los Angeles County, California

Dear Ms. Anderson:

This Letter Report summarizes the findings of focused surveys to determine the presence or absence of Blainville’s horned lizard (*Phrynosoma blainvillii*) for the Palmdale Logistics Park Project (hereinafter referred to as “the proposed Project”) in the City of Palmdale, Los Angeles County, California.

## PROJECT LOCATION AND SETTING

The Proposed Project is located on approximately 18 acres in the southern portion of the Antelope Valley in the City of Palmdale. The Project site is situated east of Sierra Highway, west of 8<sup>th</sup> Street East, and approximately 800 feet south of East Avenue P in the City of Palmdale (Exhibit 1). The Project site is located on the Palmdale U.S. Geologic Survey 7.5-minute quadrangle map (Exhibit 2). Elevations range from approximately 2,610 feet above mean sea level (msl) to approximately 2,620 feet above msl. The Project site is currently undeveloped but has had some previous disturbance and is directly adjacent (south of) a decommissioned segment of the Pacific Union Railroad. Vegetation on the site is comprised mostly of disturbed rubber rabbitbrush scrub, with a small patch of developed/disturbed rubber rabbitbrush scrub in the eastern portion of the site and big sagebrush – rubber rabbitbrush scrub in the drainage that runs along the southern edge of the site. Most of the site has been disturbed historically (e.g., evidence of heavy machine work such as scraping), and contains many trash piles from illegal dumping.

## BACKGROUND

The Blainville’s horned lizard is a California Department of Fish and Wildlife’s (CDFW’s) California Species of Special Concern species. This medium sized species of lizard is flat, spiny, and generally flat-bodied with an overall oval-shape. They can be reddish, brown, yellow, or gray in color with darker blotches on the back and large dark spots on the sides of the neck. The belly scales are smooth and usually cream beige or yellow, usually with dark spots. Blainville’s horned lizard can be distinguished from the desert horned lizard (*Phrynosoma platyrhinos*) which overlaps in range in the Project area by the larger crown of spines around the base of its head and two rows of pointed fringe scales on the side of the body instead of one row like the desert horned lizard.

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[www.Psomas.com](http://www.Psomas.com)

Blainville’s horned lizard occurs throughout much of California, west of the desert and Cascade-Sierra highlands south to Baja California, Mexico (Stebbins 2012). This species occurs in scrubland, grassland, coniferous forests, and broadleaf woodland vegetation types (Stebbins 2012). It prefers open areas for basking and loose, friable soil for burrowing (Stebbins 2012). The Blainville’s horned lizard is considered an ant-eating specialist, eating primarily native harvester ants such as the black harvester ant (*Veromessor pergandei*) observed on the Project site. Ants comprise more than 90% of their diet in some populations (Pianka and Parker 1975 and Suarez et al. 2000, cited in UC Davis 2011). Blainville’s horned lizards mate and reproduce in spring and early summer and are generally active through summer into the early fall months. The Project site is located at the eastern edge of the Blainville’s horned lizard’s range.

Two historical observations from 1964 occur in the vicinity of the Project site—one overlaps the Project site, and one occurs approximately 3.7 miles to the north (CDFW 2022). Potentially suitable habitat for the lizard occurs in the Project site in the sandy stream bottom of the drainage that runs east-to-west along the southern border of the Project boundary.

**METHODS**

There are currently no agency guidelines or protocols for conducting Blainville’s horned lizard surveys. Therefore, Pomas Biologists used approved protocols for similar special status reptile species as guidelines and determined survey methodology based on previous experience and life history of the species. The presence/absence surveys for the Blainville’s horned lizard were conducted by qualified Biologists between June and July when the species are most likely to be observed. To achieve 100 percent visual coverage, appropriate habitat within the project site was surveyed three times on separate days by using meandering transects. The focused surveys were conducted on June 13, and July 6 and 27, 2022. Surveys were conducted in early morning and afternoon hours when weather conditions were acceptable for reptile activity (e.g., temperatures under 90 degrees Fahrenheit, clear skies, and sustained winds below 10 miles per hour). Table 1 below summarizes weather conditions during each day of the surveys.

**TABLE 1  
 BLAINVILLE’S HORNED LIZARD SURVEY WEATHER CONDITIONS**

Survey Number	Date	Surveyor(s)	Survey Time	Weather Conditions		
				Temperature (°F) (Start/End)	Wind (mph) (Start/End)	Cloud Cover (%) (Start/End)
Survey 1	6/13/2022	Thomas	1150–1240	76/80	7/9	15/15
Survey 2	7/6/2022	Thomas	1205–1255	78/80	8/9	25/25
Survey 3	7/17/2022	Thomas	0950–1040	79/84	8/6	10/10

<sup>°</sup>F: degrees Fahrenheit; mph: miles per hour

**RESULTS**

In addition to temperature and other weather data, all lizard species encountered were recorded, as well as presence, or characteristic sign, of all observed wildlife species (Attachment A). No Blainville’s horned lizards were observed within the survey area.

Connie Anderson  
September 15, 2022  
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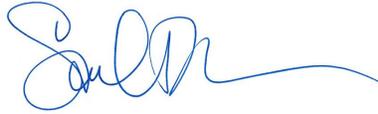
If you have any comments or questions, please call Marc Blain at 626.351.2000.

Sincerely,

**P S O M A S**



Marc T. Blain  
Senior Project Manager



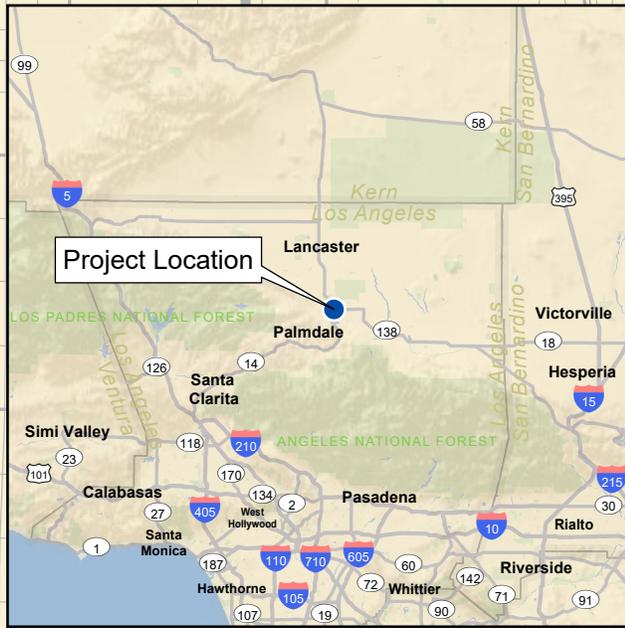
Sarah Thomas  
Biologist

Enclosures:    Exhibit 1 – Project Location  
                  Exhibit 2 – U.S. Geological Survey 7.5-Minute Quadrangle  
                  Attachment A – Wildlife Compendium

Connie Anderson  
September 15, 2022  
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## REFERENCES

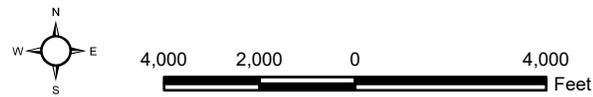
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 Project Survey Area

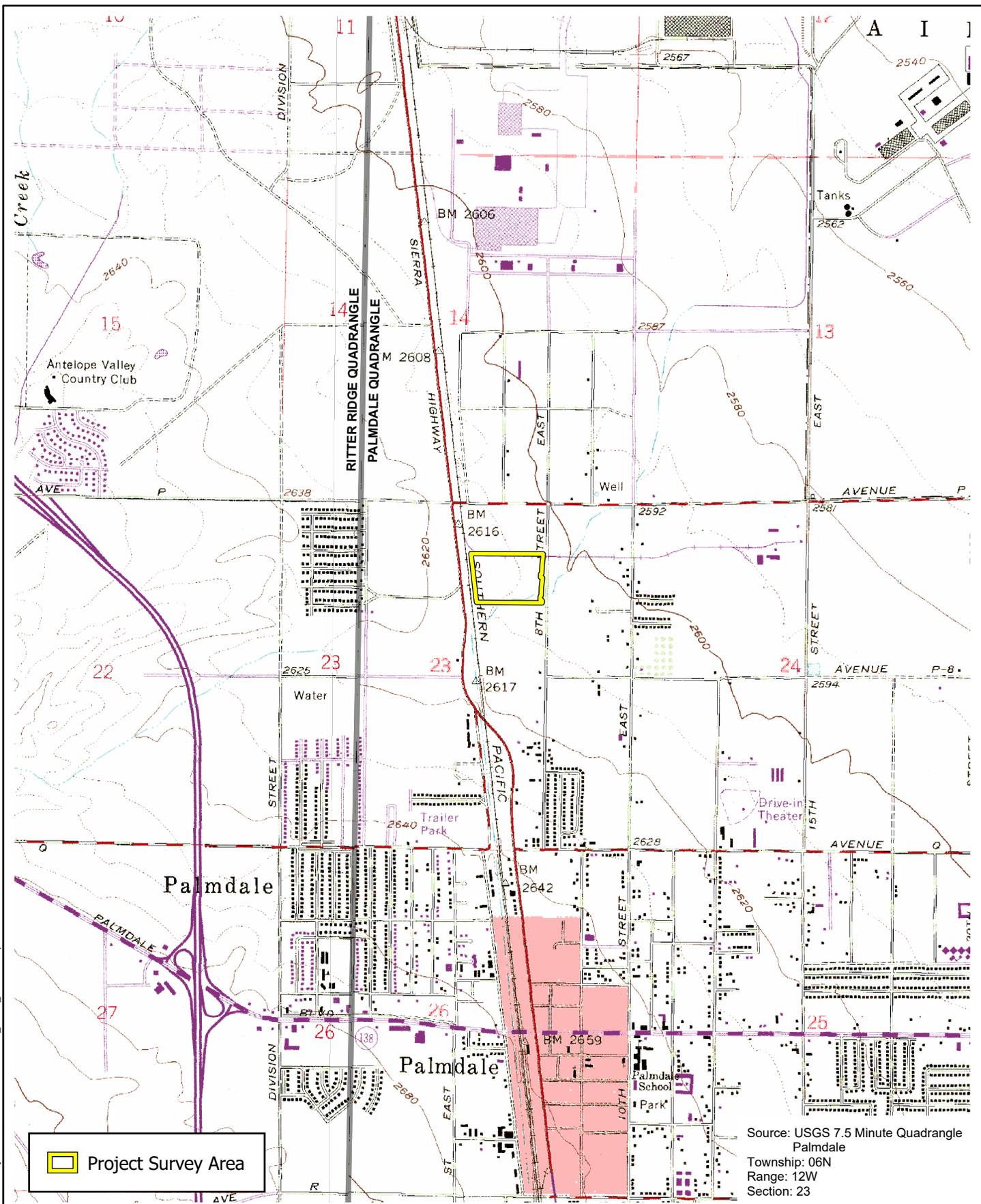
## Regional Location and Local Vicinity

### 8th Street East Industrial Project



## Exhibit 1





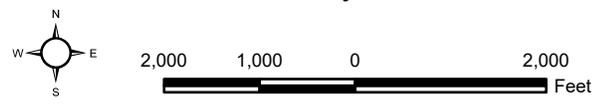
 Project Survey Area

Source: USGS 7.5 Minute Quadrangle  
 Palmdale  
 Township: 06N  
 Range: 12W  
 Section: 23

# USGS 7.5-Minute Digital Quadrangle

8th Street East Industrial Project

# Exhibit 2



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**ATTACHMENT A**  
**WILDLIFE COMPENDIUM**

## WILDLIFE SPECIES OBSERVED DURING SURVEYS

Species	
Scientific Name	Common Name
<b>LIZARDS</b>	
PHRYNOSOMATIDAE – SPINY LIZARD FAMILY	
<i>Uta stansburiana</i>	common side-blotched lizard
<b>BIRDS</b>	
ACCIPITRIDAE – HAWK FAMILY	
<i>Buteo jamaicensis</i>	red-tailed hawk
CORVIDAE – JAY AND CROW FAMILY	
<i>Corvus corax</i>	common raven
ALAUDIDAE – LARK FAMILY	
<i>Eremophila alpestris</i>	horned lark
TROGLODYTIDAE – WREN FAMILY	
<i>Campylorhynchus brunneicapillus</i>	cactus wren
STURNIDAE – STARLING FAMILY	
<i>Sturnus vulgaris</i> *	European starling*
FRINGILLIDAE – FINCH FAMILY	
<i>Haemorhous mexicanus</i>	house finch
PASSERELLIDAE – NEW WORLD SPARROW FAMILY	
<i>Artemisiospiza belli</i>	Bell's sparrow
<b>MAMMALS</b>	
LEPORIDAE – HARE AND RABBIT FAMILY	
<i>Lepus californicus</i>	black-tailed jackrabbit
* Non-native	

**APPENDIX E**  
**BURROWING OWL SURVEY REPORT**

September 14, 2022

Connie Anderson  
T&B Planning, Inc  
Director of New Business Services/Project Manager  
3200 El Camino Real, Suite 100  
Irvine, California 92602

VIA EMAIL  
canderson@tbplanning.com

Subject: Results of a Focused Survey for Burrowing Owl for the 8<sup>th</sup> Street East Industrial Project,  
City of Palmdale, Los Angeles County, California

Dear Ms. Anderson:

This Letter Report presents the results of focused surveys for the western burrowing owl (*Athene cunicularia hypugaea*) for the 8<sup>th</sup> Street East Industrial Project (hereinafter referred to as “the Proposed Project”) in the City of Palmdale, Los Angeles County, California (Exhibit 1). The purpose of the survey was to determine the presence or absence of the western burrowing owl during its breeding period (i.e., March 1 to August 31) on or immediately adjacent to the Project area. The habitat assessment determined that potentially suitable habitat for the western burrowing owl was present and, as a result, focused surveys were required. The surveys were completed in accordance with the California Department of Fish and Wildlife’s (CDFW’s) *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) by Psomas biologists who have the necessary training and experience to conduct surveys for burrowing owls.

## PROJECT LOCATION AND SETTING

The Proposed Project is located on approximately 18-acres in the southern portion of the Antelope Valley in the City of Palmdale. The Project site is situated east of Sierra Highway, west of 8<sup>th</sup> Street East, and approximately 800 feet south of East Avenue P in the city of Palmdale (Exhibit 1). The Project site is located on the Palmdale U.S. Geologic Survey 7.5-minute quadrangle map (Exhibit 2). Elevations range from approximately 2,610 feet above mean sea level (msl) to approximately 2,620 feet above msl. The Project site is currently undeveloped but has had some previous disturbance and is directly adjacent (south of) a decommissioned portion of the Pacific Union Railroad. Vegetation on the site is comprised mostly of disturbed rubber rabbitbrush scrub, with a small patch of developed/disturbed rubber rabbitbrush scrub in the eastern portion of the site and big sagebrush - rubber rabbitbrush scrub in the drainage that runs along the southern edge of the site. Most of the site has been disturbed historically (e.g., evidence of heavy machine work such as scraping), and contains many trash piles from illegal dumping.

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Connie Anderson  
September 14, 2022  
Page 2

## BACKGROUND

The western burrowing owl is a grassland specialist distributed throughout western North America, where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments, with well-drained, level to gently sloping areas characterized by sparse vegetation and bare ground (Poulin et al. 2020; Shaffer et al. 2022). Burrowing owls in Florida excavate their own burrows, but western burrowing owls depend upon the presence of burrowing mammals whose burrows are used for roosting and nesting (Poulin et al. 2020). The presence or absence of colonial fossorial mammal burrows (e.g., California ground squirrels [*Spermophilus beecheyi*]) is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drainpipes, stand-pipes, and dry culverts. Burrowing mammals may burrow beneath rocks; debris; or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. Large, hard objects at burrow entrances stabilize the entrance from collapse and may inhibit excavation by predators.

Burrowing owls often use “satellite”, or non-nesting burrows, moving chicks into them from the nesting burrow, presumably to reduce the risk of predation (Desmond and Savidge 1998) and possibly to avoid nest parasites (Shaffer et al. 2022). One pair may use up to ten satellite burrows (James and Seabloom 1968). Individual burrowing owls have a moderate to high site fidelity to previously used burrow complexes and often use the same burrows for nesting year after year.

The western burrowing owl was once abundant and widely distributed within coastal Southern California, but it has declined precipitously in Los Angeles, Orange, San Diego, Riverside, and San Bernardino Counties. Although a petition was submitted to list the California population of the western burrowing owl as an Endangered or Threatened species, the CDFW declined to list the burrowing owl as either Threatened or Endangered in consideration of its overall population throughout the state. However, the CDFW considers the burrowing owl to be a California Species of Special Concern (CDFW 2022).

## SURVEY METHODOLOGY

Focused surveys for the burrowing owl were conducted during the breeding season, which extends from March 1 to August 31. The CDFW guidelines specify time periods in which the four focused crepuscular surveys should be conducted during the breeding season: at least one survey between February 15 and April 15; three surveys between April 15 and July 15; with at least one survey after June 15. Surveys should be conducted at least three weeks apart.

During the initial reconnaissance-level wildlife survey conducted on December 10, 2022, it was determined that potentially suitable habitat for burrowing owl was present on the Project site and immediately adjacent. The burrow survey was conducted the same day by Psomas Biologists Sarah Thomas and Jack Underwood. The burrow survey was conducted by walking the Project site in 10- to 20-meter (approximately 33 feet to 65 feet) belt transects (depending on shrub coverage) to achieve 100 percent visual coverage. Potentially suitable burrows were marked with Garmin Global Positioning System (GPS) units. Any natural or man-made cavities large enough to allow a burrowing owl to enter were inspected for evidence of occupation. Evidence of occupation may include prey remains, cast pellets, white-wash, feathers, and observations of owls adjacent to burrows. The burrow survey was conducted at least five days after rain, which could have washed away potential sign. Areas containing suitable habitat within 500 feet of the Project site were surveyed with binoculars.

The CDFW guidelines specify time periods in which the four focused crepuscular surveys should be conducted during the breeding season: at least one survey between February 15 and April 15; three surveys between April 15 and July 15; with at least one survey after June 15. Surveys should be conducted at least three weeks apart. Ms. Thomas and Mr. Underwood conducted the focused crepuscular surveys on February 15; May 2 and 30; and June 20, 2022. These surveys were conducted from either one hour before sunrise to two hours after, or from two hours before sunset to one hour after. The surveys were conducted when light conditions were sufficient to observe burrowing owl flights. All potential habitat (e.g., areas where potentially suitable burrows were located) within the survey area was surveyed by walking in meandering transects to allow 100 percent visual coverage of the study area. The transects were spaced no more than approximately 65 feet apart in order to ensure 100 percent visual coverage of the ground surface. At the start of each transect and, at least, every 300 feet, the study area was scanned for burrowing owls or burrowing owl sign (e.g., pellets, prey remains, whitewash, or decoration) using binoculars. Periodically, binoculars were used to inspect holes; crevices; and potential perches such as rocks, fence posts, and other elevated structures for the presence of owls while listening for owl calls. All wildlife observed were recorded in field notes (Attachment B). Survey times and weather conditions are summarized in Table 1 below.

**TABLE 1  
 SUMMARY OF BURROWING OWL SURVEYS**

Survey Number	Date	Time (Start/End)	Surveyor(s)	Weather Conditions		
				Temperature (°F) (Start/End)	Wind (mph) (Start/End)	Cloud Cover (%) (Start/End)
Habitat Assessment/Burrow Survey	12/10/2022	8:00 AM–12:00 PM	Thomas, Underwood	45/55	0–1/0–1	60/60
Crepuscular Survey 1	2/15/2022	6:05 AM–7:10 AM	Thomas, Underwood	50/58	5/5	Clear/Clear
Crepuscular Survey 2	5/2/2022	6:35 AM–7:30 AM	Thomas	66/73	5/6	Clear/10
Crepuscular Survey 3	5/30/2022	6:50 AM–8:15 AM	Thomas	65/70	0/1	50/30
Crepuscular Survey 4	6/20/2022	7:45 AM–8:40 AM	Thomas	66/74	0–1/0–1	20/Clear

°F: Fahrenheit; mph: miles per hour; %: percent

**SURVEY RESULTS**

No burrowing owl individuals or active/inactive burrowing owl burrows were observed during the surveys. Suitable habitat and potentially suitable burrows for burrowing owl occurs in the disturbed rubber rabbitbrush scrub portions of the Project site. One special status species, the loggerhead shrike (*Lanius ludovicianus*), was observed in the southwestern portion of the site. A California Natural Diversity Database form will be submitted to the CDFW for the observation.

Representative photographs are included in Attachment A. A complete list of all wildlife species observed during the surveys is provided in Attachment B of this report.

Connie Anderson  
September 14, 2022  
Page 4

Psomas appreciates the opportunity to assist on this Project. If you have any comments or questions, please call Marc Blain at 626.351.2000.

Sincerely,

**P S O M A S**



Ann M. Johnston  
Vice President, Resource Management



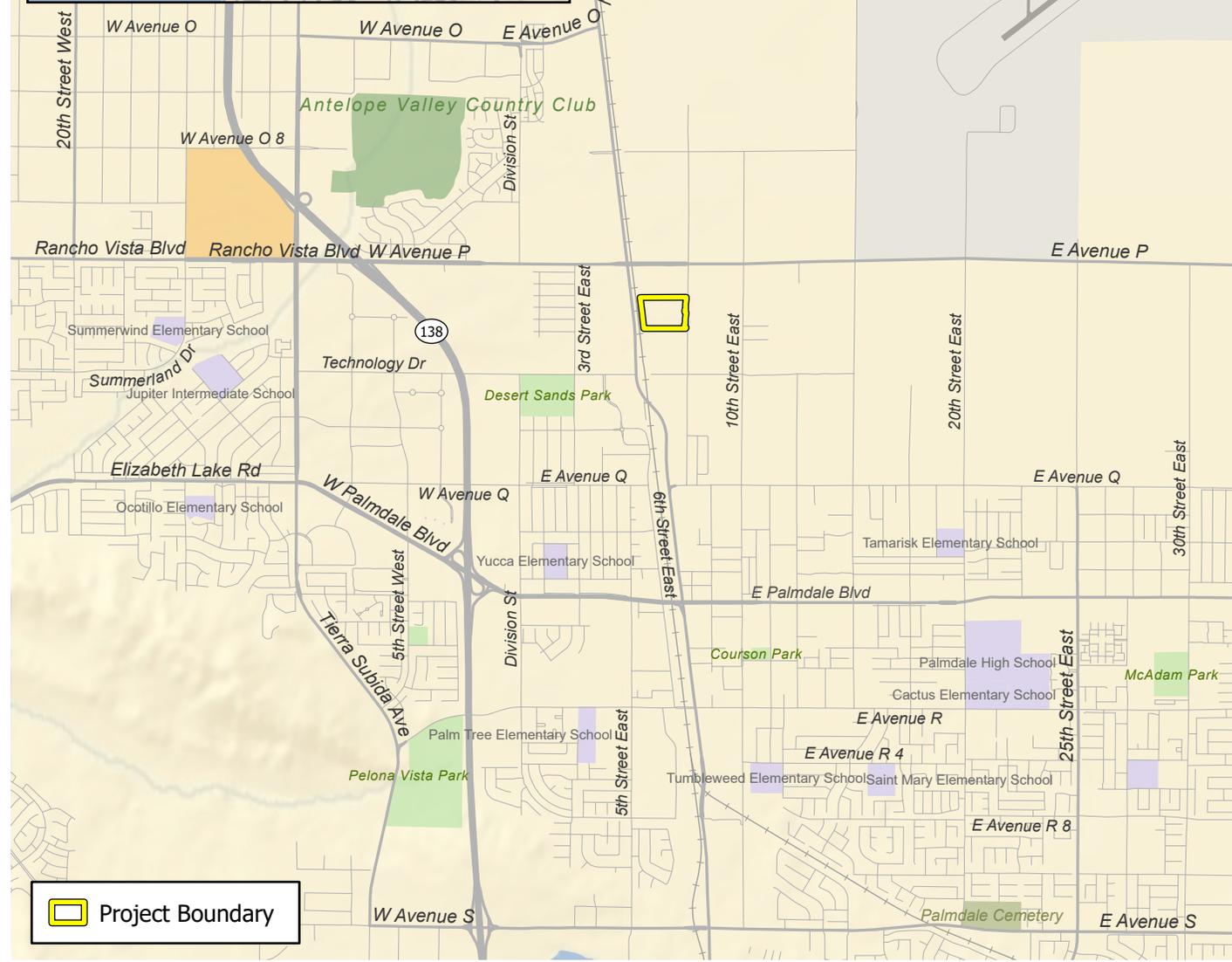
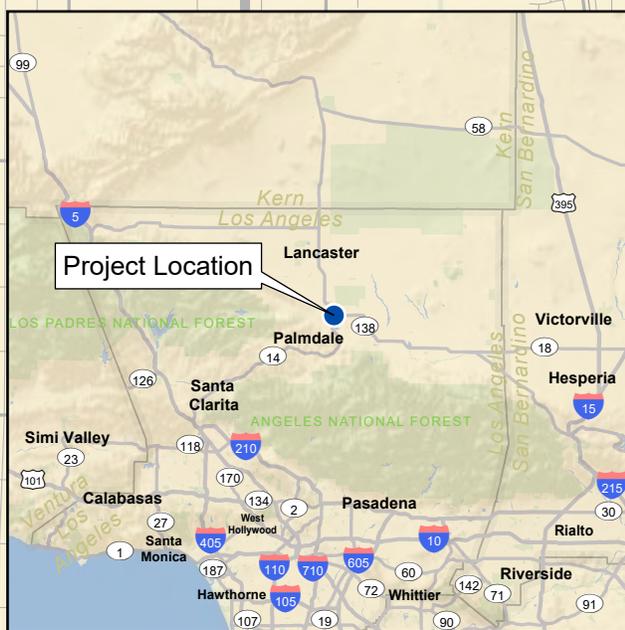
Marc T. Blain  
Senior Project Manager

Exhibits:      Exhibit 1– Project Location  
                  Exhibit 2– U.S. Geological Survey 7.5-Minute Quadrangle  
                  Exhibit 3– Survey Area  
                  Exhibit 4– Survey Results  
Attachments:  A – Representative Site Photographs  
                  B – Wildlife Compendium

Connie Anderson  
September 14, 2022  
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## REFERENCES

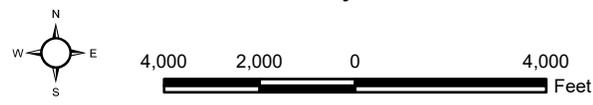
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 Project Boundary

## Regional Location and Local Vicinity

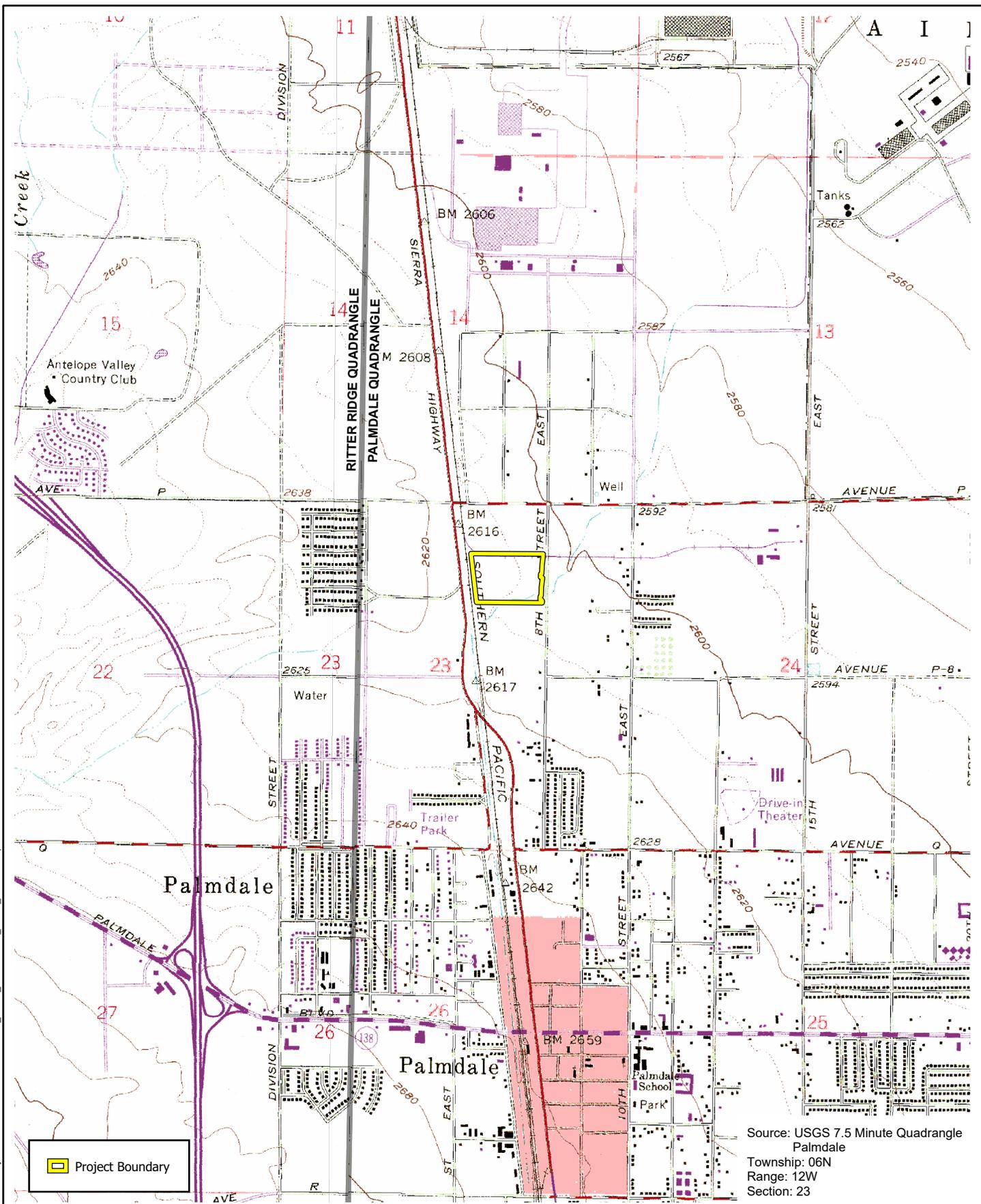
8th Street East Industrial Project



## Exhibit 1



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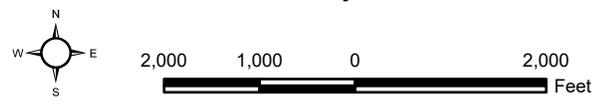
Project Boundary

Source: USGS 7.5 Minute Quadrangle  
 Palmdale  
 Township: 06N  
 Range: 12W  
 Section: 23

# USGS 7.5-Minute Digital Quadrangle

## 8th Street East Industrial Project

# Exhibit 2



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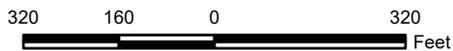
 Survey Area  
 Project Boundary

Aerial Source: Esri, Maxar 2021

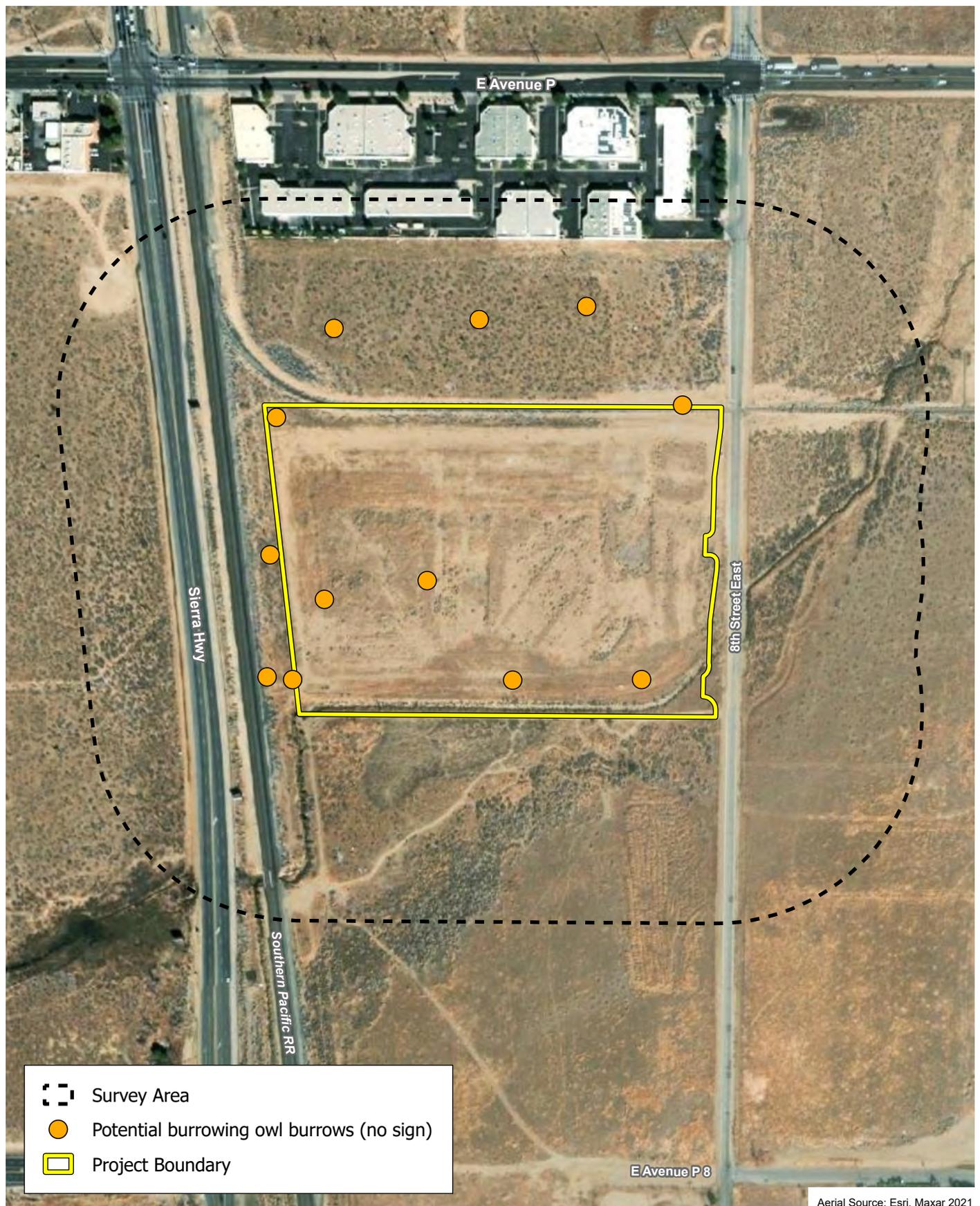
# Survey Area

# Exhibit 3

*8th Street East Industrial Project*



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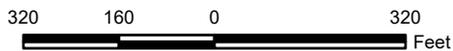


Aerial Source: Esri, Maxar 2021

## Survey Results

## Exhibit 4

8th Street East Industrial Project



**ATTACHMENT A**  
**REPRESENTATIVE SITE PHOTOGRAPHS**



Overview of the site, taken from the southern portion of the site facing north. Showing disturbed rubber rabbitbrush scrub.



Photo of example potential burrowing owl burrow with no sign present, approximately 10 cm round. No active or inactive burrows were documented during the survey.

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## Representative Site Photos

*8th Street East Industrial Project*

Attachment A-1



**ATTACHMENT B**  
**WILDLIFE COMPENDIUM**

## WILDLIFE SPECIES OBSERVED DURING THE SURVEYS

Species		Special Status
Scientific Name	Common Name	
<b>BIRDS</b>		
TYRANNIDAE – TYRANT FLYCATCHER FAMILY		
<i>Sayornis saya</i>	Say's phoebe	
LANIIDAE – SHRIKE FAMILY		
<i>Lanius ludovicianus</i>	loggerhead shrike	SSC
CORVIDAE – JAY AND CROW FAMILY		
<i>Corvus corax</i>	common raven	
TROGLODYTIDAE – WREN FAMILY		
<i>Campylorhynchus brunneicapillus</i>	cactus wren	
MIMIDAE – MOCKINGBIRD AND THRASHER FAMILY		
<i>Mimus polyglottos</i>	northern mockingbird	
FRINGILLIDAE – FINCH FAMILY		
<i>Haemorhous mexicanus</i>	house finch	
PASSERELLIDAE – NEW WORLD SPARROW FAMILY		
<i>Zonotrichia leucophrys</i>	white-crowned sparrow	
<i>Artemisospiza belli</i>	Bell's sparrow	
<i>Passerculus sandwichensis</i>	savannah sparrow	
ICTERIDAE – BLACKBIRDS AND ORIOLES		
<i>Sturnella neglecta</i>	western meadowlark	
PARULIDAE – WOOD-WARBLER FAMILY		
<i>Setophaga coronata</i>	yellow-rumped warbler	
CDFW: California Department of Fish and Wildlife		
<b>Species Status:</b>		
<b>State (CDFW)</b>		
SSC	Species of Special Concern	

**APPENDIX F**  
**JURISDICTIONAL DELINEATION REPORT**

# Jurisdictional Delineation Report

## 8<sup>th</sup> Street East Industrial Project Palmdale, California

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August 29, 2022

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**ATTACHMENTS**

**Attachment**

- A Summary of Regulatory Authority
- B Site Photographs
- C Literature Review Details
- D Wetland Data Form

## **EXECUTIVE SUMMARY**

The purpose of this Jurisdictional Delineation Report is to provide baseline data concerning the type and extent of jurisdictional resources that occur at the 8<sup>th</sup> Street East Industrial Project Site in the city of Palmdale, Los Angeles County, California. Jurisdictional resources considered for this report include wetlands and non-wetland “waters of the United States” (WOTUS) regulated by the U.S. Army Corps of Engineers (USACE); “waters of the State” regulated by the Regional Water Quality Control Board (RWQCB); and the bed, bank, and channel of all lakes, rivers, and/or streams (and associated riparian vegetation), as regulated by the California Department of Fish and Wildlife (CDFW).

The limits of non-wetland WOTUS and “waters of the State” were identified by the presence of an ordinary high water mark (OHWM) and by determining the potential inundation limits of the reservoir. Wetland features were identified based on the USACE’s three-parameter approach in which wetlands are defined by the presence of hydrophytic vegetation, hydric soils, and presence of wetland hydrology indicators.

The jurisdictional delineation work was performed by Psomas Regulatory Specialist David Hughes and Biologist Jack Underwood on March 17, 2022. Based on the results of the jurisdictional delineation field work, it was determined that the total amount of jurisdictional resources on the Project site are as follows:

- **USACE Jurisdictional “waters of the U.S.”:**

Wetlands: 0.00 acre

Non-wetland waters: 0.00 acre (due to lack to connectivity to Traditional Navigable Waterway)

- **RWQCB Jurisdictional “waters of the State”:**

Wetlands: 0.00 acre

Non-wetland waters: 0.35 acre

- **CDFW Jurisdictional Streambeds:**

Streambeds/Riparian Habitat: 0.72 acre

## 1.0 **INTRODUCTION**

This Jurisdictional Delineation Report has been prepared to provide baseline data concerning the type and extent of resources under the jurisdiction of the U.S. Army Corps of Engineers (USACE), Los Angeles Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) for the 8<sup>th</sup> Street East Industrial Project site located in the city of Palmdale, California (hereinafter referred to as the “Project site”).

### 1.1 **PROJECT LOCATION**

The Project site consists of a vacant parcel located east of Sierra Highway, west of 8<sup>th</sup> Street East, and approximately 800 feet south of East Avenue P in the city of Palmdale (Exhibit 1). The Project site comprises Assessor Parcel Number 3022-001-027 and measures approximately 18 acres. The Project site is shown on the U.S. Geological Survey’s (USGS’) Palmdale 7.5-minute topographic quadrangle of the San Bernardino Meridian in Township 6 North, Range 12 West, Section 23 (Exhibit 2).

### 1.2 **EXISTING CONDITIONS**

The Project site consists of a generally flat parcel that appears to have experienced past surficial grading so that many areas of the site are largely unvegetated while other areas contain early successional plant species (Exhibit 3). A graded channel runs from west to east along the southern edge of the Project site. The site does not contain any structures or infrastructure such as roads or drainage structures. Elevation on the Project site ranges from approximately 2,610 to 2,620 feet above mean sea level.

### 1.3 **REGULATORY AUTHORITY**

This section summarizes the federal and State agencies’ regulatory jurisdiction over activities that have a potential to impact jurisdictional resources. A detailed explanation of each agency’s regulatory authority is provided in Attachment A.

#### 1.3.1 **U.S. Army Corps of Engineers**

The USACE Regulatory Branch regulates activities that discharge dredged or fill materials into “waters of the United States” (WOTUS) under Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Its authority applies to all WOTUS where the material (1) replaces any portion of a WOTUS with dry land or (2) changes the bottom elevation of any portion of any WOTUS. Activities that result in fill or dredge of WOTUS require a permit from the USACE.

Recently, the definition of WOTUS has been the subject of shifting regulations. In June of 2020, the United States Environmental Protection Agency (USEPA) and the USACE published the Navigable Waters Protection Rule (NWPR) in the *Federal Register* which defined WOTUS as:

1. Territorial seas and TNWs;
2. Tributaries of jurisdictional waters;
3. Lakes, ponds, and impoundments that contribute surface water flow to a jurisdictional water in a typical year; and
4. Wetlands adjacent to non-wetland jurisdictional waters.



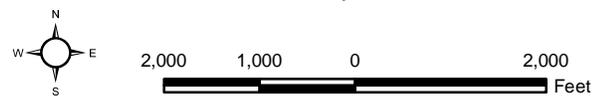
 Project Boundary

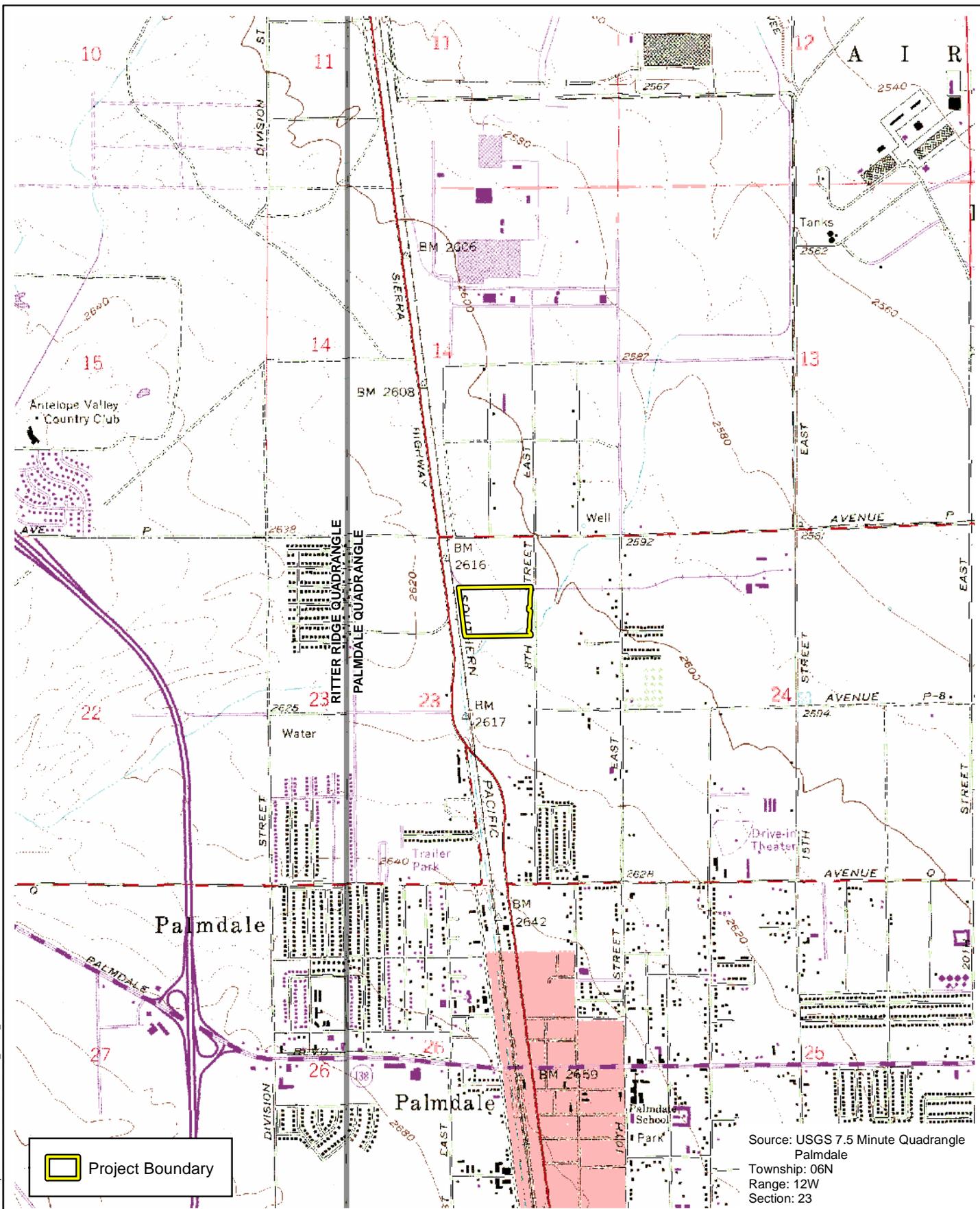
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## Local Vicinity

*Jurisdictional Delineation Report for the 8th Street East Industrial Project*

## Exhibit 1





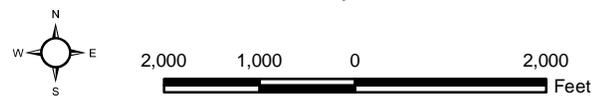
 Project Boundary

Source: USGS 7.5 Minute Quadrangle  
 Palmdale  
 Township: 06N  
 Range: 12W  
 Section: 23

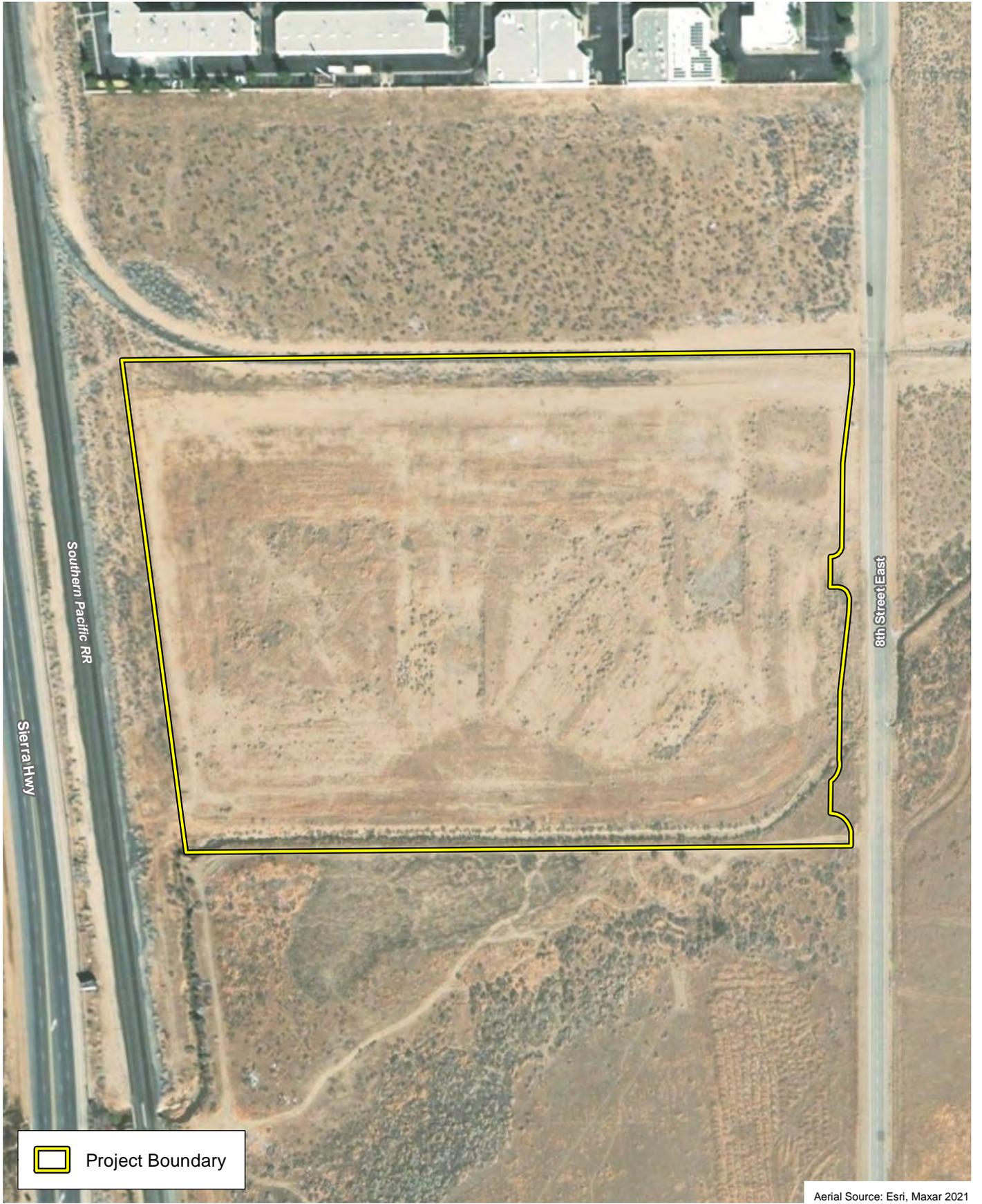
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**U.S. Geological Survey 7.5-Minute Quadrangle**  
*Jurisdictional Delineation Report for the 8th Street East Industrial Project*

**Exhibit 2**



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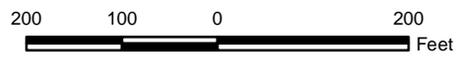
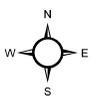
 Project Boundary

Aerial Source: Esri, Maxar 2021

# Project Site

# Exhibit 3

*Jurisdictional Delineation Report for the 8th Street East Industrial Project*



The NWPR also identified twelve categories of waters that are considered non-jurisdictional by rule. These include:

1. All waters not covered by the four categories of WOTUS discussed above;
2. Groundwater;
3. Ephemeral features;
4. Storm water runoff and overland sheet flow;
5. All ditches not considered tributaries;
6. Prior converted cropland;
7. Artificially irrigated areas;
8. Certain artificial lakes and ponds;
9. Water-filled depressions or pits excavated in connection with mining or construction or to obtain fill, sand, or gravel;
10. Certain storm water control features;
11. Groundwater recharge, water reuse, and wastewater recycling structures; and
12. Wastewater treatment systems.

On August 30, 2021, the U.S. District Court for the District of Arizona vacated the NWPR, which led regulatory agencies to define WOTUS according to the pre-2015 regulatory regime. Subsequently, on April 6, 2022, the U.S. Supreme Court halted the District Court decision which effectively reinstates the NWPR's definition of WOTUS described above. The USACE will utilize the NWPR definition of WOTUS until the USEPA issues a new final rule which is expected to be released in the spring of 2023.

Attachment A provides additional information on the current status of this regulatory definition.

### **1.3.2 Regional Water Quality Control Board**

The State Water Resources Control Board (SWRCB), in conjunction with the nine RWQCBs, is the primary agency responsible for protecting water quality in California through the regulation of discharges to surface waters under the CWA and the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The SWRCB's and RWQCBs' jurisdictions extend to all "waters of the State" and to all WOTUS, including wetlands (isolated and non-isolated).

The Porter-Cologne Act broadly defines "waters of the State" as any surface water or groundwater, including saline waters, within the boundaries of the State." On August 28, 2019, the Office of Administrative Law approved the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to "waters of the State", which went into effect on May 28, 2020. Under these new regulations, the SWRCB and its nine RWQCBs will assert jurisdiction over all existing WOTUS, and all waters that have been considered WOTUS under any historical definition.

Impacts to WOTUS are authorized by the RWQCBs through a Water Quality Certification per Section 401 of the CWA. Impacts to "waters of the State" that are not considered WOTUS would be authorized by Waste Discharge Requirements issued by the RWQCB.

On April 6, 2022, the U.S. Supreme Court issued a stay of the October 2021 order by the U.S. District Court for the Northern District of California that vacated EPA's 2020 Clean Water Act Section 401 Certification Rule (2020). The stay of the vacatur applies nationwide. Therefore, the CWA section 401 certification process is once again governed by the CWA section 401 certification regulations promulgated by EPA in 2020 (codified in the Code of Federal Regulations [CFR], Title 40 Section 121). This 2020 rule requires all project proponents to request a pre-filing meeting with the RWQCB at least 30 days prior to filing a 401 "Certification Request". The filing

procedure has been simplified to require the filing of a “Certification Request”, rather than the acceptance of a “complete application”.

There is a mandatory 30 day wait period between a pre-filing meeting request and the filing of a Certification Request. A Certification Request must be filed with the RWQCB and the USACE concurrently. The Certification Request must address nine components specified in 40 CFR § 121.5 which are provided in Attachment A. The USACE has 15 days to review the Certification Request and then notifies the RWQCB that request is complete and of the reasonable time period to act on the Certification Request. The reasonable time period is not to exceed 1 year. Within 15 days of receipt of the Certification Request the RWQCB must provide the applicant with the following: (1) date of receipt; (2) applicable reasonable period of time to act on the Certification Request; and (3) date upon which waiver will occur if the certifying authority fails or refuses to act on the Certification Request.

Once the RWQCB issues the 401 Certification, the USACE has 5 days to notify the USEPA that the 401 Certification has been issued. The USEPA then has 30 days to notify neighboring jurisdictions of the 401 Certification. Neighboring jurisdictions have 60 days to respond. If there are no objections to the 401 Certification, then the USACE issues the 404 permit.

### **1.3.3 California Department of Fish and Wildlife**

The CDFW regulates activities that may affect rivers, streams, and lakes pursuant to the *California Fish and Game Code* (§§1600–1616). According to Section 1602 of the *California Fish and Game Code*, the CDFW has jurisdictional authority over any work that will (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) 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.

## 2.0 **METHODS**

### 2.1 **LITERATURE REVIEW**

Prior to conducting the delineation and during the course of report preparation, Psomas reviewed the following documents to identify areas that may fall under agency jurisdiction: the USGS' Palmdale 7.5-minute topographic quadrangle map; color aerial photography provided by Google Earth; soil data provided by the U.S. Department of Agriculture's Natural Resources Conservation Service (USDA NRCS 2022a); the National Hydric Soils List (USDA NRCS 2022b); the National Wetlands Inventory's Wetland Mapper (USFWS 2022); and the Water Quality Control Plan for the Lahontan Region (Lahontan RWQCB 1995).

### 2.2 **FIELD SURVEY**

The analysis contained in this report uses the results of a field survey conducted by Psomas Regulatory Specialist David Hughes and Biologist Jack Underwood on March 17, 2022. Jurisdictional features were delineated using a 1 inch equals 100 feet (1" = 100') scale aerial photograph. Jurisdictional drainage features were mapped as a line and the width of the agency jurisdiction was noted; other waterbodies (basins) were mapped as polygons.

Photographs that show conditions in the survey area are provided in Attachment B.

### 2.3 **JURISDICTIONAL DELINEATION**

#### 2.3.1 **Non-Wetlands**

Non-wetland WOTUS are delineated based on the limits of the Ordinary High Water Mark (OHWM), which can be determined by a number of factors, including the presence of a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; and the presence of litter and debris. The OHWM limits (i.e., active floodplain) occurring on the Project site as based on methods contained in *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual* (Lichvar and McColley 2008) and the *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Curtis and Lichvar 2010).

It should be noted that the RWQCB shares USACE jurisdiction unless isolated conditions are present. If isolated waters are present, the RWQCB takes jurisdiction using the USACE's definition of the OHWM and/or the three-parameter wetlands method pursuant to the 1987 Wetlands Manual. The CDFW's jurisdiction is defined as the top of the bank on either side of a stream, channel, or basin or to the outer limit of riparian vegetation located within or immediately adjacent to the river, stream, creek, pond, lake, or other impoundment.

#### 2.3.2 **Wetlands**

Technical methods and guidelines to determine the presence and extent of wetlands is described by the USACE in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008). The presence of wetlands is determined by a three-parameter approach requiring evidence of (1) wetland hydrology, (2) hydrophytic vegetation, and (3) hydric soils.

Wetland hydrology is determined by the presence of indicators such as observed surface water; presence of past surface flow; and the depth to saturated soils or free water in soil test pits.

Procedures for determining whether the hydrophytic vegetation criterion is met is based three potential indicators as described in *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008). These include the “Dominance Test”, using the “50/20 Rule”; the “Prevalence Index”; or the presence of “Morphological Adaptation” of vegetation that is present. These indicators are based on determining the presence and relative abundance of plant species that are categorized as Obligate Wetland (typically associated with wetland conditions); Facultative Wetland (predominantly present in wetland conditions); Facultative (equally likely to occur in wetland or non-wetland areas); Facultative Upland (predominantly found in non-wetland areas); or Upland (typically found in mesic to xeric non-wetland habitats). Plant species are categorized in the National Wetland Plant List, created by the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture.

Soils are determined to be hydric when they form under conditions of saturation, flooding, or ponding that occurs long enough during the growing season to develop anaerobic conditions (or conditions of limited oxygen) at or near the soil surface and that favor the establishment of hydrophytic vegetation (USDA NRCS 2022c). The presence of hydric soil conditions is determined where various indicators are observed by digging soil test pits to a depth of approximately 20 inches. Common hydric soil indicators include presence of redoximorphic features (i.e., areas where iron is reduced under anaerobic conditions and oxidized following a return to aerobic conditions); buried organic matter; organic streaking; reduced soil conditions; or sulfuric odor.

One wetland sampling point was located within the on-site channel to determine the presence of wetland conditions.

### 3.0 LITERATURE REVIEW

This section provides a summary of literature review results that were reviewed prior to the field survey and during report preparation that have helped inform the analysis provided in this report.

#### 3.1 USGS TOPOGRAPHIC QUADRANGLE

The USGS topographic quadrangle maps show geological formations and their characteristics; they describe the physical settings of an area through topographic contour lines and other major surface features. These features include lakes, streams, rivers, buildings, roadways, landmarks, and other features that may fall under the jurisdiction of one or more regulatory agencies. In addition, the USGS maps provide topographic information that is useful in determining elevations, latitude and longitude, and Universal Transverse Mercator (UTM) Grid coordinates.

The Project site occurs on the USGS' Palmdale 7.5-minute topographic quadrangle map. The quadrangle map shows an unnamed blue line stream that generally flows from southwest to northeast and passes along the southern edge of the Project site.

#### 3.2 SOIL SURVEY

The presence of hydric soils is one of the chief indicators of jurisdictional wetlands. Psomas reviewed the USDA's soil data for the survey area (Exhibit 4). The survey area contains the following soil types: Hesperia fine sandy loam, 0 to 2 percent slopes, and Rosamond loam.

The National Hydric Soils List (NHSL) identifies a soil map unit as "hydric" if it contains either a major or minor component that is at least in part hydric (USDA NRCS 2022c). The survey area occurs in the Antelope Valley Soil Survey Area in Los Angeles County. Both on-site soil types are listed as potentially hydric on the NHSL. A brief description of these soils is provided in Attachment C of this report.

#### 3.3 NATIONAL WETLANDS INVENTORY

The U.S. Fish and Wildlife Service's Wetland Mapper (USFWS 2022) shows wetland resources available from the Wetlands Spatial Data Layer of the National Spatial Data Infrastructure. This resource provides the classification of known wetlands following the Classification of Wetlands and Deepwater Habitats of the United States (FGDC 2013). This classification system is arranged in a hierarchy of (1) Systems that share the influence of similar hydrologic, geomorphologic, chemical, or biological factors (i.e., Marine Estuarine, Riverine, Lacustrine, and Palustrine); (2) Subsystems (i.e., Subtidal and Intertidal; Tidal, Lower Perennial, Upper Perennial, and Intermittent; or Littoral and Limnetic); (3) Classes, which are based on substrate material and flooding regime or on vegetative life forms; (4) Subclasses; and (5) Dominance Types, which are named for the dominant plant or wildlife forms. In addition, there are modifying terms applied to Classes or Subclasses.

The channel that passes along the southern edge of the Project site occurs on the National Wetland Inventory and is listed as R4SBJ (Riverine, Intermittent Streambed, Intermittently Flooded) (Exhibit 5). The description for this code is as follows:

- **R: System RIVERINE.** The Riverine System includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 parts per trillion (ppt) or greater. A channel is an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water.

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 Project Boundary

**Soil Types**

 HkA: Hesperia fine sandy loam, 0 to 2 percent slopes

 Rp: Rosamond loam

Data Source: U.S. Department of Agriculture;  
Natural Resources Conservation Service  
Aerial Source: Esri, Maxar 2021

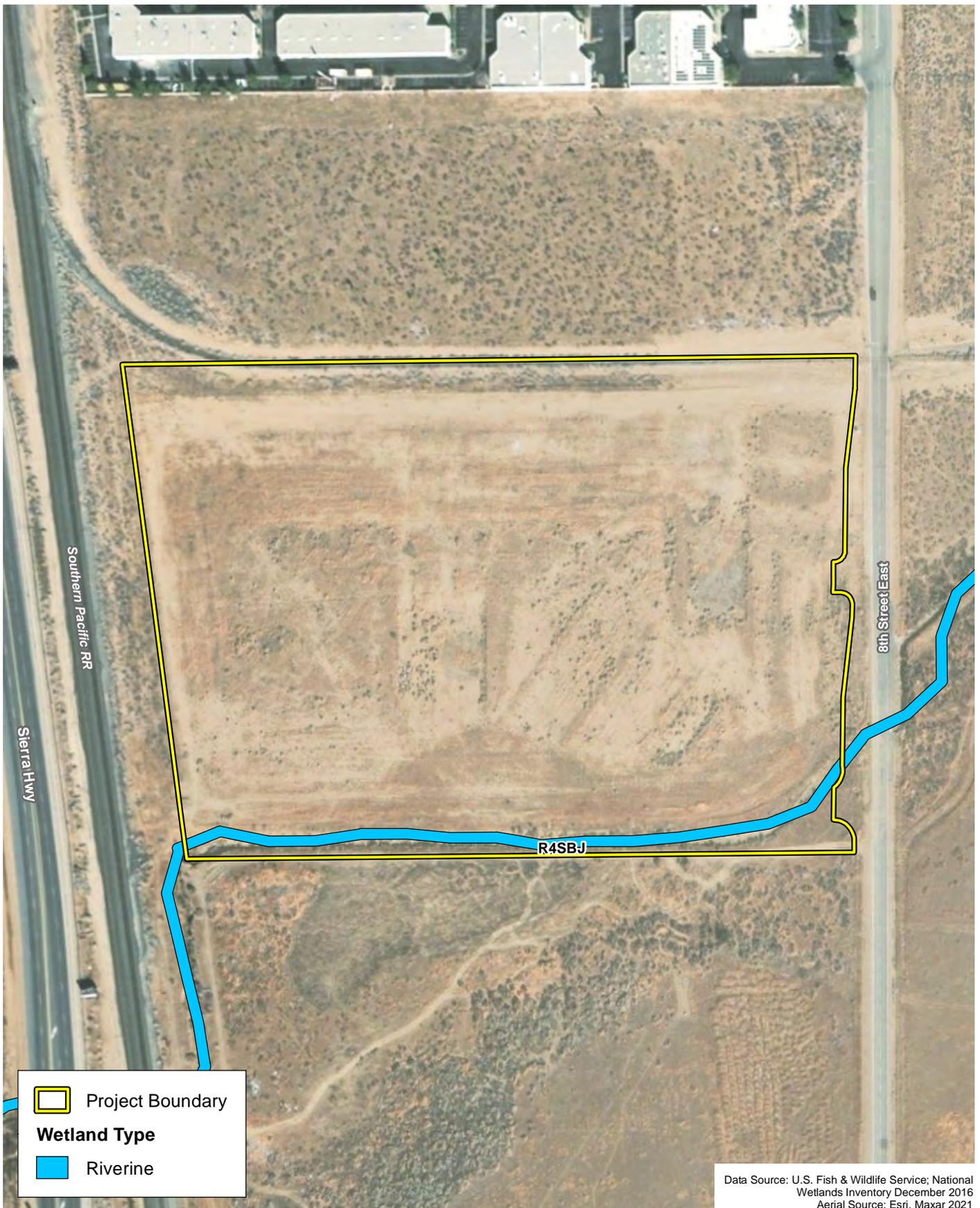
## Soils Map

## Exhibit 4

*Jurisdictional Delineation Report for the 8th Street East Industrial Project*



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 Project Boundary

**Wetland Type**

 Riverine

Data Source: U.S. Fish & Wildlife Service; National Wetlands Inventory December 2016  
Aerial Source: Esri, Maxar 2021

# National Wetland Inventory

# Exhibit 5

*Jurisdictional Delineation Report for the 8th Street East Industrial Project*



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- **4: Subsystem INTERMITTENT.** This Subsystem includes channels that contain flowing water only part of the year. When the water is not flowing, it may remain in isolated pools or surface water may be absent.
  - **SB: Class STREAMBED.** Includes all wetlands contained within the Intermittent Subsystem of the Riverine System and all channels of the Estuarine System or of the Tidal Subsystem of the Riverine System that are completely dewatered at low tide.
    - **A: Water Regime INTERMITTENTLY FLOODED.** The substrate is usually exposed, but surface water is present for variable periods without detectable seasonal periodicity. Weeks, months, or even years may intervene between periods of inundation. The dominant plant communities under this Water Regime may change as soil moisture conditions change. Some areas exhibiting this Water Regime do not fall within our definition of wetland because they do not have hydric soils or support hydrophytes. This Water Regime is generally limited to the arid West.

### 3.4 REGIONAL WATER QUALITY CONTROL PLAN

There are nine Regional Water Quality Control Boards in California. The Project site is located within Regional Water Quality Control Board Region 6, the Lahontan Region. The SWRCB and the Lahontan RWQCB have adopted a Water Quality Control Plan (or “Basin Plan”) for the Lahontan Region. The Basin Plan contains goals and policies, descriptions of conditions, and proposed solutions to surface and groundwater issues. The Basin Plan also establishes water quality standards for surface and groundwater resources and includes beneficial uses and levels of water quality that must be met and maintained to protect these uses. These water quality standards are implemented through various regulatory permits pursuant to CWA Section 401 for Water Quality Certifications and Section 402 for Report of Waste Discharge permits.

The Project site is located within the Lancaster Hydrologic Area (626.50) of the Antelope Hydrologic Unit. The channel that occurs on the Project site is categorized in the Basin Plan as Minor Surface Waters within the Lancaster Hydrologic Area. Beneficial Uses associated with Minor Surface Waters in this hydrologic area include: Municipal Water Supply (MUN); Agricultural Water Supply (AGR); Ground Water Recharge (GWR); Limited Water Contact Recreation (REC-1); Non-Contact Water Recreation (REC-2); Commercial and Sportfishing (COMM); Warm Freshwater Habitat (WARM); Cold Freshwater Habitat (COLD); and Wildlife Habitat (WILD) (Lahontan RWQCB 1995).

Descriptions of the various Beneficial Uses are provided in Attachment C.

## 4.0 JURISDICTIONAL ANALYSIS

The Project site contains an unnamed graded channel that flows from west to east. Water conveyed through this channel appears to originate from urban runoff and passes under Sierra Highway and the adjacent railroad before reaching the Project site. Historic aerial photos of the area show that the natural path of the stream was diverted slightly northward around an agricultural field sometime prior to 1948. The current pathway for this channel was established in approximately 2005 and appears to be regularly maintained to allow water to pass westward.

Currently, the channel bed is mostly unvegetated with sparse native desert scrub species growing along the channel banks. Vegetation along the channel consists of Great Basin sagebrush (*Artemisia tridentata*), four-wing saltbush (*Atriplex canescens*), creosote (*Larrea tridentata*), and rubber rabbitbrush scrub (*Ericameria nauseosa*).

A summary of information related to this channel is provided in Table 1 and photographs are provided in Attachment B that illustrate the general conditions on the Project site.

**TABLE 1  
SUMMARY OF JURISDICTIONAL RESOURCES ON THE PROJECT SITE**

Feature	Latitude/Longitude (decimal degrees)		Feature Length (linear feet)	OHWM Width Range (feet)	Area of RWQCB Jurisdiction (acres)		CDFW Jurisdiction Width Range (feet)	Area of CDFW Jurisdiction (acres)
	Upstream End	Downstream End			Wetland	Non- wetland		
Unnamed Channel	34.597591°, -118.119875°	34.598033°, -118.116617°	1,050	13–17	0.00	0.35	27–33	0.72
<b>Total</b>					<b>0.00</b>	<b>0.35</b>		<b>0.72</b>

OHWM: Ordinary High Water Mark; USACE: RWQCB: Regional Water Quality Control Board; CDFW: California Department of Fish and Wildlife

### 4.1 “WATERS OF THE UNITED STATES” DETERMINATION

#### ***Connectivity to a Traditional Navigable Water***

Water that passes through the unnamed channel on the Project site flows under 8<sup>th</sup> Street East and continues in a northeasterly direction. Water flows through a drainage feature that proceeds northerly along 10<sup>th</sup> Street East and later 15<sup>th</sup> Street East before reaching Palmdale Regional Airport. The drainage is directed underground in a concrete culvert before resurfacing along 15<sup>th</sup> Street East on the northern side of the Palmdale Regional Airport runway. The drainage contains two grade control structures before reaching Columbia Way and turning directly eastward. The drainage transitions to a series of interconnected basins that allow water to percolate into the soil with no connection to downstream waters. Based on a review of aerial photographs, the drainage originally flowed northeasterly from the Project site and flows eventually dissipated in upland areas that are in the approximate location of Palmdale Regional Airport. Therefore, the on-site drainage feature has no connection to downstream waters and would therefore not be considered WOTUS.

#### ***Wetlands Determination***

A wetland sampling point was located in the bottom of the on-site drainage feature to determine if wetland conditions are present on the Project site. This sampling point was chosen due to the presence of potential wetland hydrology, though no hydrophytic vegetation was observed on the

Project site. A wetland data form that documents conditions at this location is provided in Attachment D and the information collected is summarized below in Table 2.

Vegetation in the vicinity of the each of the locations consisted of Great Basin sagebrush, four-wing saltbush, and rubber rabbitbrush, all of which are upland (UPL) plant species. No hydric soil indicators were observed, while secondary indicators of wetland hydrology were noted (e.g., presence of sediment deposits and drainage patterns). Due to the lack of hydrophytic vegetation and hydric soils, wetland conditions do not exist on the Project site.

**TABLE 2  
SUMMARY OF WETLAND SAMPLING POINT DATA**

Sampling Point	Vegetated	Dominance Test Result <sup>a</sup>	Prevalence Index Result	Hydrophytic Vegetation Present	Hydric Soil Indicators	Wetland Hydrology Indicators	Wetland?
1	Yes	0%	5.0	No	None	B2, B10	No
<sup>a</sup> Percent of dominant species that are OBL, FACW, or FAC. <b>Hydric Soil Indicators</b> B2 Sediment Deposits B10 Drainage Patterns							

#### 4.2 REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION

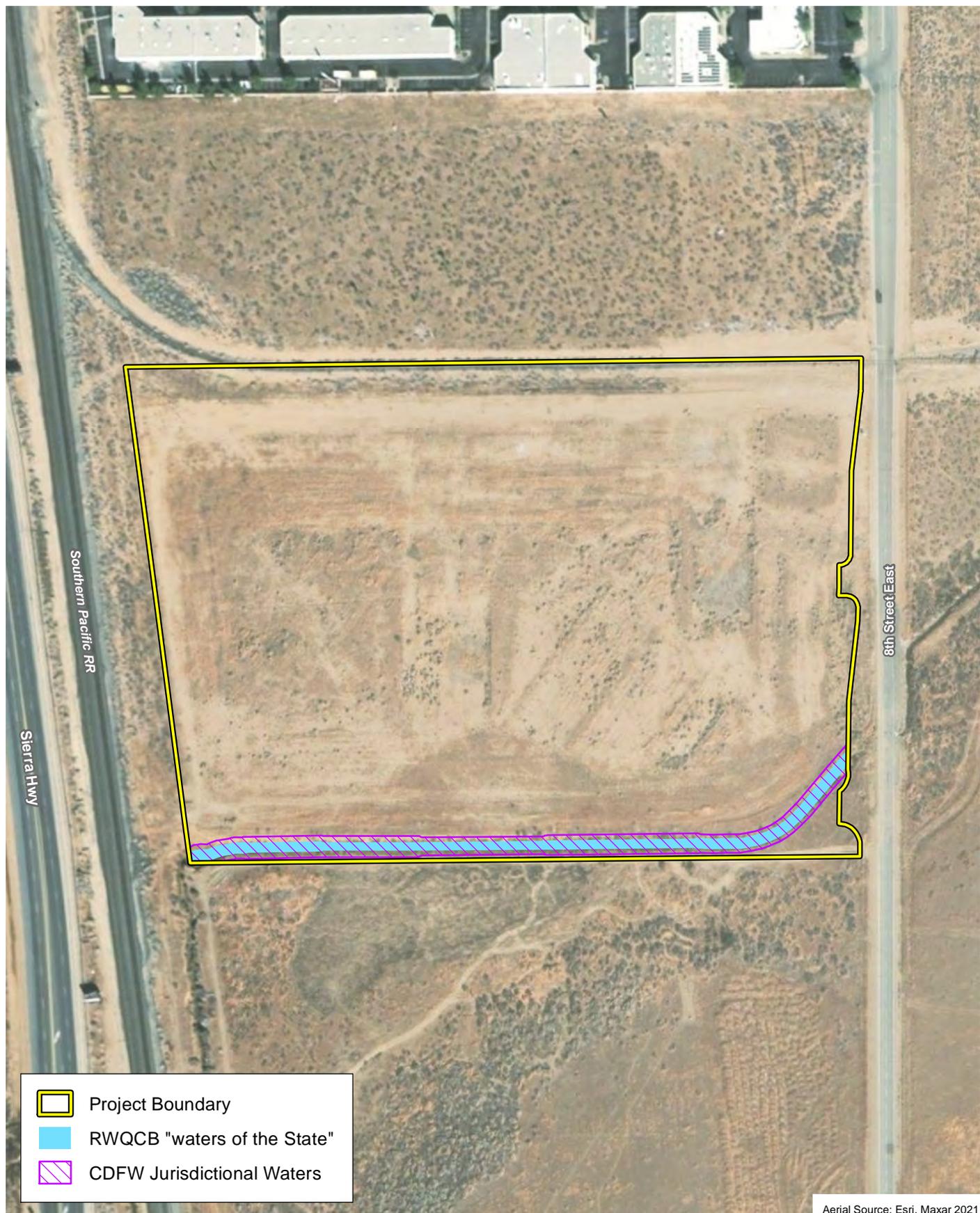
Though the channel is not considered to be WOTUS, the RWQCB has broad latitude to regulate waters via the Porter-Cologne Act. The limits of non-wetland “waters of the State” were defined by the well-established bed and bank with evidence of scour along the banks and sediment deposition.

Based on this boundary, the project site contains 0.35 acre of non-wetland “waters of the State” (Table 1; Exhibit 6).

#### 4.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION

The limits of CDFW jurisdiction on the Project site were mapped to the top of the bank on each site of the unnamed channel. There is no adjacent riparian habitat present along the channel so that CDFW’s jurisdiction is limited to the top of the channel’s banks. Therefore, the total amount of CDFW’s jurisdictional area is 0.72 acre (Table 1; Exhibit 6).

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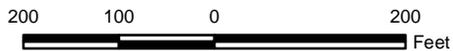


Aerial Source: Esri, Maxar 2021

# Jurisdictional Resources

# Exhibit 6

*Jurisdictional Delineation Report for the 8th Street East Industrial Project*



## **5.0 REGULATORY APPROVAL PROCESS**

This section summarizes the various permits, agreements, and certifications that may be required prior to initiation of the proposed Project activities that involve impacts to jurisdictional waters, including:

- USACE Section 404 Permit
- RWQCB Section 401 Water Quality Certification
- CDFW Section 1602 Notification of Lake or Streambed Alteration

It should be noted that all regulatory permit applications can be processed concurrently.

### **5.1 U.S. ARMY CORPS OF ENGINEERS**

As described above, the on-site drainage channel is not considered WOTUS due to the lack of connectivity to a downstream TNW. Because there are no WOTUS on the Project site, a Section 404 permit would not be required.

It is recommended that the USACE is consulted to confirm that they would not assert jurisdiction over the on-site channel. If a formal concurrence of this finding is desired, an Approved Jurisdictional Determination (AJD) can be requested that would document the USACE's determination.

### **5.2 REGIONAL WATER QUALITY CONTROL BOARD**

Assuming the USACE concurs that there are no WOTUS on the Project site, the RWQCB would authorize impacts to jurisdictional features via a Waste Discharge Requirements (WDR) permit rather than a Section 401 Water Quality Certification. Applying for a WDR permit would require urban storm water runoff to be addressed during and after construction in the form of Best Management Practices (BMPs). These BMPs are intended to address the treatment of pollutants carried by storm water runoff. Please note that WDR permit holders are required to pay an annual fee until the RWQCB is notified that the authorized project has been completed. The RWQCB will not deem the application to be complete until the application fees have been paid and the agency is provided with a certified CEQA document and a signed copy of the receipt of County Clerk filing fees for the Notice of Determination (NOD).

### **5.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE**

Prior to construction, Notification of a Lake or Streambed Alteration (LSA) must be submitted to the CDFW that describes any proposed streambed alteration contemplated by the proposed project. If an LSA Agreement is required, the CDFW may want to conduct an on-site inspection.

In addition to the formal application materials and the fee, a copy of the appropriate environmental document (e.g., Mitigated Negative Declaration) should be included in the submittal, consistent with CEQA requirements. The CDFW will not deem the application to be complete until the application fees have been paid and the agency is provided with a certified CEQA document and a signed copy of the receipt of County Clerk filing fees for the NOD.

## 5.4 RECOMMENDATIONS

Based on the conclusions of this Jurisdictional Delineation Report, the following recommendations are identified:

1. The USACE should be consulted to confirm that on-site features are not considered WOTUS so that no permitting pursuant to Section 404 of the Clean Water Act is required.
2. Staff from the RWQCB and CDFW should be contacted to discuss the proposed Project activities and determine the appropriate permitting strategy.
3. Upon determining the appropriate permitting strategy, the following should be prepared and processed: a RWQCB Report of Waste Discharge and a CDFW Notification of Lake or Streambed Alteration.

## 6.0 REFERENCES

- Curtis, K. E., and R. L. Lichvar. 2010. Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (ERDC/CRREL TN-10-1). Hanover, NH: USACE Research and Development Center, Cold Regions and Research Engineering Laboratory.
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**ATTACHMENT A**  
**SUMMARY OF REGULATORY AUTHORITY**

## REGULATORY AUTHORITY

This attachment summarizes the regulatory authority of the U.S. Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW) over activities that have potential to impact jurisdictional resources.

### U.S. Army Corps of Engineers

The USACE Regulatory Branch regulates activities that discharge dredged or fill materials into “waters of the United States” (WOTUS) under Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. This permitting authority applies to all WOTUS where the material (1) replaces any portion of WOTUS with dry land or (2) changes the bottom elevation of any portion of any WOTUS. These fill materials would include sand, rock, clay, construction debris, wood chips, and materials used to create any structure or infrastructure in these waters.

### ***Waters of the United States***

On April 21, 2020, the United States Environmental Protection Agency (USEPA) and the USACE published in the *Federal Register* the Navigable Waters Protection Rule (NWPR) which revised the definition of WOTUS. The NWPR subsequently became effective on June 22, 2020.

The NWPR narrows the definition of WOTUS that are subject to USACE jurisdiction through two rules: the Step One rule, issued on October 22, 2019, which reestablished USACE regulations that were in place prior to the 2015 Waters of the United States Rule, and the Step Two rule, published on April 21, 2020, which narrows federal jurisdiction so that WOTUS must demonstrate a direct connection to a Traditional Navigable Waterway (TNW). On August 30, 2021, the U.S. District Court for the District of Arizona vacated and remanded the NWPR for reconsideration to the USEPA and the USACE.<sup>1</sup> Subsequently, on April 6, 2022, the U.S. Supreme Court halted the District Court decision which effectively reinstates the NWPR’s definition of WOTUS described above. The USACE will utilize the NWPR definition of WOTUS until the USEPA issues a new final rule which is expected to be released in the spring of 2023.

Under the NWPR’s Step Two Rule, four categories of waters are considered WOTUS:

1. Territorial seas and TNWs;
2. Tributaries of jurisdictional waters;
3. Lakes, ponds, and impoundments that contribute surface water flow to a jurisdictional water in a typical year; and
4. Wetlands adjacent to non-wetland jurisdictional waters.

Under the rule, a wetland is considered “adjacent” if it:

1. Abuts (i.e., touches a side or corner of) another non-wetland jurisdictional water;
2. Is inundated by flooding from another non-wetland jurisdictional water at least once in a typical year;
3. Is physically separated from a non-wetland jurisdictional water by a natural berm, bank, dune, or similar natural feature without regard to whether there is a specific hydrological surface connection in a typical year; or
4. Is physically separated from a non-wetland jurisdictional water by an artificial structure like a road, dike, or barrier as long as the structure allows for a direct hydrologic surface connection between the wetland and the other jurisdictional water at least once in a

<sup>1</sup> *Pasqua Yaqui Tribe, et al. v. U.S. Environmental Protection Agency, et al.*

typical year. This connection can be through a gate or culvert or even by water overtopping a road.

The Step Two Rule also identifies waters specifically excluded from consideration as WOTUS. The twelve categories of non-jurisdictional waters in the Step Two Rule include:

1. All waters not covered by the four categories of WOTUS discussed above;
2. Groundwater;
3. Ephemeral features;
4. Storm water runoff and overland sheet flow;
5. All ditches not considered tributaries;
6. Prior converted cropland;
7. Artificially irrigated areas;
8. Certain artificial lakes and ponds;
9. Water-filled depressions or pits excavated in connection with mining or construction or to obtain fill, sand, or gravel;
10. Certain storm water control features;
11. Groundwater recharge, water reuse, and wastewater recycling structures; and
12. Wastewater treatment systems.

The NWPR was drafted to incorporate direction that the U.S. Supreme Court provided via three decisions that provided context and guidance in determining the appropriate scope of WOTUS. In *United States v. Riverside Bayview Homes* (1985), the Court upheld the inclusion of adjacent wetlands in the regulatory definition of WOTUS. In *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (“SWANCC”, issued in 2001), the Court held that the use of “isolated” non-navigable intrastate ponds by migratory birds was not, by itself, sufficient basis for the exercise of federal regulatory authority under the CWA. In *Rapanos v. United States* (“Rapanos”, 2006)<sup>2</sup>, a majority of the U.S. Supreme Court overturned two Sixth Circuit Court of Appeals decisions, finding that certain wetlands constituted WOTUS under the CWA. In his plurality opinion, Justice Scalia argued that WOTUS should not include channels through which water flows intermittently or ephemerally or channels that periodically provide drainage for rainfall. He also stated that a wetland may not be considered “adjacent to” remote WOTUS based on a mere hydrologic connection. Justice Kennedy authored a separate concurring opinion concluding that wetlands are WOTUS if they, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as “navigable”. Lacking a majority opinion, regulatory jurisdiction under the CWA existed over a water body if either the plurality’s or Justice Kennedy’s “significant nexus” standard was satisfied.

### **Ordinary High Water Mark**

The landward limit of tidal “waters of the U.S.” is the high-tide line. In non-tidal waters where adjacent wetlands are absent, the lateral limits of USACE jurisdiction extend to the ordinary high water mark (OHWM).<sup>3</sup> The OHWM is defined 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 the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the

<sup>2</sup> Consolidated cases: *Rapanos v. United States* and *Carabell v. United States* refer to the U.S. Supreme Court’s decision concerning USACE jurisdiction over “waters of the U.S.” under the CWA.

<sup>3</sup> U.S. Army Corps of Engineers (USACE). 2005 (December 7). Regulatory Guidance Letter. Ordinary High Water Mark Identification. Washington, D.C.: USACE.

characteristics of the surrounding areas”.<sup>4</sup> When wetlands are present, the lateral limits of USACE jurisdiction extend beyond the OHWM to the limits of the adjacent wetlands.<sup>5</sup>

## **Wetlands**

A wetland is a subset of jurisdictional waters and is defined by the USACE and the USEPA as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions”.<sup>6</sup> Wetlands generally include swamps, marshes, bogs, and areas containing similar features.

The definition and methods for identifying wetland resources can be found in the USACE’s *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*,<sup>7</sup> a supplement to the 1987 *Corps of Engineers Wetlands Delineation Manual*.<sup>8</sup> Both the 1987 Wetlands Manual and the 2008 Arid West Supplement to the manual provide technical methods and guidelines for determining the presence of wetland “waters of the U.S.”. Pursuant to these manuals, a three-parameter approach is used to identify wetlands and requires evidence of wetland hydrology, hydrophytic vegetation, and hydric soils. In order to be considered a wetland, an area must exhibit one or more indicators of all three of these parameters. However, problem areas may periodically or permanently lack certain indicators for reasons such as seasonal or annual variability of rainfall, vegetation, and other factors. Atypical wetlands lack certain indicators due to recent human activities or natural events. Guidance for determining the presence of wetlands in these situations is presented in the regional supplement.

## **Section 404 Permit**

Except as specified in Section 323.4 of the CFR, impacts to “waters of the U.S.” require a Section 404 Permit. Permit authorization may be in the form of (1) a “general permit” authorizing a category of activities in a specific geographical region or nationwide or (2) an “individual permit” (IP) following a review of an individual application form (to be obtained from the district office having jurisdiction over the waters in which the activity is proposed to be located).

Regulatory authorization in the form of a Nationwide Permit (NWP) is provided for certain categories of activities such as repair, rehabilitation, or replacement of a structure or fill which was previously authorized; utility line placement; or bank stabilization. NWPs authorize only those activities with minimal adverse effects on the aquatic environment and are valid only if the conditions applicable to the permits are met or waivers to these conditions are provided in writing from the USACE. Please note that waivers may require consultation with affected federal and State agencies, which can be a lengthy process with no mandated processing time frames. Certain activities do not require submission of an application form but may require a separate notification. If the NWP conditions cannot be met, an IP will be required. “Waters of the U.S.” temporarily filled, flooded, excavated, or drained but restored to pre-construction contours and elevations after construction are not included in the measurement of loss of “waters of the U.S.”. The appropriate permit authorization will be based on the amount of impacts to “waters of the U.S.”, as determined by the USACE. There is no filing fee for the Section 404 Permit.

<sup>4</sup> Code of Federal Regulations (CFR), Title 33, §328.3(e)

<sup>5</sup> USACE 2005

<sup>6</sup> 33 CFR §328.3(b)

<sup>7</sup> USACE. 2008a. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*. (J.S. Wakeley, R.W. Lichvar, and C.V. Noble, Eds.). Vicksburg, MS: U.S. Army Engineer Research and Development Center.

<sup>8</sup> Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1)*. Vicksburg, MS: U.S. Army Engineer Waterways Experiment Station.

Approximately three or four months are typically required to process a routine permit application; large or complex activities may take longer to process. When a permit application is received, it will be assigned an identification number and reviewed for completeness by the District Engineer. If an application is incomplete, additional information will be requested within 15 days of receipt of the application. If an application is complete, the District Engineer will issue a public notice within 15 days unless specifically exempted by provisions of the CFR. Public comments will be accepted no more than 30 days but not less than 15 days from the date of public notice; these will become part of the administrative record of the application. Generally, the District Engineer will decide on the application no later than 60 days after receipt of the completed application. Additional permit situations may increase the permit processing time (e.g., projects involving a Section 401 Water Quality Certification, a coastal zone management consistency analysis, historic properties, a federal agency, and/or Endangered species). The Project Applicant will be given time, not to exceed 30 days, to respond to requests of the District Engineer.

On January 31, 2007, the USACE published a memorandum clarifying the Interim Guidance for Amendments to the National Historic Preservation Act and the Advisory Council on Historic Preservation (ACHP) implementing regulations.<sup>9</sup> The Interim Guidance applies to all Department of the Army requests for authorization/verification, including Individual Permits (IPs, i.e., standard permits and letters of permission) and all Regional General Permits (RGPs) and Nationwide Permits (NWP). The State or Tribal Historic Preservation Officer (SHPO/THPO) has 30 days to respond to a determination that a proposed activity, which otherwise qualifies for an NWP or an RGP, has no effect or no adverse effect on a historic property. If the SHPO/THPO does not respond within 30 days of notification, the Los Angeles District may proceed with verification. If the SHPO/THPO disagrees with the District's determination, the District may work with the SHPO/THPO to resolve the disagreement or request an opinion from the ACHP. The USACE will submit the Draft Jurisdictional Delineation Report to the SHPO/THPO for review prior to initiating the actual regulatory process.

Please note that, if the USACE determines that the drainages/waterbodies are jurisdictional and would be impacted by project implementation, the Applicant will be required to obtain a CWA Section 401 Water Quality Certification from the RWQCB before the USACE will issue the Section 404 Permit. If the USACE determines that the impacted drainage/waterbody is not jurisdictional, the Applicant will be required to obtain RWQCB authorization under the provisions of a Report of Waste Discharge (ROWD).

### Jurisdictional Determinations

Pursuant to USACE Regulatory Guidance Letter (RGL) 08-02 (dated June 26, 2008), the USACE can issue two types of jurisdictional determinations to implement Section 404 of the CWA: Approved Jurisdictional Determinations and Preliminary Jurisdictional Determinations.<sup>10</sup> An Approved Jurisdictional Determination is an official USACE determination that jurisdictional "waters of the U.S.", "Navigable Waters of the U.S.", or both are either present or absent on a site. An Approved Jurisdictional Determination also identifies the precise limits of jurisdictional waters on a project site.

The USACE will provide an Approved Jurisdictional Determination when (1) an Applicant requests an official jurisdictional determination; (2) an Applicant contests jurisdiction over a particular water body or wetland; or (3) when the USACE determines that jurisdiction does not exist over a particular water body or wetland. The Approved Jurisdictional Determination then becomes the

<sup>9</sup> USACE. 2007 (January 31). Memorandum: Interim Guidance for Amendments to the National Historic Preservation Act and the Advisory Council on Historic Preservation (ACHP) Implementing Regulations. Washington, D.C.: USACE.

<sup>10</sup> USACE. 2008b (June 26). Regulatory Guidance Letter. Jurisdictional Determinations. Washington, D.C.: USACE.

USACE's official determination that can then be relied upon over a five-year period to request regulatory authorization as part of the permit application.

In addition, an Applicant may decline to request an Approved Jurisdictional Determination and instead obtain a USACE IP or General Permit Authorization based on a Preliminary Jurisdictional Determination or, in certain circumstances (e.g., authorizations by non-reporting nationwide general permits), with no Jurisdictional Determination.

Preliminary Jurisdictional Determinations are non-binding, advisory in nature, and may not be appealed. They indicate that there may be "waters of the U.S." on a project site. An Applicant may elect to use a Preliminary Jurisdictional Determination to voluntarily waive or set aside questions regarding CWA jurisdiction over a site, usually in the interest of expediting the permitting process. The USACE will determine what form of Jurisdictional Determination is appropriate for a particular project site.

The USACE Regulatory Branch Offices will coordinate with the USEPA Regional Office and USACE Headquarters (HQ), as outlined in its January 28, 2008, memorandum entitled "Process for Coordinating Jurisdictional Determinations Conducted Pursuant to Section 404 of the Clean Water Act in Light of the *Rapanos* and *SWANCC* Supreme Court Decisions".<sup>11</sup> The guidance provided in this memorandum is quoted as follows:

1. Effective immediately, unless and until paragraph 5(b) of the June 5, 2007, Rapanos guidance coordination memorandum is modified by a joint memorandum from Army and EPA, we will follow these procedures:
  - a. For jurisdictional determinations involving significant nexus determinations, USACE districts will send copies of draft jurisdictional delineations via e-mail to appropriate EPA regional offices. The EPA regional office will have 15 calendar days to decide whether to take the draft jurisdictional delineation as a special case under the January 19, 1989, "Memorandum of Agreement Between the Department of the Army and the USEPA Concerning the Determination of the Section 404 Program and the Application of the Exceptions under Section 404(f) of the Clean Water Act." If the EPA regional office does not respond to the district within 15 days, the district will finalize the jurisdictional determination.
  - b. For jurisdictional determinations involving isolated waters determinations, the agencies will continue to follow the procedure in paragraph 5(b) of June 5, 2007, coordination memorandum, until a new coordination memorandum is signed by USACE and EPA. (In accordance with paragraph 6 of the June 5, 2007, coordination memorandum, this is a 21-day timeline that can only be changed through a joint memorandum between agencies).
2. Approved JDs are not required for non-reporting NWP, unless the project proponent specifically requests an approved JD. For proposed activities that may qualify for authorization under a State Programmatic General Permit (SPGP) or RGP, an approved JD is not required unless requested by the project proponent.

<sup>11</sup> USACE. 2008c (January 28). *Memorandum for Commander, Major Subordinate Commands and District Commands. Process for Coordinating Jurisdictional Determinations Conducted Pursuant to Section 404 of the Clean Water Act in Light of the *Rapanos* and *SWANCC* Supreme Court Decisions*. Washington, D.C.: USACE.

3. The USACE will continue to work with EPA to resolve the JDs involving significant nexus and isolated waters determinations that are currently in the elevation process.
4. USACE districts will continue posting completed Approved JD Forms on their web pages.

### **Regional Water Quality Control Board**

The RWQCB is the primary agency responsible for protecting water quality in California through the regulation of discharges to surface waters under the CWA and the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The RWQCB's jurisdiction extends to all "waters of the State" and to all "waters of the U.S.", including wetlands (isolated and non-isolated).

Section 401 of the CWA provides the RWQCB with the authority to regulate, through a Water Quality Certification, any proposed, federally permitted activity that may affect water quality. Among such activities are discharges of dredged or fill material permitted by the USACE pursuant to Section 404 of the CWA. Section 401 requires the RWQCB to provide certification that there is reasonable assurance that an activity which may result in discharge to navigable waters will not violate water quality standards. Water Quality Certification must be based on a finding that the proposed discharge will comply with water quality standards, which contain numeric and narrative objectives that can be found in each of the nine RWQCBs' Basin Plans.

The Porter-Cologne Act provides the State with very broad authority to regulate "waters of the State" (which are defined as any surface water or groundwater, including saline waters). The Porter-Cologne Act has become an important tool in the post-SWANCC (Solid Waste Agency of Northern Cook Counties vs. United States Army Corps of Engineers) and Rapanos era with respect to the State's authority over isolated waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file an ROWD when there is no federal nexus, such as under Section 404(b)(1) of the CWA. Although "waste" is partially defined as any waste substance associated with human habitation, the RWQCB interprets this to include fill discharge into water bodies.

### ***Section 401 Water Quality Certification***

Issuance of the USACE Section 404 Permit would be contingent upon the approval of a Section 401 Water Quality Certification from the RWQCB. Also, the RWQCB requires certification of the project's California Environmental Quality Act (CEQA) documentation before it will approve the Section 401 Water Quality Certification or ROWD. The RWQCB, as a responsible agency, will use the project's CEQA document to satisfy its own CEQA-compliance requirements.

On June 1, 2020, the USEPA finalized the "Clean Water Act Section 401 Certification Rule" to implement the water quality certification process consistent with the text and structure of the Clean Water Act (CWA). The final rule establishes procedures that promote consistent implementation of CWA section 401 and regulatory certainty in the federal licensing and permitting process. The new regulation includes reviews and approvals by the USACE prior to the RWQCB issuing a 401 Certification and reviews and approvals by the EPA prior to the USACE issuing a 404. The new 401 rule went into effect on September 11, 2020.

The new certification rule defines a discharge subject to 401 Certification as a discharge from a point source into a water of the United States. The new rule also states that States with additional water quality regulations cannot use these to expand the certification request.

The new rule requires all project proponents to request a pre-filing meeting with the RWQCB at least 30 days prior to filing a 401 "Certification Request". The filing procedure has been simplified

to require the filing of a “Certification Request”, rather than the acceptance of a “complete application”. The certification request has nine mandatory components:

1. identify the project proponent(s) and a point of contact;
2. identify the proposed project;
3. identify the applicable federal license or permit;
4. identify the location and nature of any potential discharge that may result from the proposed project and the location of receiving waters;
5. include a description of any methods and means proposed to monitor the discharge and the equipment or measures planned to treat, control, or manage the discharge;
6. include a list of all other federal, interstate, tribal, state, territorial, or local agency authorizations required for the proposed project, including all approvals or denials already received;
7. include documentation that a pre-filing meeting request was submitted to the certifying authority at least 30 days prior to submitting the certification request;
8. contain the following statement: ‘The project proponent hereby certifies that all information contained herein is true, accurate, and complete, to the best of my knowledge and belief; and
9. contain the following statement: ‘The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.’

There is a mandatory 30 day wait period between a pre-filing meeting request and the filing of a Certification Request. A Certification Request must be filed with the RWQCB and the USACE concurrently. USACE reviews the Certification Request for the nine required components. The USACE has 15 days to review the Certification Request. The USACE then notifies the RWQCB that request is complete. And concurrently notifies the RWQCB of the reasonable time period to act on the Certification Request. The reasonable time period is not to exceed 1 year. Within 15 days of receipt of the Certification Request, the RWQCB must provide the applicant with the following: 1) date of receipt; 2) applicable reasonable period of time to act on the Certification Request; and 3) date upon which waiver will occur if the certifying authority fails or refuses to act on the Certification Request.

Once the RWQCB issues the 401 Certification, the USACE has 5 days to notify the USEPA that the 401 Certification has been issued. The USEPA then has 30 days to notify neighboring jurisdictions of the 401 Certification. Neighboring jurisdictions have 60 days to respond. If there are no objections to the 401 Certification, then the USACE would issue the 404 permit.

On June 2, 2021, the USEPA published a notice of intention to reconsider and revise the Clean Water Act Section 401 Certification Rule. At this time, they are currently accepting public comment. Until a new rule goes into effect, the current 401 Certification Rule stands.

The RWQCB is required under the *California Code of Regulations* (CCR) to have a “minimum 21-day public comment period” before any action can be taken on the Section 401 application.<sup>12</sup> This period closes when the RWQCB acts on the application. Since projects often change or are revised during the Section 401 permit process, the comment period can remain open. The public comment period starts as soon as an application has been received. Generally, the RWQCB

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<sup>12</sup> 23 CCR §3858(a)

Section 401, USACE Section 404, and CDFW Section 1602 permit applications are submitted at the same time.

The RWQCB requires the Applicant to address urban storm water runoff during and after construction in the form of Best Management Practices (BMPs). These BMPs are intended to address the treatment of pollutants carried by storm water runoff and are required in all complete applications. The notification/application for a CWA Section 401 Water Quality Certification must also address compliance with the Basin Plan. Please note that filing an application would also require the payment of an application fee which would be based on project impacts. The fee schedule calculator is available at [https://www.waterboards.ca.gov/resources/fees/water\\_quality/docs/dredgefillcalculator.xlsm](https://www.waterboards.ca.gov/resources/fees/water_quality/docs/dredgefillcalculator.xlsm).

### **California Department of Fish and Wildlife**

The CDFW has jurisdictional authority over wetland resources associated with rivers, streams, and lakes pursuant to the *California Fish and Game Code*.<sup>13</sup> Activities of State and local agencies as well as public utilities that are project proponents are regulated by the CDFW under Section 1602 of the *California Fish and Game Code*. This section regulates any work that will (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) 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. Section 1602 of the *California Fish and Game Code* applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State.

The CDFW jurisdictional limits are not as clearly defined by regulation as those of the USACE. While they closely resemble the limits described by USACE regulations, they include riparian habitat supported by a river, stream, or lake regardless of the presence or absence of hydric and saturated soils conditions. In general, the CDFW takes jurisdiction from the top of a stream bank or to the outer limits of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place within or in the vicinity of a river, stream, lake or within or in the vicinity of tributaries to a river, stream, or lake. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish and other aquatic plant and/or wildlife species. It also includes watercourses that have a surface or subsurface flow that support or have supported riparian vegetation.

### ***Section 1602 Lake or Streambed Alteration Agreement***

The CDFW enters into a Lake or Streambed Alteration (LSA) Agreement with a project proponent to ensure protection of wildlife and habitat values and acreages.

Prior to construction, a Notification of an LSA must be submitted to the CDFW that describes any proposed lake or streambed alteration that would occur with implementation of a project. The Notification of an LSA must address the initial construction and long-term operation and maintenance of any structures (such as a culvert or a desilting basin) included in the project design that are located within any river, stream, or lake and that may require periodic maintenance. In addition to the formal application materials and the fee, a copy of the appropriate environmental document (e.g., a Mitigated Negative Declaration) should be included in the submittal, consistent with CEQA requirements. The complete notification package must be completed on CDFW's Environmental Permit Information Management System (EPIMS). This notification will serve as the basis for the CDFW's issuance of a Section 1602 LSA Agreement.

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<sup>13</sup> See §§1600–1616.

Note that notification is not required before beginning emergency work, but the CDFW must be notified in writing within 14 days after beginning the work.

After receiving Notification of an LSA Agreement, the CDFW will determine whether an LSA Agreement will be required for the proposed activity. An LSA Agreement will be required if the activity could substantially adversely affect an existing fish and wildlife resource. If an LSA Agreement is required, the CDFW may want to conduct an on-site inspection.

If the CDFW does not respond in writing concerning the completeness of the Notification within 30 days of its submittal, the Notification automatically becomes complete. If the CDFW does not submit a draft LSA Agreement to the Applicant within 60 days of the determination of a completed Notification package, the CDFW will issue a letter that either (1) identifies the final date to transmit a draft LSA Agreement or (2) indicates that an LSA Agreement was not required. The CDFW will also indicate that it was unable to meet this mandated compliance date and that, by law, the Applicant is authorized to complete the project without an LSA Agreement as long as the Applicant constructs the project as proposed and complies with all avoidance, minimization, and mitigation measures described in the submitted Notification package. Please note that, if the project requires revisions to the design or project construction, the CDFW may require submittal of a new Notification/application with an additional 90-day permit process.

If determined to be necessary, the CDFW will prepare a draft LSA Agreement, which will include standard measures to protect fish and wildlife resources during project construction and during ongoing operation and maintenance of any project element that occurs within a CDFW jurisdictional area. The draft Agreement must be transmitted to the Applicant within 60 calendar days of the CDFW's determination that the notification is complete. It should be noted that the 60-day timeframe might not apply to long-range agreements.

Following receipt of a draft LSA Agreement from the CDFW, the Applicant has 30 calendar days to notify the CDFW concerning the acceptability of the proposed terms, conditions, and measures. If the Applicant agrees with these terms, conditions and measures, the Agreement must be signed and returned to the CDFW. The Agreement becomes final once the CDFW executes it and an LSA Agreement is issued. Please note that all application fees must be paid and the final certified CEQA documentation must be provided prior to the CDFW's execution of the Agreement.

**ATTACHMENT B**  
**SITE PHOTOGRAPHS**

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Aerial Source: Esri, Maxar 2021

 Project Boundary

 Photo Location and Direction

### Photo Locations

### Exhibit B-1

Jurisdictional Delineation Report for the 8th Street East Industrial Project

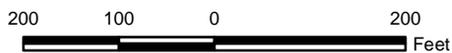




Photo Location 1, facing upstream. March 17, 2022. View of general conditions in stream channel along southern edge of project site.



Photo Location 2, facing downstream. March 17, 2022. View of general conditions in stream channel.

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## Site Photos

*Jurisdictional Delineation Report for the 8th Street East Industrial Project*

Exhibit B-2





Photo Location 3, facing downstream. March 17, 2022. View of general conditions in stream channel.



Photo Location 4, facing downstream. March 17, 2022. View of general conditions in stream channel.

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## Site Photos

## Exhibit B-3

*Jurisdictional Delineation Report for the 8th Street East Industrial Project*





Photo Location 5, facing downstream. March 17, 2022. View of general conditions in stream channel.



Photo Location 6, facing downstream. March 17, 2022. View of conditions where stream channel flows toward 8th Street along eastern site boundary. Note that road shoulder is graded to allow water to flow off road into channel. Small culvert is evident that allows water to drain eastward under 8th Street.

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## Site Photos

*Jurisdictional Delineation Report for the 8th Street East Industrial Project*

Exhibit B-4





Photo Location 7, facing northwest. March 17, 2022. General overview of project site conditions.



Photo Location 8, facing northeast. March 17, 2022. General overview of project site conditions.

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## Site Photos

*Jurisdictional Delineation Report for the 8th Street East Industrial Project*

Exhibit B-5





Photo Location 9, facing southeast. March 17, 2022. General overview of project site conditions.



Photo Location 10, facing southwest. March 17, 2022. General overview of project site conditions.

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## Site Photos

Exhibit B-6

*Jurisdictional Delineation Report for the 8th Street East Industrial Project*



**ATTACHMENT C**  
**LITERATURE REVIEW DETAILS**

## **DESCRIPTIONS OF SOILS IN SURVEY AREA**

### **ANTELOPE VALLEY AREA, CALIFORNIA**

#### **Hesperia fine sandy loam, 0 to 2 percent slopes**

##### ***Map Unit Setting***

- National map unit symbol: hcfcd
- Elevation: 200 to 4,000 feet
- Mean annual precipitation: 6 to 9 inches
- Mean annual air temperature: 61 to 70 degrees F
- Frost-free period: 225 to 310 days
- Farmland classification: Prime farmland if irrigated

##### ***Map Unit Composition***

- Hesperia and similar soils: 85 percent
- Minor components: 15 percent
- Estimates are based on observations, descriptions, and transects of the mapunit.

##### ***Description of Hesperia***

###### **Setting**

- Landform: Alluvial fans
- Landform position (two-dimensional): Backslope
- Landform position (three-dimensional): Tread
- Down-slope shape: Linear
- Across-slope shape: Linear
- Parent material: Alluvium derived from granite

###### **Typical profile**

- H1 - 0 to 4 inches: fine sandy loam
- H2 - 4 to 54 inches: fine sandy loam
- H3 - 54 to 77 inches: sandy loam

###### **Properties and qualities**

- Slope: 0 to 2 percent
- Depth to restrictive feature: More than 80 inches
- Drainage class: Well drained
- Runoff class: Very low
- Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
- Depth to water table: More than 80 inches
- Frequency of flooding: None
- Frequency of ponding: None
- Calcium carbonate, maximum content: 10 percent
- Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
- Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

###### **Interpretive groups**

- Land capability classification (irrigated): 2e
- Land capability classification (nonirrigated): 7e
- Hydrologic Soil Group: A
- Ecological site: R030XG021CA - LOAMY 4-9"
- Hydric soil rating: No

### **Minor Components**

#### Cajon

- Percent of map unit: 5 percent
- Hydric soil rating: No

#### Rosamond

- Percent of map unit: 5 percent
- Hydric soil rating: No

#### Tray

- Percent of map unit: 3 percent
- Hydric soil rating: No

#### Unnamed

- Percent of map unit: 2 percent
- Landform: Playas
- Hydric soil rating: Yes

## **Rosamond loam**

### ***Map Unit Setting***

- National map unit symbol: hcgz
- Elevation: 1,900 to 2,900 feet
- Mean annual precipitation: 3 to 8 inches
- Mean annual air temperature: 61 to 64 degrees F
- Frost-free period: 240 to 260 days
- Farmland classification: Prime farmland if irrigated

### ***Map Unit Composition***

- Rosamond and similar soils: 85 percent
- Minor components: 15 percent
- Estimates are based on observations, descriptions, and transects of the mapunit.

### ***Description of Rosamond***

#### **Setting**

- Landform: Alluvial fans
- Landform position (two-dimensional): Backslope
- Landform position (three-dimensional): Tread
- Down-slope shape: Linear
- Across-slope shape: Linear
- Parent material: Alluvium derived from granite

#### **Typical profile**

- H1 - 0 to 8 inches: loam
- H2 - 8 to 60 inches: stratified loam to silty clay loam

#### **Properties and qualities**

- Slope: 0 to 2 percent
- Depth to restrictive feature: More than 80 inches
- Drainage class: Well drained
- Runoff class: Low
- Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
- Depth to water table: More than 80 inches
- Frequency of flooding: Rare
- Frequency of ponding: None
- Calcium carbonate, maximum content: 10 percent
- Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
- Available water supply, 0 to 60 inches: High (about 10.0 inches)

#### **Interpretive groups**

- Land capability classification (irrigated): 1
- Land capability classification (nonirrigated): 7c
- Hydrologic Soil Group: B
- Ecological site: R030XG021CA - LOAMY 4-9"
- Hydric soil rating: No

### **Minor Components**

#### Cajon

- Percent of map unit: 5 percent
- Hydric soil rating: No

#### Hesperia

- Percent of map unit: 5 percent
- Hydric soil rating: No

#### Unnamed

- Percent of map unit: 4 percent
- Hydric soil rating: No

#### Unnamed

- Percent of map unit: 1 percent
- Landform: Playas
- Hydric soil rating: Yes

## **BASIN PLAN BENEFICIAL USES**

The *Water Quality Control Plan for the Lahontan Region* (Basin Plan) identifies a number of beneficial uses, some or all of which may apply to a specific hydrologic area (HA), including: Municipal and Domestic Water Supply (MUN) waters; Agricultural Supply (AGR) waters; Industrial Process Supply (PROC) waters; Industrial Service Supply waters (IND); Groundwater Recharge (GWR) waters; Freshwater Replenishment (FRSH); Navigation (NAV) waters; Hydropower Generation (POW) waters; Water Contact Recreation (REC1) waters; Non-Contact Water Recreation (REC2) waters; Commercial and Sport Fishing (COMM) waters; Aquaculture (AQUA) waters; Warm Fresh Water Habitat (WARM) waters; Cold Fresh Water Habitat (COLD) waters; Inland Saline Water Habitat (SAL) waters; Estuarine Habitat (EST) waters; Wetland Habitat (WET) waters; Marine Habitat (MAR) waters; Wildlife Habitat (WILD) waters; Preservation of Biological Habitats of Special Significance (BIOL) waters; Rare, Threatened or Endangered Species (RARE) waters; Migration of Aquatic Organisms (MIGR) waters; Spawning, Reproduction and Development (SPWN) waters; and Shellfish Harvesting (SHELL) waters.

Present and/or potential Beneficial Uses associated with the unnamed channel on the Project site are described below; Beneficial Uses not described below do not apply to these areas.

- MUN waters support community, military, or individual water supply systems including, but not limited to, drinking water supply.
- AGR waters are used for farming, horticulture, or ranching, including, but not limited to, irrigation, stock watering, and support of vegetation for range grazing.
- GWR waters are used for natural or artificial recharge of groundwater for purposes that may include, but are not limited to, future extraction, maintaining water quality, or halting saltwater intrusion into freshwater aquifers.
- COMM waters are used for commercial or recreational collection of fish or other organisms including, but not limited to, uses involving organisms intended for human consumption.
- WARM waters support warm water ecosystems that may include, but are not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, and wildlife (including invertebrates).
- COLD waters support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
- WILD waters support wildlife habitats including, but not limited to, the preservation and enhancement of vegetation and prey species used by wildlife, such as waterfowl. \
- REC-1 waters are used for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs.
- REC-2 waters are used for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities

**ATTACHMENT D**  
**WETLAND DATA FORM**

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: 8th Street Industrial City/County: Palmdale / Los Angeles Sampling Date: 3/17/2022  
 Applicant/Owner: Covington Development State: CA Sampling Point: 1  
 Investigator(s): David Hughes, Jack Underwood Section, Township, Range: Section 23, Township 6N, Range 12W  
 Landform (hillslope, terrace, etc.): channel Local relief (concave, convex, none): concave Slope (%): 5  
 Subregion (LRR): Mediterranean California (LRR C) Lat: 34.597621° Long: -118.119284° Datum: WGS 84  
 Soil Map Unit Name: Rosamond Loam NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <input checked="" type="checkbox"/>
Remarks: Sampling point is within a channel that has been graded.	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>15'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>0</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species <u>50</u> x 5 = <u>250</u> Column Totals: <u>50</u> (A) <u>250</u> (B)  Prevalence Index = B/A = <u>5.0</u>
<b>Sapling/Shrub Stratum (Plot size: <u>5'</u>)</b>				
1. <u>Atriplex canescens</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>	
2. <u>Artemisia tridentata</u>	<u>20</u>	<u>Y</u>	<u>UPL</u>	
3. <u>Ericameria nauseosa</u>	<u>10</u>	<u>Y</u>	<u>UPL</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>50</u> = Total Cover				
<b>Herb Stratum (Plot size: <u>5'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>0</u> = Total Cover				
<b>Woody Vine Stratum (Plot size: <u>15'</u>)</b>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>100</u>		% Cover of Biotic Crust <u>0</u>		
<b>Hydrophytic Vegetation Indicators:</b> ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 <sup>1</sup> ___ Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
<b>Hydrophytic Vegetation Present?</b> Yes _____ No <input checked="" type="checkbox"/>				

Remarks:

**SOIL**

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-24	10YR 4/2	100					sand	