IRIS PARK PROJECT
WESTERN RIVERSIDE MSHCP HABITAT ASSESSMENT AND CONSISTENCY ANALYSIS
CITY OF MORENO VALLEY, RIVERSIDE COUNTY, CALIFORNIA

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LIST OF ATTACHMENTS

ABBREVIATIONS

AMSL	Above Mean Sea Level
APN	Assessor's Parcel Number
BCC	Birds of Conservation Concern
CDFW	California Department of Fish & Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
FC	Federal Candidate Species
FE	Federally Endangered Species
FT	Federally Threatened Species
FESA	Federal Endangered Species Act
FP	CDFW Fully Protected Species
GPS	Global Positioning System
HCP	Habitat Conservation Plan
MBTA	Migratory Bird Treaty Act
MSHCP	Multiple Species Habitat Conservation Plan
NEPA	National Environmental Protection Act
NWI	National Wetland Inventory
Plan	Western Riverside Multiple Species Habitat Conservation Plan
PFO	Potential for Occurrence
RCA	Regional Conservation Authority
RCIP	Riverside County Integrated Project
RWQCB	Regional Water Quality Control Board
SC	State Candidate Species
SE	State Endangered Species
ST	State Threatened Species
SSC	CDFW Species of Special Concern
TLMA	Transportation and Land Management
USACE	United States Army Corp of Engineers
USDA	United State Department of Agriculture
USGS	United States Geological Survey
USFWS	United States Fish & Wildlife Service

EXECUTIVE SUMMARY

Blackhawk Environmental (Blackhawk) conducted a literature review, field reconnaissance survey, and biological assessment of the proposed Iris Park Project (Project; APN 312-020-025) to assess existing site conditions, as well as assess the potential for sensitive species or habitats to occur within the Project site and surrounding area. This report is intended to fulfill requirements for determining Project consistency with the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP; Plan).

Iris Park (Project) includes 10.82 acres of undeveloped lands in the incorporated City of Moreno Valley, Riverside County, California. The Project is located generally east of March Air Reserve Base and Interstate 215 and south of State Route (SR) 60 (Attachment A, Figure 1). The Project site is bordered by the Val Verde Academy to the west, Iris Avenue to the north, California Aqueduct Linear Park Site to the south and the residential community associated with Ebony Avenue to the east.

The Project is a is a proposed 81-lot single-family detached subdivision located on the south side of Iris Avenue, about 500 feet east of Perris Boulevard, on APN 312-020-025. The project site is triangular in shape and has a gross acreage of approximately 10.82 acres, including 3.02 acres that is planned for development by the City of Moreno Valley as a public park and trail over the California Aqueduct. The community will have two gated access points off Iris Avenue. Three small park areas are spread out on the site. Residential lots would range from 2,197 sq. ft. to 4,741 sq. ft. Homes would range from 1,848 sq. ft. to 2,201 sq. ft., with 3 to 5 bedrooms and 2.5 to 3 baths. Homes would be two stories, include a back yard approximately 12 to 14 feet deep, and have an attached two-car garage. Three architectural styles are proposed: Spanish, French, and Farmhouse. The project overall would provide 217 parking spaces, including 162 garage spaces and 49 spaces on private streets.

The Project site is located entirely within the Riverside County, California and will include 10.82 acres occurring on vacant land. Proposed Project impact areas are shown in Attachment A, Figure 3. The Project is located within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP; Plan) in the Reche Canyon/Badlands Area Plan. The Project site is not located within any Criteria Cell and is located outside of Plan Conservation Areas. The Project area is not located within areas requiring assessment for special status mammals, amphibians, narrow endemic plants, or other criteria area species. The Project area requires assessment and surveys for burrowing owl (*Athene cunicularia*), if suitable habitat is identified during a habitat assessment; suitable burrowing owl habitat was not present within the survey area.

The Project site contains a single vegetation community and/or land cover type (Residential/Urban/Exotic – Disturbed Areas) and predominately contains non-native grasses and non-native annual plant species commonly associated with anthropogenically-altered landscapes, while areas surrounding the Project site contain sparse ornamental shrubs and trees, amongst development.

A literature review conducted for the Project site identified documented occurrences from within five miles of the Project site for a total of 18 special-status wildlife species and one special-status plant species. A field reconnaissance survey and habitat assessment was conducted on February 24, 2020. During the survey, each of these “target species” species were evaluated for their potentials for occurrence (PFO) within and/or adjacent to the Project site. In order to evaluate habitat which may

be suitable for burrowing owl, and to evaluate the potential for indirect impacts, the assessment included all proposed Project features as well as an additional 150-meter (492 feet) survey buffer surrounding the proposed Parcel (Survey Area). During the assessment, no additional special-status wildlife species were observed within or adjacent to the Project site.

Special-status wildlife species identified in the literature review that were determined to have a potential for occurrence (PFO) within the Survey Area consisted of California horned lark (*Eremophila alpestris actia*; moderate PFO), California glossy snake (*Arizona elegans occidentalis*; low PFO) and Western yellow bat (*Lasiurus xanthinus;* low PFO [roosting]). Of the three species with the potential to occur, only the California horned lark is covered under the MSHCP. Species PFO was determined based on proximity of historic records and quality of habitat on site. At the time of the assessment, the Survey Area did not support suitable habitat for burrowing owl; however, two rubble piles containing shallow cavities were identified on the site and were occupied by desert cottontail and a domestic cat during the 2020 breeding season, precluding occupation by burrowing owl. Therefore, suitable habitat for burrowing owl was found absent from the Project site and focused burrowing owl surveys were not required pursuant to the Burrowing Owl Survey Instructions for the Western Riverside MSHCP. Though, occupied by other species at the time of the assessment, these rubble piles have a low potential to support migrating burrowing owls as temporary roost sites, if they become vacant (i.e. not occupied by desert cottontails or domestic cats) prior to construction. Following the MSHCP recommendation of a preconstruction burrowing owl survey within 30 days prior to construction, no negative impacts to burrowing owl are anticipated. If burrowing owls are present during the non-breeding season (September 1 through February 28), burrowing owl exclusion measures may be implemented in accordance with the Plan.

The remaining 15 target sensitive species were considered absent due to lack of suitable habitats on the Project site and Survey Area and no sensitive species were present at the time of the assessment.

Based on CNDDB, USFWS, and CNPSEI-documented occurrences within five miles of the Project site, the literature review resulted in a list of one special-status plant species evaluated for its' potential to occur on the Project site (smooth tarplant; *Centromadia pungens ssp. laevis*). Smooth tarplant was determined to be absent from the Project site and Survey Area, based on lack of individuals observed on site, proximity of historic records and quality of habitat on site. Smooth tarplant is covered under the MSHCP; however, is presumed absent.

The Project site and surrounding areas support suitable nesting substrates for various general migratory bird and raptor species common to the region. Take authorization for migratory bird and raptor species is not provided by the Plan. The Plan functionally covers the remaining special-status species identified with potentials to occur, as well as impacts to their habitats. No other special-status resources are present or are expected to occur. Mitigation for potential Project-related impacts to the species identified to occur or with the potentials to occur during the literature review and assessment can be achieved through payment of a mitigation fee to the appropriate MSHCP authority. No significant adverse impacts to special-status biological resources of the region are anticipated with implementation of Project mitigation contained herein.

Riparian/riverine habitats, as defined by the MSHCP, do not occur within the proposed Project area. The habitat assessment did not identify any drainages or waterways which may fall under the jurisdiction by the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW). No vernal pools or habitat that could potentially support fairy shrimp species were observed on the Project site. No vernal pools

were observed, and they are not known to historically occur within the Project site or within 2 miles of the Survey Area. Additional permitting from these agencies should not be required for Project authorization.

1.0 INTRODUCTION

Blackhawk was contracted by Environmental Planning Development Solutions, Inc. (EPD) to conduct environmental surveys and provide a Habitat Assessment Report and MSHCP Consistency Analysis Report for proposed Iris Park Project (Project; APN 312-020-025), located within an approximately 10.82-acre private land parcel in Riverside County, California. Blackhawk conducted a literature review, field reconnaissance survey, and biological assessment of the proposed Project to assess existing site conditions, as well as assess the potential for sensitive species or habitats to occur within the Project site.

The purpose of this survey effort and consistency analysis is to identify and document sensitive biological resources potentially occurring within the Project site and surrounding areas. The Project is located within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) in the Reche Canyon/Badlands Area Plan; however, the Project is not located within a MSHCP Cell Group or MSHCP Criteria Cell(s). The survey effort focused on documentation of existing site conditions, such as soils, topography, vegetation communities, riverine/riparian habitats, vernal pools and special status species as required for review under the MSHCP. Specifically, the assessment was conducted to determine if habitat was present for BUOW due to the Project location occurring within the MSHCP BUOW survey area, as well as all other sensitive species identified in the literature review as required by the Plan (Table 3 and 4). The assessment did not include a formal jurisdictional or wetland delineation or aquatic resources mapping effort.

1.1 Project Description

The Project is located within a 10.82-acre parcel (APN 312-020-025) in Riverside County, located generally east of March Air Reserve Base and Interstate 215 and south of State Route (SR) 60 in the incorporated City of Moreno Valley (Attachment A, Figure 1). The Project is a proposed 81-lot single-family detached subdivision located on the south side of Iris Avenue, about 500 feet east of Perris Boulevard, on APN 312-020-025. The project site is triangular in shape and has a gross acreage of approximately 10.82 acres, including 3.02 acres that is planned for development by the City of Moreno Valley as a public park and trail over the California Aqueduct. The community will have two gated access points off Iris Avenue. Three small park areas are spread out on the site. Residential lots would range from 2,197 sq. ft. to 4,741 sq. ft. Homes would range from 1,848 sq. ft. to 2,201 sq. ft., with 3 to 5 bedrooms and 2.5 to 3 baths. Homes would be two stories, include a back yard approximately 12 to 14 feet deep, and have an attached two-car garage. Three architectural styles are proposed: Spanish, French, and Farmhouse. The project overall would provide 217 parking spaces, including 162 garage spaces and 49 spaces on private streets. Proposed Project impact areas are shown on Attachment A, Figure 3.

2.0 REGULATORY SETTING

The proposed Project is subject to a host of state and federal regulations associated with a number of regulatory programs. These programs often overlap and were developed to protect natural resources, including: state- and federally listed plants and animals; aquatic resources including rivers and creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-status species that are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities.

2.1 State and/or Federally Listed Plant and Wildlife Species

2.1.1 State of California Endangered Species Act

California's Endangered Species Act (CESA) defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." The State defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an Endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species." Candidate species are defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the Federal Endangered Species Act (FESA), CESA does not list invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened, endangered, or candidate species by stating "No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided." Under the CESA, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

2.1.2 Federal Endangered Species Act

The FESA of 1973 defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to

"take" any listed species. "Take" is defined in Section 3(18) of FESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the United States Fish and Wildlife Service (USFWS), through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification that result in injury to, or death of species as forms of "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a Federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants.

2.1.3 State and Federal Take Authorizations for Listed Species

Federal or state authorizations of impacts to or incidental take of a listed species by a private individual or other private entity would be granted in one of the following ways:

- Section 7 of the FESA stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. 16 U.S.C. 1536(a)(2).

- In 1982, the FESA was amended to give private landowners the ability to develop Habitat Conservation Plans (HCP) pursuant to Section 10(a) of the FESA. Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan.

- Sections 2090-2097 of the California Endangered Species Act (CESA) require that the state lead agency consult with CDFW on projects with potential impacts on state-listed species. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed as well as state- listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFW to adopt the federal incidental take statement or the 10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

2.2 California Environmental Quality Act

Shortly after the United States federal government passed the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA) was passed in 1970 to institute a statewide policy of environmental protection. CEQA does not directly regulate land uses, but instead requires state and local agencies within California to follow a protocol of analysis and public disclosure of environmental impacts of proposed projects and adopt all feasible measures to mitigate those impacts. CEQA makes environmental protection a mandatory part of every California state and local agency's decision-making process.

2.2.1 CEQA Thresholds of Significance

Environmental impacts relative to biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, Section 21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State of California 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 may have a significant effect, or impact, plays a critical role in the CEQA process. According to CEQA, Section 15064.7 (Thresholds of Significance), each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. In the development of thresholds of significance for impacts to biological resources CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Attachment G, Environmental Checklist Form. 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, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, ..."*

Therefore, for the purpose of this analysis, impacts to biological resources are considered potentially significant (before considering offsetting mitigation measures) if one or more of the following criteria discussed below would result from implementation of the proposed project.

2.2.2 Criteria for Determining Significance Pursuant to CEQA

Attachment G of the 1998 State CEQA guidelines indicate that a project may be deemed to have a significant effect on the environment if the project is likely to:

> *a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*
>
> *b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

2.2.3 CEQA Guidelines Section 15380

The CEQA requires evaluation of a project's impacts on biological resources and provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts. Sections 5.1.1 and 5.2.2 below set forth these thresholds and guidelines. Furthermore, pursuant to the CEQA Guidelines Section 15380, CEQA provides protection for non-listed species that could potentially meet the criteria for state listing. For plants, CDFW assigns California Rare Plant Ranks (CRPR) to species categorized as List 1A, 1B, or 2 of the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Plants in California* may meet the criteria for listing and should be considered under CEQA. CDFW also recommends protection of plants, which are regionally important, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 or 4.

2.3 Special Status Species Designations

2.3.1 Federally Designated Special-Status Species

Some years ago, the USFWS instituted changes in the listing status of candidate species. Former C1 (candidate) species are now referred to simply as candidate species and represent the only candidates for listing. All references to federally protected species in this report (whether listed, proposed for listing, or candidate) include the most current published status or candidate category to which each species has been assigned by USFWS. Additionally, the USFWS *Birds of Conservation Concern 2008* report was published to identify the migratory and non-migratory bird species (beyond those already federally listed) that represent the highest conservation priorities for USFWS.

For this report, the following acronyms are used for federal special-status species:

- FE: Federally listed as Endangered
- FT: Federally listed as Threatened
- FPE: Federally proposed for listing as Endangered
- FPT: Federally proposed for listing as Threatened
- FC: Federal Candidate species (Former Category 1 candidates)
- BCC: USFWS Birds of Conservation Concern

2.3.2 State-Designated Special-Status Species

Some mammals and birds are protected by the state as Fully Protected (FP) Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. California Species of Special Concern (SSC) are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. This list is primarily a working document for the CDFW's California Natural Diversity Database (CNDDB) project. Informally listed taxa are not protected but warrant consideration in the preparation of biotic assessments. For some species, the CNDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites. For this report the following acronyms are used for State special-status species:

- SE: State-listed as Endangered
- ST: State-listed as Threatened
- SCE: State candidate for listing as Endangered
- SCT: State candidate for listing as Threatened
- FP: State Fully Protected
- SSC: Species of Special Concern

2.3.3 California Rare Plant Rank

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. The California Native Plant Society's *California Native Plant Society's Inventory of Rare and Endangered Plants of California* separates plants of interest into five categories. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California (Tibor 2001). The list serves as the candidate list for listing as threatened and endangered by CDFW.

- CRPR 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
- CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere
- CRPR 2A: Plants presumed extirpated in California but common elsewhere
- CRPR 2B: Plants rare, threatened, or endangered in California but more common elsewhere
- CRPS 3: Plants about which more information is needed
- CRPR 4: Plants of limited distribution

2.4 Additional Applicable State and Federal Regulations

Each of the following regulations bears some applicability toward assessing the natural resources of the Project Site and any effects that construction and long-term operations and maintenance activities may have upon such resources. These are included for informational and referential purposes only.

2.4.1 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (PL 95-616; 16 USC §§ 668 et seq.) provides for protection of the bald and golden eagles by prohibiting taking, possession, and commerce in the birds.

2.4.2 Clean Water Act

The Clean Water Act (CWA) regulates the discharge of pollutants to waters of the United States in order to protect water quality and the beneficial uses of these waters. Through a permit application process, CWA Section 404 regulates dredge and fill discharges to waters of the United States.

2.4.3 Fish and Wildlife Conservation Act of 1980

The Fish and Wildlife Conservation Act of 1980 (PL 96-366; 16 USC §§2901 et seq.) provides for conservation, protection, restoration and propagation of certain species, including migratory birds threatened with extinction.

2.4.4 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (PL 65-186, as amended; 16 USC §§ 703 et seq.) protects most birds, whether or not they migrate. Birds, their nests, eggs, parts, or products may not be killed or possessed. Game birds are listed and protected except where specific seasons, bag limits, and other features govern their hunting. Exceptions are made for some agricultural pests, which require a USFWS permit (yellow-headed, red-winged, bi-colored red-winged, tri-colored red-winged, Rusty and Brewer's blackbirds, cowbirds, all grackles, crows and magpies). Some other birds that injure crops in California may be taken under the authority of the County Agricultural Commissioner (meadowlarks, horned larks, golden-crowned sparrows, white- and other crowned sparrows, goldfinches, house finches, acorn woodpeckers, Lewis' woodpeckers and flickers). Permits may be granted for various non-commercial activities involving migratory birds and some commercial activities involving captive-bred migratory birds.

2.4.5 California Fish & Game Codes 3500 Series

California Fish & Game Codes 3500, 3503, 3503.5, 3505, 3511 and 3513 are State regulations that cover resident and non-resident game birds, protected bird nests, protected raptor nests, egrets, ospreys, Fully Protected bird species, and take considerations for Migratory Bird Treaty Act birds.

- Code 3500: "(a) Resident game birds are as follows:
  (1) Doves of the genus Streptopelia, including, but not limited to, spotted doves, ringed turtledoves, and Eurasian collared-doves.
  (2) California quail and varieties thereof.
  (3) Gambel's or desert quail.
  (4) Mountain quail and varieties thereof.
  (5) Sooty or blue grouse and varieties thereof.
  (6) Ruffed grouse.
  (7) Sage hens or sage grouse.
  (8) Hungarian partridges.
  (9) Red-legged partridges including the chukar and other varieties.
  (10) Ring-necked pheasants and varieties thereof.
  (11) Wild turkeys of the order Galliformes.

(b) Migratory game birds are as follows:
(1) Ducks and geese.
(2) Coots and gallinules.
(3) Jacksnipe.
(4) Western mourning doves.
(5) White-winged doves.
(6) Band-tailed pigeons.
(c) References in this code to "game birds" means both resident game birds and migratory game birds."

- Code 3503: "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto."

- Code 3503.5: "It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

- Code 3505: "It is unlawful to take, sell, or purchase any aigrette or egret, osprey, bird of paradise, goura, numidi, or any part of such a bird."

- Code 3511: "(a) (1) Except as provided in Section 2081.7 or 2835, fully protected birds or parts thereof may not be taken or possessed at any time. No provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected bird, and no permits or licenses heretofore issued shall have any force or effect for that purpose. However, the department may authorize the taking of those species for necessary scientific research, including efforts to recover fully protected, threatened, or endangered species, and may authorize the live capture and relocation of those species pursuant to a permit for the protection of livestock. Prior to authorizing the take of any of those species, the department shall make an effort to notify all affected and interested parties to solicit information and comments on the proposed authorization. The notification shall be published in the California Regulatory Notice Register and be made available to each person who has notified the department, in writing, of his or her interest in fully protected species and who has provided an e-mail address, if available, or postal address to the department. Affected and interested parties shall have 30 days after notification is published in the California Regulatory Notice Register to provide any relevant information and comments on the proposed authorization.
(2) As used in this subdivision, "scientific research" does not include any actions taken as part of specified mitigation for a project, as defined in Section 21065 of the Public Resources Code.
(3) Legally imported fully protected birds or parts thereof may be possessed under a permit issued by the department.
(b) The following are fully protected birds:
(1) American peregrine falcon (*Falco peregrinus anatum*).
(2) Brown pelican.
(3) California black rail (*Laterallus jamaicensis coturniculus*).
(4) California Ridgway's rail (*Rallus longirostris obsoletus*).
(5) California condor (*Gymnogyps californianus*).
(6) California least tern (*Sterna albifrons browni*).

(7) Golden eagle.
(8) Greater sandhill crane (*Grus canadensis tabida*).
(9) Light-footed Ridgway's rail (*Rallus longirostris levipes*).
(10) Southern bald eagle (*Haliaeetus leucocephalus leucocephalus*).
(11) Trumpeter swan (*Cygnus buccinator*).
(12) White-tailed kite (*Elanus leucurus*).
(13) Yuma Ridgway's rail (*Rallus longirostris yumanensis*)."

- Code 3513: "It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act."

2.4.6 Native Plant Protection Act

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the California Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations, emergencies, and/or with proper notification to the CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

2.4.7 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (California Water Code §§13000 et seq.) is the State's primary water law. It gives the State Water Resources Control Board (SWRCB) and the nine regional water quality control boards substantial authority to regulate water use of surface and sub-surface waters.

2.5 Local Regulations

2.5.1 Western Riverside Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on conservation of species and their associated habitats in Western Riverside County.

The MSHCP will serve as an HCP pursuant to Section 10(a)(1)(B) of the FESA, as well as a NCCP under the NCCP Act of 2001. The MSHCP will be used to allow the participating jurisdictions to authorize "take" of plant and wildlife species identified within the MSHCP area. USFWS and CDFW (Wildlife Agencies) have authority to regulate the take of threatened, endangered, and rare species. Under the MSHCP, the Wildlife Agencies will grant "take authorization" for otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside of the MSHCP Conservation Area, in exchange for the assembly and management of a coordinated MSHCP Area. The MSHCP is designed to provide mitigation compliance under the FESA, CESA, CEQA, and National Environmental Protection Act (NEPA) with payment of a development mitigation fee to the appropriate local jurisdiction and completion of requisite habitat assessments/focused surveys for projects within those jurisdictions.

3.0 METHODS

Methods described below focused on determination of potential for occurrence of special-status plant and wildlife species. Specific consideration was given for species not covered or functionally covered under the Western Riverside MSHCP. Species are considered to be special-status, and are therefore subject to analysis in this section, if they meet one or more of the following criteria:

- Plant and animal species listed as endangered (FE), threatened (FT), or candidates (FPE or FPT) for listing under the Federal Endangered Species Act (FESA);
- Plant and animal species listed as endangered (SE), threatened (ST), or candidates (SPE or SPT) for listing under the California Endangered Species Act (CESA);
- Animals designated as Fully Protected Species (FP), as defined in California Fish and Game Code Sections 3511, 4700, 5050, and 5515;
- Animal species designated as Species of Special Concern (SSC) by the CDFW;
- Bat species designated as High Priority (H) by the Western Bat Working Group;
- Plants that are state listed as Rare[1]; or
- Plant species ranked by the California Native Plant Society (CNPS) as having a California Rare Plant Rank (CRPR) of 1 or 2.[2]

Sensitive natural communities are communities that have a limited distribution and are often vulnerable to the environmental effects of projects. These communities may or may not contain sensitive species or their habitats. For purposes of this assessment, sensitive natural communities are considered to be any of the following:

- Vegetation communities listed in the CNDDB;
- Communities listed in the Natural Communities List with a rarity rank of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable).

3.1 Literature Review

As a foundation for MSHCP requirements, the Riverside County Parcel Report was considered for information regarding sensitive habitat types and potential survey requirements applicable to portions of the Project occurring within private land. The RCA MSHCP Information map was further used to review Plan Survey areas and Criteria Species areas which may overlay portions of the Project occurring within County ROW. Additional sources of information included the National Wetlands Inventory database (NWI), the US Department of Agriculture (USDA) Web Soil Mapper, Calflora database, US Geological Service (USGS) topographic maps, and Google Earth aerial imagery.

Blackhawk Environmental conducted database records search (February 20, 2020) centered on the USGS 7.5-minute *Sunnymead* quadrangle and including up to a five-mile radius surrounding the Project. The database records search included the CDFW California Natural Diversity Database (CNDDB) (CDFW 2020), the US Fish & Wildlife Service (USFWS) Species Occurrence Database (USFWS 2020), and the California Native Plant Society's (CNPS) Electronic Inventory (EI) of Rare and

[1] Plants that were previously state listed as "Rare" have been re-designated as state threatened.

[2] Under the CEQA review process, only CRPR 1 and 2 species are considered, as these are the only CNPS species that meet CEQA's definition of "rare" or "endangered." Impacts to List 3 and 4 species do not meet CEQA's definition of "rare" or "endangered."

Endangered Vascular Plants of California (CNPS 2020). The CNDDB contains records of reported occurrences of federal- and state-listed species, proposed endangered or threatened species, Federal Birds of Conservation Concern (BCC), California Species of Special Concern (SSC) and otherwise sensitive species or communities that may occur within and/or in the vicinity of a Project (Figure 2). The USFWS Species Occurrence Database records federal-listed and candidate species. The CNPS Electronic inventory was filtered for CRPR 2.B and higher species. For the purposes of the habitat assessment, all historic records identified using the methods above, as well as MSHCP species with additional survey needs and procedures, were considered "target species."

The USDA Web Soil Survey was used to review soil types documented to occur within the Project site, as soil types often relate to the PFOs for a number of special-status species and habitat types. Also, a synoptic review was conducted of the NWI database, Google Earth imagery and USGS topographic maps for documented or potential water features on and adjacent to the Project site. These databases and literature reviews were used to provide details on special-status species that have potentials to occur within the proposed Project site and/or its surrounding area prior to conducting habitat assessment or focused survey efforts.

Utilizing the background data described above, Blackhawk biologist Ryan Quilley conducted a field survey of the Project site on February 24, 2020 to assess the Project site for existing conditions and the capacity to potentially harbor target species. Representative photos of the Project site, habitats, and existing site conditions are included in Attachment B.

Following the habitat assessment, potentials for sensitive species to occur were evaluated based on proximity, connectivity, recency and abundance of known occurrences, availability of suitable habitats, historic distributions of the species, and existing site conditions. Potentials for occurrence were generally evaluated based on the following criteria:

- Present – The species was observed within the Project area during the survey effort.
- High – Historic records indicate that the species has been known to occur within the vicinity of the Project (1 mile), and suitable habitat occurs onsite.
- Moderate – Historic records indicate that the species has been known to occur within the vicinity of the Project, but low-quality suitable habitat occurs onsite, or; no historic records occur within the Project, but the Project occurs within the historic range of the species, and moderate to high quality habitat occurs.
- Low – Historic records indicate that the species has not been known to occupy the immediate vicinity of the Project, and low-quality habitat for the species exists onsite.
- Assumed Absent – The species is restricted to habitats not occurring within the Project or is considered extirpated from the Project area.

3.2 Habitat Assessment

Blackhawk Environmental Biologist Ryan Quilley conducted the habitat assessment on February 24, 2020. In order to evaluate areas which may be appropriate for temporary Project use, and to evaluate the potential for indirect impacts, the assessment included all proposed Project features as well as an additional 150-meter (492 feet) survey buffer surrounding the proposed Parcel (Survey Area). Fully developed areas were excluded from the Survey Area due to lack of potential habitat for sensitive species. The survey was conducted between 07:20 A.M. and 08:55 A.M. Survey conditions

are included in Table 1 below.

Table 1. Habitat Assessment Conditions

Biologist(s)	Date	Time	Air Temperature (°F)	Wind Speed (mph)	Cloud Cover (%)	Precipitation
Ryan Quilley	2/24/2020	0720-0855	45-60	0-2	0	None

Methods used during the habitat assessment included slowly walking the entire Project site while documenting flora and fauna species and using Global Positioning System (GPS) technology to map dominant vegetation communities and potential hydrologic features. Where appropriate, the biologist paused at select vantage points to provide full visual coverage of the Project site and Survey Area. Pedestrian surveys of the Project Survey Area were performed throughout all areas of the Project and associated survey buffer, with the exception of fully developed lands; and are further discussed below. During the field survey, all plant and wildlife species observed or detected were recorded in field notebooks. Binoculars were used as needed to identify wildlife species. Plant species observed were identified to species or subspecies level when feasible according to the nomenclature in The Jepson Manual: Vascular Plants of California Edition 2 (2012). Vegetation communities were described according to dominant plant species and annotated on a high-resolution aerial photograph of the Project site. The habitat assessment did not include focused or protocol level surveys for any special-status plant or wildlife species; however, the habitat assessment included a burrowing owl habitat assessment, per Plan requirements.

3.3 Jurisdictional Water Bodies, Riverine/Riparian Habitats, Vernal Pools and Listed Fairy Shrimp Habitat

Aerial imagery, the NWI database, and USGS topographic maps of the Project site were reviewed to identify any known or potential drainage features, riparian/riverine habitat types, water bodies and/or other features that may fall under USACE, RWQCB, and/or CDFW jurisdictions and that may require investigation during the field survey. Per the MSHCP, riparian/riverine habitats are lands containing habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens which occur close to or which depend upon soil moisture from a nearby fresh water source or areas with freshwater flow during all or a portion of the year. The presence of any potentially jurisdictional features, including associated vegetation/communities, presence of ordinary high watermarks (OHWMs) or streambeds, substrates, hydrological indicators and potential connectivity, were documented during the field survey. Although the survey did not include a formal jurisdictional delineation, the survey included evaluation of potentially jurisdictional water bodies that may be subject to USACE, RWQCB, and/or CDFW jurisdictions within or adjacent to the Project as well as an assessment of riverine/riparian habitats as defined by the Plan, and none were observed to occur.

3.3.1 Vernal Pools and Listed Fairy Shrimp Habitat

The habitat assessment included a review of the proposed Project and Survey Area for stock ponds, ephemeral pools, road ruts, and other seasonally ponded areas which may support listed fairy shrimp species. The survey was performed during the 2020 wet season. The biologist noted any areas which may support standing water in excess of 2 centimeters. Where presence of standing water was not noted, the biologist recorded any indicators of non-riverine seasonally ponded areas such as water marks, soil cracks, algal mats, or other indicators which may indicate intermittent ponding. As part of the notation of floral species, the biologist recorded any observed vernal pool indicator species per USACE guidance (USACE 1997). Methods included the review of historic aerial imagery to determine

if inundation was readily visible on historic aerials.

3.4 MSHCP Additional Survey Needs and Procedures

The proposed Project falls within an MSHCP Survey Areas for burrowing owl (e.g. amphibian species, mammal species, narrow endemic plant species, and/or special linkage areas). Assessment of habitat suitability for burrowing owl was performed per accepted protocols. These methods are discussed below. The proposed Project does not occur within areas requiring additional assessment and surveys for mammals, amphibians, narrow endemic plants, or Criteria Areas.

3.4.1 Burrowing Owl

A habitat assessment for burrowing owl was performed throughout the Survey Area, as the entirety of the Project falls within areas designated as MSHCP survey areas for the species. Blackhawk performed a habitat assessment for burrowing owl concurrently with the habitat assessment on February 24, 2020. The assessment was performed per the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area – Step 1 Habitat Assessment* (2005, by walking meandering transects through the entire Survey Area (excluding urban development). Pedestrian survey transects were spaced in a manner which allowed 100% visual coverage of the ground surface and transect centerlines were no more than 30 meters (approximately 100 ft.) apart. Transect spacing was adjusted as necessary to account for differences in terrain, vegetation density and ground surface visibility. The approximate spacing and directionality of transects is shown on Figure 3. Suitable habitat, as defined by the MSHCP, consists of a variety of natural and modified habitats for nesting and foraging that is typically characterized by low growing vegetation. Burrowing owl habitat includes, but is not limited to, native and non-native grassland, interstitial grassland within shrub lands, shrub lands with low density shrub cover, golf-courses, drainage ditches, earthen berms, unpaved airfields, pastureland, dairies, fallow fields, and agricultural use areas. Burrowing owls typically use burrows made by fossorial (adapted for burrowing or digging) mammals, such as ground squirrels (*Spermaphilus beecheyi*) or badgers (*Taxidea taxus*), they often utilize manmade structures, such as earthen berms; cement culverts; cement, asphalt, rock, or wood debris piles; or openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or in close proximity to man-made structures. In order to assess potential habitat, the biologist focused on the identification of suitable burrows within and adjacent to the site. Per the MSHCP, if burrowing owl habitat is not present on-site (i.e. if the site is completely covered by chaparral, cement or asphalt) Step II of the survey is not necessary and no pre-construction surveys are necessary.

4.0 ENVIRONMENTAL SETTNG AND RESULTS

4.1 Literature Review Results

The literature review resulted in a total of 18 special-status wildlife species and one special-status plant species known to occur within the Project vicinity. Three wildlife species are Federally Endangered, and one is State Threatened. No plant species are listed as Threatened or Endangered under the CESA or FESA. In addition to the above-mentioned FESA and CESA designations, the remaining 16 species had a CDFW listing status of at least Species of Special Concern (SSC) or CRPR ranking of 2 or higher. A CNDDB map of all sensitive wildlife and plant species known to occur within five miles of the Project site can be found in Attachment A, Figure 2. The resulting lists of species are included in Tables 3 and 4 and discussed in Section 4.2.4 and 4.2.5 below.

- Federally Endangered: three wildlife species; Riverside fairy shrimp, Stephen's kangaroo rat and San Bernardino kangaroo rat.

- State Threatened: one wildlife species; Stephen's kangaroo rat (*Dipodomys stephensi*)].

4.1.1 MSHCP Requirements (criteria cells, fee areas, narrow endemic plants, jurisdictional areas)

The Project site is located within Riverside County in the Reche Canyon/Badlands Area Plan. The RCIP report indicates the Project does not occur within a Plan Cell Group or Plan Criteria Cell; however, the Project is located within the Reche Canyon/Badlands Area Development Impact Fee (DIF) Area and is subject to payment of said fees as compliance. The MSHCP requires burrowing owl habitat assessments and surveys (if suitable habitat is present) are to be conducted on the Project site, but it does not require additional surveys for criteria areas species, amphibian species, mammal species, narrow endemic plant species, and/or special linkage areas.

4.2 Habitat Assessment Results

The proposed Project Includes 10.82 acres of undeveloped lands in the incorporated City of Moreno Valley, Riverside County, California. The Project is located generally east of March Air Reserve Base and Interstate 215 and south of State Route (SR) 60 (Attachment A, Figure 1). The Project site is bordered by the Val Verde Academy to the west, Iris Avenue to the north, California Aqueduct Linear Park Site to the south and the residential community associated with Ebony Avenue to the east. Regional access is provided by Iris Avenue to the north. Areas surrounding the Project site include residential and commercial developments, major and arterial roadways, parking areas, infrastructure, and landscaped areas, as well as undeveloped areas including the site itself and small undeveloped parcels to the west.

Elevations within the Project site range from 1,588 feet to 1,573 feet above mean sea level (AMSL) with little variation throughout the entire Project area.

4.2.1 Soils

Mapped soil units within the Project Survey Area include Exeter, Greenfield and Hanford sandy loams and loamy sands with slopes ranging between zero to two percent. Three distinct soil series are present within the Project area. These soil units are included in Table 2.

Table 2. Soils Occurring Within the Project Site

Map Unit Symbol	Map Unit Name	Acres in Survey Area	Percent of Survey Area
EnA	Exeter sandy loam, 0 to 2 percent slopes	2.11	19.5
GyA	Greenfield sandy loam, 0 to 2 percent slopes	7.00	64.7
HgA	Hanford fine sandy loam, 0 to 2 percent slopes	1.71	15.80
Total		10.82	100.00

4.2.2 Existing Land Use and Site Conditions

The Project site consists of a flat, vacant, triangular area characterized entirely by previously disturbed areas showing evidence of past historic mass grading of the site, imported soils (fill material containing sand and gravel), a single existing dirt access road, anthropogenic topographical disruptions from past land uses (tilling), and small debris piles. There was evidence onsite of recent (<1 year) disturbances, and the observed vegetation communities were highly disturbed. No native habitat was identified within the Project site, and nonnative annual species accounted for over ninety percent of the plant species percent cover on the vegetated areas.

Absolute vegetative cover averaged seventy percent and non-native plant species were dominant in all portions of the Project site. Shrubs were absent and annual, nonnative plant species accounted for an average vegetation height of one foot. The only observed trees within the Survey Area were located outside of the Project site and consisted of scattered ornamental species such as eucalyptus (*Eucalyptus ssp.*), golden wattle (*Acacia sp.*) and Mexican fan palm associated with residential development to the east and northwest of the parcel and the Val Verde Academy to the west of the parcel. The Project site provides marginally suitable habitat for common plant and wildlife species known to occur in the region and is restricted to species associated with disturbed areas.

Hydrology within the Project is characteristic of previously graded urban development areas with flat topography, isolated from surface run-off by municipal storm drain systems surrounding the site. The Project site has a slight grade and generally drains from north to south. Soils throughout the project are broadly described as “well drained,” comprised of sandy loams. Areas of natural hydrology were not observed within the Project, with the exception of small rills due to sheet flow.

4.2.3 Vegetation Communities and Land Use Types

According to the MSHCP Information Map, the Project is proposed to occur within developed/disturbed land. Field verification of the site identified two distinct MSHCP vegetation community and/or land use type within the Project site. Land use types are described according to *Volume II, Section C Habitat Accounts – Vegetation Associations of the Plan* and further refined into

subgroups according to *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). Vegetation mapping showing the distribution of the two communities identified within the Project site and the Survey Area is shown in Figure 3 of Attachment A. The vegetation community/land cover uses present on the Project site and its' acreage include:

Project Site:

- 10.82 acres of Residential/Urban/Exotic – Disturbed Lands (Holland code 11300)

Survey Area (150 meter buffer):

- 12.23 acres of Residential/Urban/Exotic – Disturbed Lands (Holland code 11300)
- 54.39 acres of Residential/Urban/Exotic – Urban/Developed Areas (Holland code 11200)

Residential/Urban/Exotic – Distrubed Lands (Holland code 11300)

According to the Plan descriptions of Residential/Urban/Exotic areas, weed communities occur commonly in roadside areas and abandoned lots, such as the proposed Project lot. Within the Survey Area, these areas are further characterized according to Holland as "Disturbed Lands," which may result from anthropogenic or natural causes and can take on many forms in context of the surrounding vegetation communities, available seed banks, and disturbance factors. These areas can result from previous grading, vehicle traffic, or temporary land uses such as project staging. If disturbance variables are removed, and Disturbed Land is left to natural processes, these areas have the capacity to revegetate in the short term, but do not function as native vegetation communities. This contrasts with Urban/Developed Areas described herein, that do not have the capacity to revegetate in the short term or consist of maintained landscaping.

The entire parcel (10.82 acres) can be characterized by Residential/Urban/Exotic – Disturbed Lands in the form of non-native grasses and recently disturbed soils. Dominant and sub-dominant vegetation in this habitat include smooth barley (*Hordeum murinum*), cheeseweed (*Malva parviflora*), wild radish (*Raphanus sativus*), common fiddleneck (Amsinckia menziesii) and red brome (*Bromus madritensis*). Herbaceous ground cover in these areas was observed to provide groundcover in excess of eighty percent. Average height of vegetation was low, ranging from one half to three feet above ground. An additional 1.41 acres of similarly characterized habitat occurs within the surrounding Survey Area. Visible signs of recent mechanical raking (tilling) and consistent anthropogenic disturbance were observed within this habitat type, precluding the potential for most special-status species of plants and wildlife (Attachment B, Photograph 4). The regional value of disturbed Residential/Urban/Exotic – Weed Communities on site is low; having potential as foraging habitat for raptors, some passerine bird species and use by rodents capable of withstanding frequent anthropogenic disturbance

Residential/Urban/Exotic – Urban/Developed Areas (Holland code 11200)

The Plan characterizes developed areas and urban environments in a variety of ways, including tree groves, street strips, green belts, and shrub cover. Within the Survey Area this land use is further refined to include existing development according to Holland as "Urban/Developed Areas" which are nearly or entirely devoid of native vegetation and show significant evidence of intentional, human-caused conversion of previously existing natural habitats into development. Developed land is characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation. This vegetation community typically includes unvegetated or landscaped areas with a variety of ornamental (usually non-native) plants (Oberbauer 2008). A total of 54.39

acres of Urban/Developed Areas were observed within the Survey Area.

4.2.3 Jurisdictional Waters and Riverine/Riparian Habitats

USACE, RWQCB and CDFW regulate discharge into and impacts to wetland and non-wetland water bodies meeting certain criteria. The MSHCP regulates impacts to riverine/riparian communities and vernal pools, as well as species associated with these habitat types, as outlined in section 6.1.2 of the MSHCP. The MSHCP specifically describes riverine/riparian habitats as "lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with freshwater flow during all or a portion of the year."

The habitat assessment did not identify any drainage features which meet the MSHCP criteria for riverine or riparian habitat within the Project vicinity. Based on lack of riverine habitat a Jurisdictional Assessment and accompanying Jurisdictional Delineation Report is not required.

4.2.4 Sensitive and Observed Wildlife Species

The literature review resulted in a list of eighteen special-status target wildlife species with the potential to occur within the Project vicinity. These species and their potentials for occurrence are further described in Table 3. A complete list of wildlife species observed during the habitat assessment is included in Attachment C.

Table 3. Sensitive Wildlife Species Potentially Occurring Within the Survey Area

Species Name	Listing Status	Habitat Requirements	Potential for Occurrence
Birds			
Burrowing owl *Athene cunicularia*	Federal: BCC State: SSC MSHCP: Covered	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	Presumed Absent. Six historical occurrences were recorded within five miles of the Project site; however, at the time of the survey, the site had no suitable burrows and lacks enough suitable habitat to support this species.
California horned lark *Eremophila alpestris actia*	Federal: None State: WL MSHCP: Covered	A common, widespread bird of the open country, the Horned Lark prefers short, sparsely vegetated prairies, deserts, and agricultural lands.	Moderate. Two historical occurrences were recorded within five miles of the Project site. Residential/Urban/Exotic – Weed Communities dominated by non-native grasses within the site provides suitable nesting and foraging habitat.
Loggerhead shrike *Lanius*	Federal: BCC State: SSC MSHCP:	Inhabits open country with short vegetation and well-spaced shrubs or low trees,	Presumed Absent (Nesting). One historical occurrence was recorded within five miles of

ludovicianus (nesting)	Covered	particularly those with spines or thorns. Frequents agricultural fields, pastures, old orchards, riparian areas, desert scrublands, savannas, prairies, golf courses and cemeteries.	the Project site; however, the site does not provide any suitable nesting substrate.
Reptiles and Amphibians			
California glossy snake *Arizona elegans occidentalis*	Federal: None State: SSC MSHCP: Not Covered	This nocturnal species inhabits a variety of grassland, sage scrub, dry wash and chaparral habitats from sea level to over 7,000 feet in elevation. Tends to prefer sandy, loose soils. It remains in its burrow by day.	Low. One historical occurrence was recorded within five miles of the Project site; however, the site is disturbed and unlikely to provide suitable habitat for this species. Additionally, the site is surrounded by development, further precluding occupation by this species.
San Diego horned lizard *Phrynosoma blainvillii* (formerly *Phrynosoma coronatum blainvillei*)	Federal: None State: SSC MSHCP: Covered	Occurs widely in sage scrub, woodlands, grasslands, and chaparral communities within microhabitats of loose granitic soils and open areas for sunning and foraging. This species is commonly associated with the presence of native harvester ants.	Presumed Absent. Multiple historical occurrences are recorded within five miles of the Project site; however, suitable habitat does not exist within the Project site. Additionally, the site is surrounded by development, further precluding occupation by this species.
Coastal whiptail *Aspidoscelis tigris stejnegeri* (formerly *Cnemidophorus tigris multiscutatus*)	Federal: None State: SSC MSHCP: Covered	Prefers open scrub, chaparral, and woodland habitats with open areas for basking and native ants as a prey base.	Presumed Absent. One historical occurrence was recorded within five miles of the Project site; however, the site is highly disturbed, lacks shrub cover, and is unlikely to provide suitable habitat for this species. Additionally, the site is surrounded by development, further precluding occupation by this species.
Northern red diamond rattlesnake *Crotalus ruber ruber*	Federal: None State: SSC MSHCP: Covered	Inhabits arid scrub, coastal chaparral, oak and pine woodlands, rocky grassland, cultivated areas. On the desert slopes of the mountains, it ranges into rocky desert flats.	Presumed Absent. Four historical occurrences are recorded within five miles of the Project site; however, suitable habitat does not exist within the Project site. Additionally, the site is surrounded by development, further precluding occupation by this species.
Belding's orange-	Federal: None	Occurs widely in sage scrub,	Presumed Absent. One

throated whiptail *Aspidoscelis hyperythra beldingi*	State: SSC MSHCP: Covered	woodlands, grasslands, and chaparral communities within microhabitats of loose granitic soils and open areas for sunning and foraging.	historical occurrence was recorded within five miles of the Project site; however, the site is disturbed, lacks shrub cover, and is unlikely to provide suitable habitat for this species. Additionally, the site is surrounded by development, further precluding occupation by this species.
Western spadefoot toad *Spea hammondii*	Federal: None State: SSC MSHCP: Covered	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Breeding sites include vernal pools and other temporary rain pools, cattle tanks, and occasionally in pools of intermittent streams. Typically, the pools are turbid with little or no cover.	Presumed Absent. Five historical occurrences are recorded within five miles of the Project site; however, suitable habitat does not exist within the Project site, and no seasonal water bodies were observed in the vicinity. Additionally, the site is surrounded by development, further precluding occupation by this species.
Mammals			
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	Federal: None State: SSC MSHCP: Covered	This species is associated with sparsely vegetated lower elevation grasslands, alluvial sage scrub and coastal sage scrub, where it tends to occur in patches with fine sandy soils, such as dry washes and aeolian deposits.	Presumed Absent. Five historical occurrences are recorded within five miles of the Project site; however, the Project site is characterized by heavily disturbed soils, lacks sufficient grass or shrub cover, contains fill soil/gravel materials, and lacks connectivity to higher quality habitat. No pocket mouse burrows were observed. Suitable habitat for this species is absent from the site.
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	Federal: None State: SSC MSHCP: Covered	Prefers loose, sandy, and gravelly soils, or mixed rocks, on moderate to steep rocky slopes with nearby shrubs. Habitats include coastal scrub, chamise-redshank chaparral, mixed chaparral,	Presumed Absent. Two historical occurrences are recorded within five miles of the Project site; the Project site is characterized by disturbed soils, lacks sufficient shrub cover, contains fill soil/gravel

		sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper and annual grassland. Known range extends north to the San Bernardino and San Gabriel mountains, east to the San Jacinto Mountains, and south into Baja California.	materials, and lacks connectivity to higher quality habitat. No pocket mouse burrows were observed. Suitable habitat for this species is absent from the site.
Pocketed free-tailed bat *Nyctinomops femorosaccus*	Federal: None State: SSC MSHCP: Not Covered	Colonial species that roosts primarily in crevices in steep rugged cliffs, high rocky outcrops and slopes; it is readily found in abandoned quarries. May also roost in buildings, caves, and under roof tiles. It has been found in a wide variety of plant associations, including riparian, oak woodland, coniferous forest, open meadow and grassland, and coastal and desert scrublands, including over scrubby ridges, reservoirs, ponds, wetlands, and artificial lights.	Presumed Absent (Roosting/Foraging). One historical occurrence has been reported within five miles of the Project site. The Project site contains poor foraging habitat and roosting habitat/structure is not present on the Project site.
San Bernardino kangaroo rat *Dipodomys merriami parvus*	Federal: FE State: SSC MSHCP: Covered	This species occurs primarily in alluvial fan sage scrub (AFSS) which is a distinct habitat type of the coastal sage scrub (CSS) community. The AFSS habitats are confined to river and floodplains of southern San Bernardino County, the current distribution of the SBKR in San Bernardino County is San Ana Wash, Cajon and Lytle Creek, Plunge Creek, City Creeks, and area west of Rialto Drainage near the Jurupa Hills.	Presumed Absent. Three historical occurrences are recorded within five miles of the Project site; however, the Project site is characterized by disturbed soils and fill materials and lacks connectivity to higher quality habitat. Habitat for this species is sub-marginal at best, but with no kangaroo rat burrows observed, and a lack of reasonable connectivity to known populations, this species is assumed absent.
Southern grasshopper mouse	Federal: None State: SSC MSHCP: Not	Typically found in open habitats, including native perennial grasslands and	Presumed Absent. One historical occurrence has been recorded within five miles of

Onychomys torridus ramona	Covered	coastal sage scrub to the west of the mountain and alluvial fans and desert scrub to the east.	the Project site; however, the Project site is characterized by disturbed soils, a lack of shrub cover, imported fill materials, and lacks connectivity to higher quality habitat. Habitat for this species is assumed absent.
Stephen's kangaroo rat *Dipodomys stephensi*	Federal: FE State: ST MSHCP: Covered	Occurs primarily in low-growing annual and perennial grassland habitats but may occur in coastal scrub or sagebrush with sparse canopy cover and low herbaceous growth, or in disturbed areas. Preferred perennials are buckwheat and chamise; preferred annuals are brome grass and filarees.	Presumed Absent. Nine historical occurrences are recorded within five miles of the Project site; however, the Project site is characterized by disturbed soils and fill materials and lacks connectivity to higher quality habitat. Habitat for this species is sub-marginal at best, but with no kangaroo rat burrows observed, and a lack of reasonable connectivity to known populations, this species is assumed absent.
Western mastiff bat *Eumops perotis californicus*	Federal: None State: SSC MSHCP: Not Covered	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban. Crevices in cliff faces, high buildings, trees, and tunnels are required for roosting. When roosting in rock crevices, it needs vertical faces to drop off to take flight. Reproduction: Nursery roosts described as tight rock crevices at least 35 inches deep and two inches wide, or crevices in buildings. Suitable habitat consists of extensive open areas with abundant roost locations provided by crevices in rock outcrops and buildings. Is known to forage over 25 miles away from its roost site (Zeiner et al 1988).	Presumed Absent (Roosting/Foraging). Two historical occurrences have been reported within five miles of the Project site. The Project site contains poor quality foraging habitat and no roosting habitat/structure. Additionally, the site is surrounded by development, further precluding occupation by this species.

Western yellow bat *Lasiurus xanthinus*	Federal: None State: SSC MSHCP: Not Covered	Roosts are commonly in palm trees, and occasionally in cottonwood trees or yuccas, often near surface water in open grassy areas or scrub habitat. Forages over water and among trees in coastal, foothill, and desert riparian areas, and in suburban neighborhoods.	Low (Roosting), Presumed Absent (Foraging). Two historical occurrences have been reported within five miles of the Project site. The Project site does not contain suitable foraging and roosting habitat/structure for this species. Potential roosting sites in Mexican fan palms are present in adjacent areas to the Project site within the Survey Area.
Crustaceans			
Riverside fairy shrimp *Streptocephalus wootoni*	Federal: FE State: None MSHCP: Covered	Restricted to deep seasonal vernal pools, vernal pool like ephemeral ponds, and stock ponds and other human modified depressions (TLMA 2004). Riverside fairy shrimp prefer warm-water pools that have low to moderate dissolved solids, are less predictable, and remained filled for extended periods of time (Eriksen and Belk 1999). In Riverside County, Riverside fairy shrimp have been found in pools formed over the following soils: Murrieta stony clay loams, Las Posas series, Wyman clay loam, and Willows soils (U.S. Fish and Wildlife Service 2001).	Presumed Absent. Two historical occurrences have been reported within five miles of the Project site; however, this species requires vernal pool habitats which are absent from the Project site.

Of the 18 target wildlife species documented to occur within the Project vicinity, one (California horned lark) was determined to have a moderate potential for occurrence, and two (glossy snake and western yellow bat) had a low potential for occurrence based on proximity of historic records and quality of habitat on site. Specifically, western yellow bat was determined to have a low potential for roosting within the Survey Area based on the presence of Mexican fan palms (*Washingtonia robusta*) present on lands immediately adjacent to the Project site. However, suitable roosting sites for this species do not occur directly within the Project and this species is presumed absent from the Project site. The remaining 15 target sensitive species were considered absent due to lack of suitable habitats on the Survey Area.

4.2.5 Special Status and Observed Plant Species

Based on CNDDB, USFWS, and CNPSEI-documented occurrences within five miles of the Project site,

the literature review resulted in a list of one special-status plant species evaluated for its' potential to occur on the Project site. This single species and potential for occurrence is further described in Table 4 below. A complete list of plant species observed during the field survey is included in Attachment D.

Table 4. Special-Status Plant Species Potentially Occurring Within the Project Site

Species Name	Listing Status	Habitat Requirements	Potential for Occurrence
Smooth tarplant *Centromadia pungens ssp. laevis*	Federal: None State: None CRPR: 1B.1 MSHCP: Not Covered	Annual herb that occurs in alkali soils within chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland. Blooms: Apr-Sep Elevation: 0-640 m	Presumed Absent. One historical occurrence has been recorded within five miles of the Project site; however, alkali soils in suitable habitat were not observed on the Project site. Additionally, no senesced individuals, seedlings or plants of any tarplant species were observed.

The single special-status plant species (smooth tarplant) documented to occur within the Project vicinity, is presumed absent within the Survey Area based on proximity of historic records and lack of suitable habitat on site.

4.2.6 Special Status and Observed Habitat Types

The literature review did not result in any special-status habitat types with potential to occur on the Project site.

4.3 Migratory Birds

The Project site predominately contains non-native grasses and non-native annual plant species commonly associated with anthropogenically-altered landscapes, while areas surrounding the Project site contain sparse ornamental shrubs and trees, amongst development. These habitat types provide suitable nesting habitat primarily for avian species commonly associated with developed and Residential/Urban/Exotic – Weed Communities dominated by non-native grasses. Nearly all native nesting birds are protected by the Migratory Bird Treaty Act (MBTA) and CDFW Codes 3500 through 3516.

Common bird species with the potential to nest within the Project site and adjacent habitats include American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus;* not MBTA-covered), European starling (*Sturnus vulgaris;* not MBTA-covered), northern mockingbird (*Mimus polyglottos*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*) and Say's phoebe (*Sayornis saya*) among others. Suitable nesting habitat for raptor species identified during the survey (i.e., American kestrel), consisted of potential cavities within ornamental palms and buildings that were adjacent to the Project site. The open nature of the Project site and Residential/Urban/Exotic – Weed Communities dominated by non-native grasses, also provides suitable habitat for ground nesting birds such as

horned lark, savannah sparrow (*Passerculus sandwichensis*), killdeer (*Charadrius vociferans*), among others.

4.4 Reserve Interface and Wildlife Movement Corridors

Tracks, sign, burrows and/or direct visual observation of small mammal species was limited and consisted of scarce Botta's pocket gopher (*Thomomys bottae*) burrows along the northern Project limit and direct observation of desert cottontail (*Sylvillagus audubonii*) within a single small rubble pile within the northwest portion of the Project site. Domestic dog tracks and a single domestic cat were observed within the Project site. The Project site does not contain large natural areas and habitat fragments, and is isolated by surrounding development, precluding wildlife corridors and connectivity to large conservation areas. The Project does not occur within Plan Conservation Areas or Public/Quasi Public Lands (PQP), and the nearest PQP area is three quarters of a mile south of the Project site and connectivity between open space Conservation Areas and the Project is absent as a result of heavy urban development in surrounding lands.

5.0 WESTERN RIVERSIDE MSHCP CONSISTENCY ANALYSIS

The Project is not located within a MSHCP Criteria Cell or Cell Group. The MSHCP establishes habitat assessments for certain plant and wildlife species. The Project is located within an area of the MSHCP requiring habitat assessments for burrowing owl and burrowing owl surveys, if suitable habitat is present; however, no suitable burrowing owl habitat was identified within the Project area or adjacent survey areas. The Project was not observed to support riparian/riverine habitats. The Project does not exist adjacent to Public/Quasi Public Lands. The Project is not located within an area requiring surveys for mammals, amphibians, narrow endemic plant species, or criteria area species.

5.1 Reserve Assembly Analysis

The proposed Project is not located within a Plan Criteria Cell or Cell Group, and therefore will not directly impact Conservation Areas or long-term reserve assembly. The proposed Project does not occur immediately adjacent to Plan Conservation Areas and therefore will avoid direct impacts to these areas. Potential indirect impacts associated with the proposed Project adjacent to these areas is discussed in Section 5.2 below.

5.2 Urban Wildlands Interface

According to the Plan, the Urban/Wildlands Interface Guidelines are intended to address indirect effects associated with locating development in proximity to Plan Conservation Areas. Plan Conservation Areas include Public/Quasi Public Lands (PQP), San Jacinto Wldlife Area Additional Acquisition, Preexisting Conservation Agreements and Rural Moutainous Designation in the MSHCP Plan Area. The Project Site does not occur within any of these Conservation Areas and urban development isolates the Survey Area from all Conservation Areas by more than three quarters of a mile. The Project Site does not occur within a Special Linkage Aree and connectivity to the site is absent as a result of heavy urban development in surrounding lands. The Project does not occur adjacent to Conservation Areas, therefore, development of this parcel is not likely to result in "edge effects" that will adversely affect biological resources within the MSHCP Public/Quasi Public Lands (TLMA, 2004). Analysis was conducted under section 6.1.4 of the MSHCP to determine potential impacts.

5.2.1 *Drainage and Storm Water Runoff*

Though the project is not within or immediately adjacent to PQP lands, Project indirect impacts could involve drainage and storm water runoff from the Project site to adjacent flow-ways (Iris Avenue and Red Maple Lane) and potentially into the municipal storm drain system. A possible temporary indirect impact during construction may include an increase of soil erosion above natural levels currently observed in these areas. Other potential effects may result from non-storm water discharges, excavation stockpile runoff, or other elements that might degrade or harm biological resources or ecosystem processes within distant MSHCP PQP Lands, if fed by the municipal storm drain system. Regardless of proximity to PQP Lands, Best Management Practices (BMPs) should be included to ensure that siltation and erosion are minimized during construction, and also incorporated into the final design of the Project in order to ensure that future water quality is not degraded. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into existing natural drainage courses and/or MSHCP Public Quasi-Public Lands (TLMA, 2004).

5.2.2 *Toxics*

Due to the use of heavy machinery proposed in the development of the Project site, as well as standard development practices, a possible indirect impact to the distant MSHCP Public/Quasi Public Lands could involve toxic runoff from the Project site to City storm drains. Toxic runoff may originate from hydraulic fuel, automotive fluid leaks, oil, etc. Similar measures as those used to address drainage impacts will be implemented to prevent toxic impacts to the any MSHCP Public/Quasi Public Lands.

5.2.3 *Lighting*

No PQP lands exist adjacent to the Project and therefore there should be no associated impacts to adjacent habitats or MSHCP Public/Quasi Public Lands as a result of night lighting.

5.2.4 *Noise*

Project activities may result in an increase of noise levels in areas immediately surrounding the Project site; however, no adjacent habitats and MSHCP Public/Quasi Public Lands do not exist within the vicinity of the Project. Therefore, increased noise levels associated with Project implementation are not anticipated to effect wildlife associated with MSHCP Public/Quasi Public Lands.

5.1.5 *Invasives*

The Project is surrounded by urban development and is not adjacent to MSHCP Public/Quasi Public Lands, therefore transfer of invasive species to distant MSHCP Public/Quasi Public Lands is not anticipated. The site itself does not provide any native habitat and is dominated by non-native annual species.

5.1.6 *Grading/ Land Development*

All Project activities shall remain restricted to designated work areas proposed for disturbance as shown in Attachment A, Figure 3, “Project Boundary”. The Project work area occurs outside of all

MSHCP Conservation Areas, Riverine Habitat, and avoids habitat areas which may support species for which additional surveys would be required.

5.2 Additional Survey Needs and Procedures

Additional surveys are not anticipated in conjunction with Plan implementation in order to achieve coverage for species discussed in 6.3.2 of the Plan, since these species either were determined to be absent from the Project site, or potential impacts to species with a PFO will be limited to a level that is below levels considered significant under CEQA/NEPA guidelines and the MSHCP.

The Project falls within the MSHCP Survey Area for burrowing owl. The habitat assessment included consideration of this species, discussed below.

5.2.1 Burrowing Owl

The Project site is located within a MSHCP burrowing owl survey area, if suitable habitat is identified during the burrowing owl habitat assessment. A habitat assessment during a site visit conducted on February 24, 2020 identified Disturbed Areas which may be considered suitable for burrowing owl. Based on the potential for suitable habitat, a habitat assessment was performed as described in section 3.4.1 above. The results of the habitat assessment determined that suitable burrowing owl habitat does not exist within the Project site or Survey Area due to a lack of suitable burrow sites. Natural or manmade burrows were not observed, with the exception of two small concrete rubble piles, one of which was occupied by a feral cat and the other occupied by several desert cottontail rabbits, precluding owl occupation. No whitewash, pellets, feathers or other burrowing owl sign were observed during the survey. Additionally, crevices created by these concrete rubble piles were considered to be too shallow to support burrowing owl. Due to absence of suitable habitat for this species within the Survey Area, no additional surveys for this species are required.

5.3 Criteria Area Species and Narrow Endemic Plant Species

The Project site is not located within a Narrow Endemic Plants Survey Area under section 6.1.3 of the Plan. The Project site is not located within a Criteria Area Species Survey for special-status plant species under section 6.3.2 of the Plan. No additional non-covered special-status or narrow endemic plant species with the potential to occur on site were identified during the literature review and/or site assessment.

5.4 Jurisdictional Waters

The presence of any potentially jurisdictional features, including associated vegetation/communities, presence of ordinary high watermarks (OHWMs) or streambeds, substrates, hydrological indicators and potential connectivity was not observed during the habitat assessment. The habitat assessment did not include a formal jurisdictional delineation effort as potentially jurisdictional water bodies that may be subject to USACE, RWQCB, and/or CDFW jurisdictions were not documented to occur within or adjacent to the Project. Therefore, an additional assessment is not required to determine if specific areas of the Project site meet either 1) criteria to be considered a relatively permanent water or tributary of a TNW providing meeting significant nexus standards and fall under the jurisdiction of the USACE, RWQCB and/or CDFW as a non-wetland water and streambed, or 2) meet the three-parameter criteria of a wetland and fall under the jurisdiction of the USACE, RWQCB and/or CDFW as

wetland areas.

5.4.1 Riparian/Riverine Habitats

Per Section 6.1.2 of the MSHCP, riparian/riverine habitats are lands containing habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens which occur close to or which depend upon soil moisture from a nearby fresh water source or areas with freshwater flow during all or a portion of the year. The habitat assessment included a review of areas which may meet criteria as riparian/rivering habitats per the Plan. No riparian/riverine habitats were documented within the Project site or Survey Area.

5.4.2 Riparian/Riverine Species

Riparian/riverine habitats were not identified within the Project site. Due to the lack of habitat which supports riparian species, riparian/riverine-associated species listed in section 6.1.2 of the Plan are not expected to occur. No MSHCP-covered or riparian-associated species were directly observed during the February 24, 2020 field survey.

5.5 Vernal Pools and Fairy Shrimp

No vernal pools or habitat that could potentially support fairy shrimp species were observed on the Project site. No vernal pools were observed, and they are not known to historically occur within the Project site or within 2 miles of the Survey Area. The closest historical record of listed fairy shrimp to the Project Site occurs approximately 2.5 miles to the west. The Project is surrounded by urban development and lacks any connectivity to known populations of listed fairy shrimp, further precluding the potential for occurrence. In addition to the absence of historical records of occurrence, native soil types mapped for the Project include well drained sandy loams, not expected to support natural formation of vernal pools or fairy shrimp habitat. As a result, these areas are not expected to support vernal pool species.

6.0 IMPACTS AND MITIGATION

This section of the report includes a discussion of the potential direct, indirect, and cumulative impacts to onsite special-status biological resources that may result upon the construction and implementation of the Project. Direct impacts include those involving the loss, alteration, and/or disturbance of plant communities, and consequently, the flora and fauna of the affected area. Direct impacts also include the destruction of individual plants and/or wildlife. Direct impacts may adversely affect regional populations of certain species, or result in isolated populations, reducing genetic diversity and range-wide population stability; conversely, direct impacts may also have intended or unintended positive effects in some cases.

Indirect impacts include a variety of effects related to areas or habitats that are not directly removed by project development, such as loss of foraging habitat, increased ambient noise, artificial light, introduced predators (e.g., domestic cats, dogs and other non-native animals), competition with exotic plants and animals, increased human presence and associated disturbances (e.g., trash, green waste, physical intrusion). Indirect impacts may include long, and/or short-term daily activities associated with project build-out, such as increased traffic, permanent barriers or fences, buildings, exotic seed-bearing ornamental plantings, irrigated landscapes and human presence, among others. These types of impacts are known as edge effects and over time, may result in some encroachment on native plants by exotic plants, altered behavioral wildlife patterns, reduced wildlife diversity, and decreased wildlife abundance in habitats adjacent to a given project site. However, as is the case with direct impacts, indirect impacts may also have intended or unintended positive effects for certain species.

The potential for significant adverse effects, either directly or indirectly through habitat modification or conversion, on any special-status vegetation community, plant species or wildlife species, or that could occur as a result of the development of this Project is discussed within this section.

6.1 Project Impacts

This section provides definitions and discussion of the various Project-related impacts which are anticipated to occur.

6.1.1 Habitat Impacts

Construction of the proposed Project will result in permanent loss of 10.82 acres of Residential/Urban/Exotic – Disturbed Areas associated with the permanent footprint of the residential development, parks, roads, and a trail.. These include all areas proposed for ground disturbance, clearing, grading, equipment staging, materials laydown, storage and ultimate development of the parcel. This area is shown on Attachment A as “Project Boundary.”

The estimated acreages of proposed impacts resulting from implementation as described above are summarized in Table 6.

Table 6. Summary of Proposed Project Impacts to Vegetation Communities/Land Use Types

Vegetation Community/ Land Use Type	Acreage
Residential/Urban/Exotic – Weed Communities	10.82

6.1.2 Construction-Related Impacts

Short-term (Temporary) Construction-Related Direct Impacts

Potential direct impacts to special status biological resources, absent mitigation measures, which may occur as a result of construction of the proposed Project include wildlife entrapment, killed or injured wildlife, and unauthorized grading or vegetation removal. These activities have the potential to occur for any number of reasons, including lack or absence of project design staking, inadequate or unmaintained demarcation of proposed impacts areas, misinterpretation of Project designs, and human error in operating equipment. Dependent on construction methodology and sequencing, impacts resulting from wildlife entrapment may occur at any Project site where excavations remain open and un-sealed for extended periods.

Short-term (Temporary) Construction-Related Indirect Impacts

Potential temporary indirect impacts as a result of construction of the proposed Project include non-storm-water discharges resulting from spills or leaks and storm-water discharges from sediment laden runoff into adjacent municipal storm drain systems.

Potential temporary indirect impacts as a result of the Project may include fugitive dust, excess noise, and the attraction of predators to the Project site that could ultimately result in take of special-status species.

6.1.3 Operations and Maintenance-Related Impacts

The proposed Project would include the complete development of the proposed parcel. As the Project location is surrounded by previously developed lands, there are no anticipated operations and maintenance-related impacts from the Project, once development is complete.

Long-term (Permanent) Operations and Maintenance-Related Direct Impacts

Direct impacts associated with the completion of the Project would be restricted to the permanent loss of Residential/Urban/Exotic – Weed Communities. Additional impacts to special status biological resources are not anticipated to result from operations and maintenance activities.

Long-term (Permanent) Operations and Maintenance-Related Indirect Impacts

Indirect impacts associated with the long-term operation of the Project are not anticipated due to the Project location being surrounded by developed areas. Though, without implementation mitigation measure and not adjacent to PQP lands. Impacts as a result of Operations and Maintenance of the proposed Project could include non-storm-water discharges resulting from spills or leaks and storm-water discharges from sediment laden runoff into adjacent municipal storm drain systems. Without proper implementation of a SWPPP and stormwater management systems

incorporated in the construction design, consistent with state and local requirements, there is a potential for long term urban discharge.

6.2 Special-Status Species

6.2.1 MSHCP-Covered Special Status Species

Of the eighteen special-status target wildlife species evaluated, only three are expected to have the potential to occur. Of these three wildlife species, the California horned lark (moderate PFO; State WL) is the only species functionally covered under the Plan. This species may be subject to both temporary and permanent, direct and indirect impacts, as a result of the proposed Project. Absent mitigation, Project-related impacts to this species are potentially significant. The following MM is recommended to reduce potential impacts to below significant levels for Plan-covered special-status species:

- MM-BIO 1: Payment of MSHCP Mitigation Fees. Prior to issuance of a grading or building permit, the Project applicant will be required to pay relevant MSHCP mitigation fees per the Final Mitigation Fee Nexus Report. These fees will be determined in consultation with the Riverside Conservation Authority based on final Project classification and impacts. Payment of all mitigation fees will be required as part of the Project approval process.

The single special-status target plant species evaluated (smooth tarplant) does not have the potential to occur. Smooth tarplant (Assumed Absent PFO; SSC) is covered under the Plan.

6.2.2 Special-Status Species Not Functionally Covered Under the MSHCP

Of the special-status species expected to have the potential to occur, the following two species are not functionally covered under the Plan:

- California glossy snake (low PFO; SSC)
- Western yellow bat (low [roosting]; SSC)

Focused surveys for these special-status species were not performed and potential for impacts is presumed based on extent and availability of habitat. California glossy snake may be subject to permanent, direct impacts, as a result of the proposed Project; however, anticipated Project-related impacts to California glossy snake is less than significant due to the Project size, existing marginal habitat, previous disturbance and low probability that this species exists within the Project site.

Western yellow bat may be subject to temporary indirect impacts as a result of the proposed Project. The only potentially suitable roosting habitat for Western yellow bat exists in the form of scattered ornamental Mexican fan palms which only occur outside of the Project impact footprint. Indirect impacts to potential western yellow bat roost sites may include temporary increases in noise as a result of construction activity. However, these activities are expected to be short in duration and generally would not exceed existing ambient conditions adjacent to the site. Based on low potential for this species to occur in combination with the temporary nature of potential impacts, potential impacts to this species are likely considered less than significant.

Additionally, with the implementation of MM BIO-1 above, which will contribute to the ongoing reserve assembly of the region, impacts to either of the aforementioned species are likely to be less than significant.

6.3 Species Requiring Additional Surveys and/or Habitat Assessments

6.3.1 Burrowing Owl

At the time of the assessment, the Survey Area did not support suitable habitat for burrowing owl; however, two rubble piles containing shallow cavities were identified on the site and were occupied by desert cottontail and a domestic cat during the 2020 breeding season, precluding occupation by burrowing owl. Therefore, suitable habitat for burrowing owl was found absent from the Project site and focused burrowing owl surveys were not required pursuant to the Burrowing Owl Survey Instructions for the Western Riverside MSHCP. Though, occupied by other species at the time of the assessment, these rubble piles have a low potential to support migrating burrowing owls as temporary roost sites, if they become vacant (i.e. not occupied by desert cottontails or domestic cats) prior to construction.

With the implementation of the proposed mitigation measures for potential Project-related impacts to burrowing owl, the Project will fulfill the requirements related to biological resources pursuant to CEQA and the Plan.

- MM-BUOW 1: Within 30 days of construction, conduct take avoidance surveys for burrowing owl per guidelines specified in the Western Riverside County Regional Conservation Authority Burrowing Owl Survey Instructions for the Plan Area (2006).

- MM-BUOW 2: If burrowing owls are observed to occupy the Project site and/or adjacent areas during take avoidance surveys or incidentally during construction, the City of Moreno Valley Planning Department will be notified, and avoidance measures may be implemented during the breeding season (March 1 through August 31). If burrowing owls are present during the non-breeding season (September 1 through February 28), burrowing owl exclusion measures may be implemented in accordance with the Plan.

6.4 Migratory Birds

The assessment identified suitable habitat and substrate for migratory birds protected under the MBTA and CDFW Codes 3503 and 3503.5. Permanent impacts to migratory birds as a result of the Project may include habitat loss, nesting habitat removal, roosting site loss and/or loss of individuals. Indirect impacts may include fugitive dust, excess noise, increased artificial lighting, and the attraction of predators to the Project site. The following mitigation measure is recommended to reduce potential impacts to migratory bird species below significant levels:

- MM-BIO 2: Perform Per-Construction Nesting Bird Surveys. To the extent feasible, conduct vegetation removal outside of the nesting bird season (generally between March 1 and August 31). If vegetation removal is required during the nesting bird season, conduct take avoidance surveys for nesting birds within 100-feet of areas proposed for vegetation removal. Surveys should be conducted by a qualified biologist(s) within three days of vegetation removal. If active nests are observed, a qualified biologist will determine appropriate minimum disturbance buffers or other adaptive mitigation techniques (e.g., biological monitoring of active nests during construction-related activities, staggered schedules, etc.) to ensure that impacts to nesting birds are avoided until the nest is no longer active.

6.5 MSHCP Urban Wildlands Interface Impacts

As discussed in Section 6.1.3 above, the proposed Project has the potential for indirect impacts to PQP Lands and Plan Conservation Areas through potential stormwater and non-stormwater discharges. However, the Project will incoroporate "best practices" for storm water pollution prevention identified during the development of a Proejct Storm Water Pollution Prevention Plan (SWPPP). Furthermore, the Project has been designed to incorporate stormwater management facitities to manage and control urban run-off during long-term operations. As such, potential indirect impacts to PQP and Conservation Areas are likely considered less than significant.

6.6 Riparian/Riverine Habitat and/or Potentially Jurisdictional Areas

The habitat assessment did not identify Riparian/Riverine habitat and potentially jurisdictional areas subject to regulation by USACE, RWQCB, and/or CDFW. Therefore, there are no anticipated potential impacts to these areas and Project development will not result in significant impacts.

7.0 CONCLUSIONS

The Project site is within the Reche Canyon/Badlands Area Plan of the MSHCP, but not within any Criteria Cell or Cell Group.

The Project does not provide suitable habitat for riparian/riverine associated species. The Project site does not contain vernal pools or potential listed fairy shrimp habitat. At the time the assessment was conducted, the Project site did not provide suitable habitat for burrowing owl; however, two rubble piles, occupied by other species at the time of the assessment, have a low potential to support migrating burrowing owls as temporary roost sites, if they become vacant (i.e. not occupied by desert cottontails or domestic cats) prior to construction. Following the MSHCP recommendation of a preconstruction burrowing owl survey within 30 days prior to construction, no negative impacts to burrowing owl are anticipated. If burrowing owls are present during the non-breeding season (September 1 through February 28), burrowing owl exclusion measures may be implemented in accordance with the Plan. If burrowing owls are present during the breeding season (March 1 through August 31), avoidance measures will be implemented.

The Project site provides potentially suitable habitat for California glossy snake and also provides suitable nesting habitat for California horned lark and other avian species. Adjacent areas, outside of the Project footprint may provide roosting habitat for Western yellow bat in the form of Mexican fan palms. Impacts to adjacent PQP lands, special-status species, PQP Lands, Riverine habitat, potential jurisdictional water resources and nesting birds are anticipated to be less than significant with mitigation proposed herein to offset any direct and/or indirect impacts.

By adhering to the recommendations provided in this Report (and resulting additional actions, if required), payment of the MSHCP mitigation fees and fulfillment of the stipulations set forth by the County of Riverside HANS process, this Project is fully consistent with the Plan and would fulfill requirements for biological resources pursuant to CEQA, FESA, and CESA.

8.0 SURVEYOR CERTIFICATION

All data, statements, analyses, findings and attachments within this report are accurate and truthful in terms of describing the existing conditions and the Project as proposed to Blackhawk Environmental. By adhering to the mitigation measures proposed within this habitat assessment report and payment of appropriate fees to the Western Riverside County Regional Conservation Authority, compensatory mitigation related to the complete the Project will be met to CEQA significance thresholds.

Ryan Quilley
Staff Biologist

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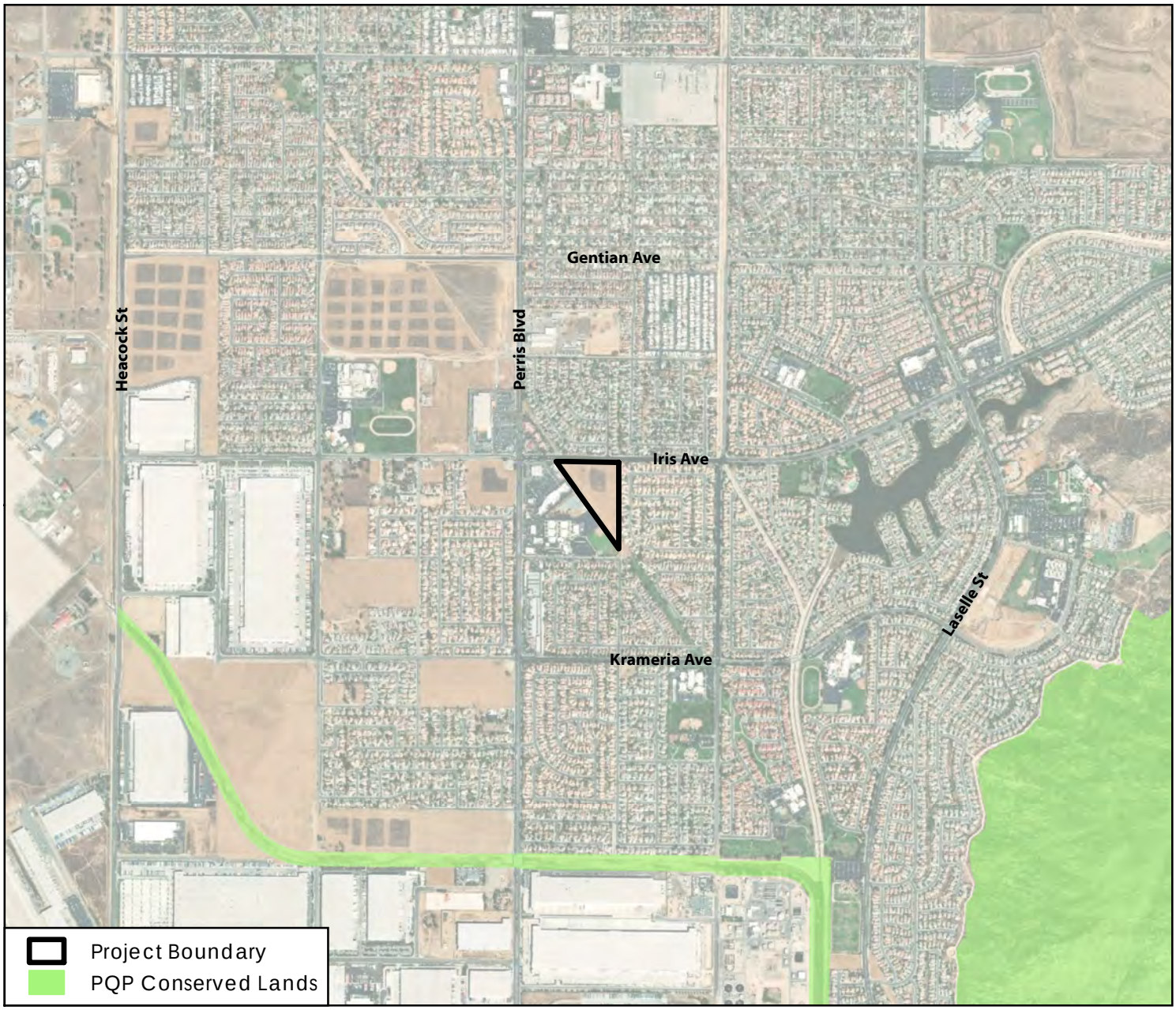
ATTACHMENT A

Figures

Blackhawk Environmental



Source: Maxar 2018, Esri

Figure 1

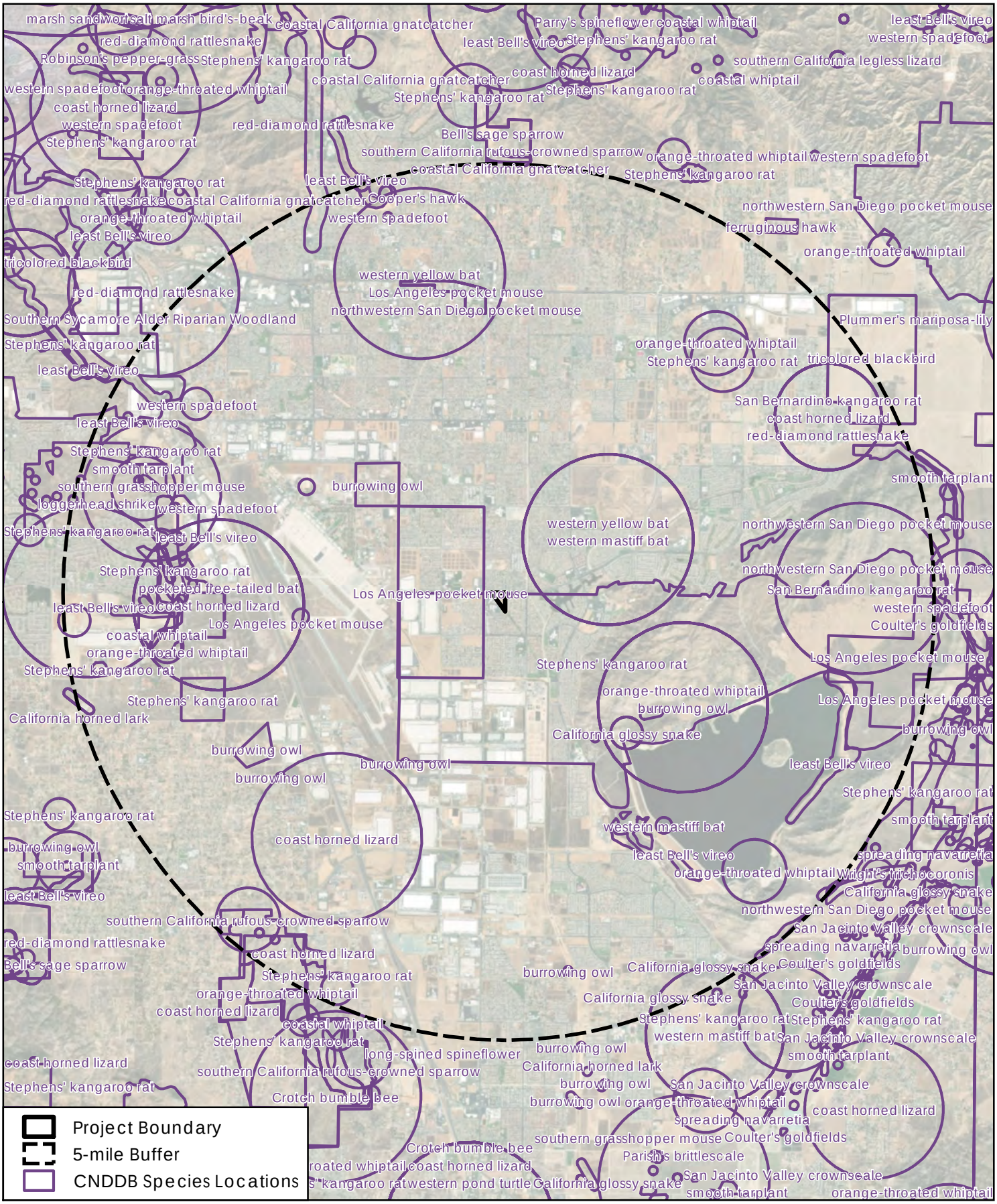
Project Vicinity and Location

APN 312-020-025 Moreno Valley, CA

BLACKHAWK Environmental

N

0 2,000 Feet



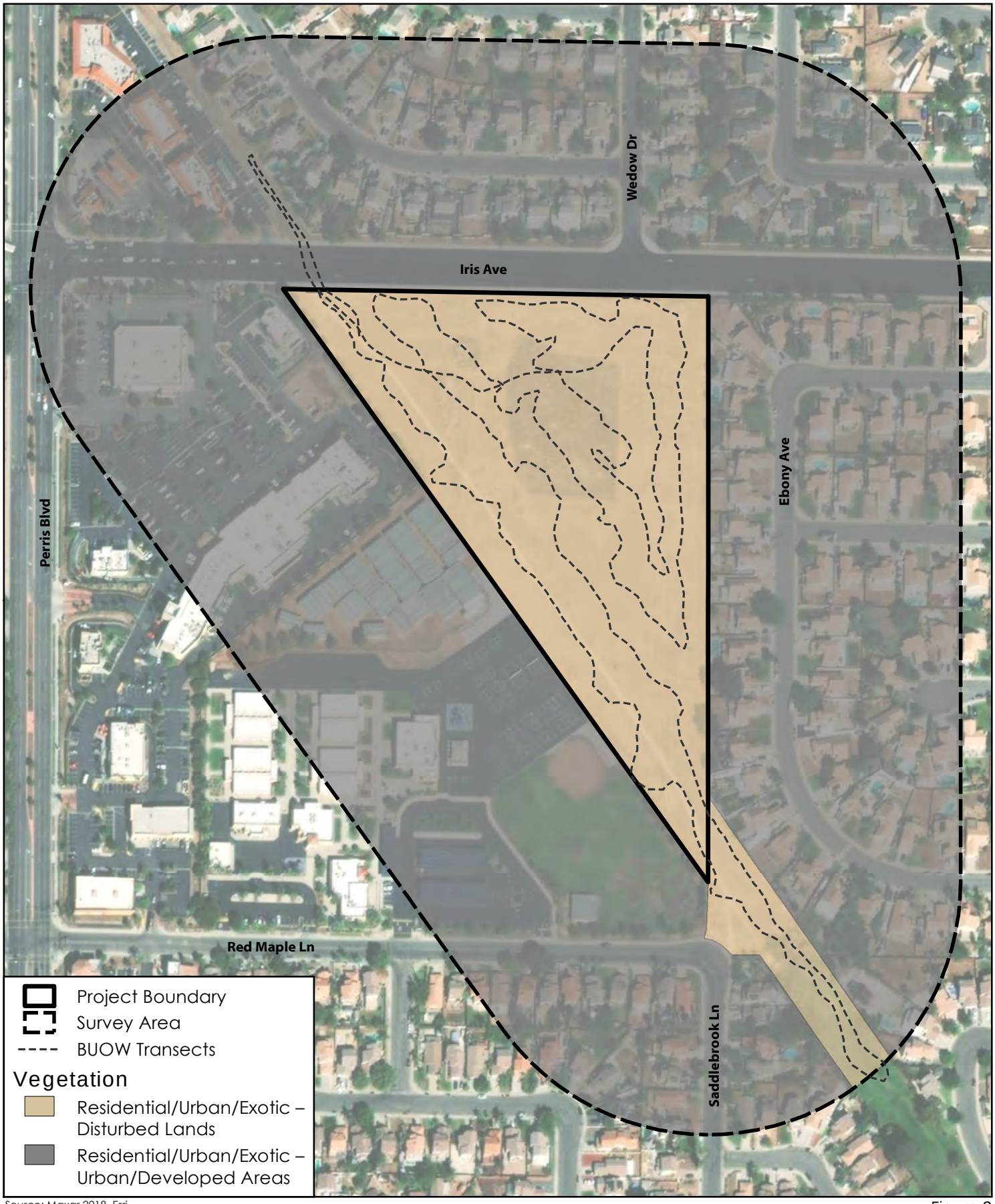
Source: CDFW; Maxar 2018, Esri

Figure 2

CNDDB Results

APN 312-020-025 Moreno Valley, CA

BLACKHAWK Environmental



Source: Maxar 2018, Esri

Figure 3

Vegetation Communities and Project Boundary

BLACKHAWK Environmental

N

0 250 Feet

APN 312-020-025 Moreno Valley, CA

ATTACHMENT B

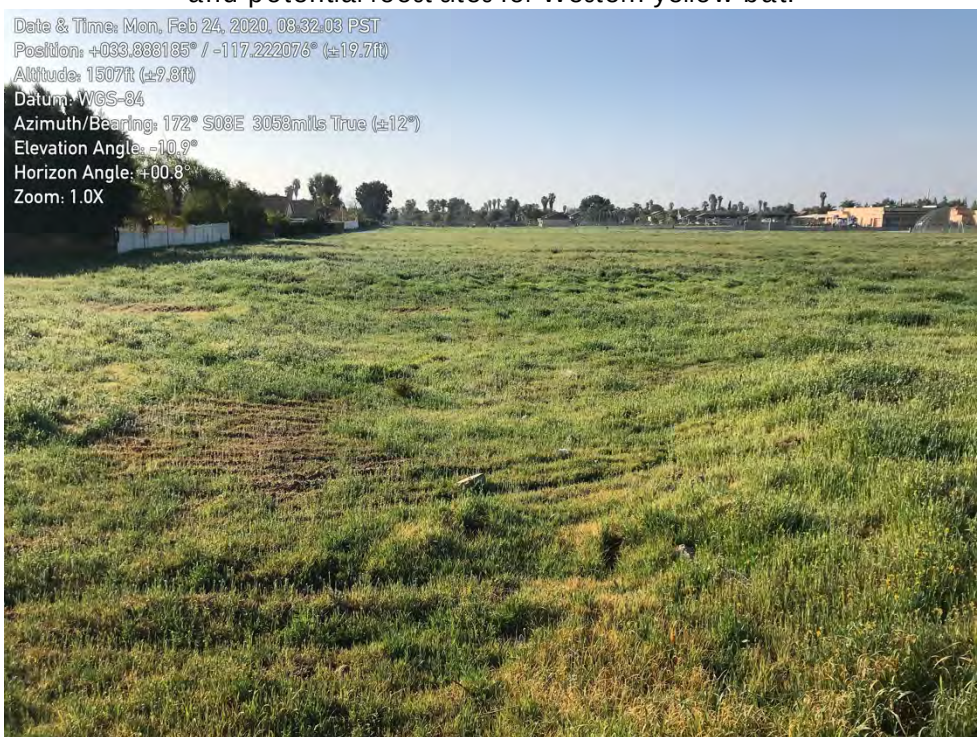
Representative Site Photographs

Blackhawk Environmental

- Photograph 1: Northwest-facing photograph taken from southwest portion of the of the Project site, showing Residential/Urban/Exotic – Disturbed Lands dominated by non-native plant species.

Photograph 2: Southeast-facing photograph taken from southwest portion of the of the Project site, showing Residential/Urban/Exotic – Disturbed Lands dominated by non-native plant species. Large ornamental trees

and Mexican fan palms are visible in the background and provide suitable nesting habitat for raptor species and potential roost sites for Western yellow bat.



Photograph 3: South-facing photograph taken from northeastern portion of the of the Project site, showing Residential/Urban/Exotic – Disturbed Lands surrounded by urban development.

Photograph 3: Southwest-facing photograph taken from northeastern portion of the of the Project site, showing Residential/Urban/Exotic – Disturbed Lands surrounded by Residential/Urban/Exotic – Urban/Developed Areas. Iris Avenue is visible on the right side of the photograph.

Photograph 4: North-facing photograph taken from the central portion of the Project area, showing Residential/Urban/Exotic – Disturbed Lands and recent signs of disturbance (tilling).

Photograph 5: Downward-facing photograph showing one of two small rubble piles. A feral cat is pictured here, occupying one of the rubble cavities, precluding burrowing owl occupancy.

ATTACHMENT C

Observed Wildlife Species List

AVES	BIRDS
ACCIPITRIDAE	Kites, Hawks, Eagles, and Allies
Falco sparverius	American kestrel
CHARADRIIDAE	Plovers, Dotterels & Lapwings
Charadrius vociferans	killdeer
CORVIDAE	Crows & Jays
Corvus brachyrhynchos	American crow
Corvus corax	common raven
FRINGILLIDAE	Finches and Allies
Haemorhous mexicanus	house finch
ICTERIDAE	Blackbirds and Allies
LARIDAE	Gulls, Terns, and Skimmers
Larus californicus	California gull
MIMIDAE	Mockingbirds & Thrashers
Mimus polyglottos	northern mockingbird
MOTACILLIDAE	Wagtails, Longclaws, and Pipits
Anthus rubescens	American pipit
PARULIDAE	Wood Warblers & relatives
Setophaga coronata	yellow-rumped warbler
PASSERELLIDAE	New World Sparrows
Passerculus sandwichensis	savannah sparrow
PASSERIDAE	Old World Sparrows
*Passer domesticus**	house sparrow
STURNIDAE	Starlings and Mynas
*Sturnus vulgaris**	European starling
TROCHILIDAE	Hummingbirds
Calypte anna	Anna's hummingbird
Selasphorus sp.	rufous or Allen's hummingbird
TURDIDAE	Thrushes
Sialia mexicana	western bluebird
TYRANNIDAE	Tyrant Flycatchers
Sayornis nigricans	black phoebe
Sayornis saya	Say's phoebe

MAMMALIA	MAMMALS
CANIDAE	Canids
*Canis familiaris**	Domestic dog
FELIDAE	Felines
*Felus catus**	domestic cat
GEOMYIDAE	Gophers
Thomomys bottae	Botta's pocket gopher
LEPORIDAE	Rabbits and Hares
Sylvillagus audubonii	desert cottontail

**Non-native*

ATTACHMENT D

Observed Plant Species List

Blackhawk Environmental

MONOCOTS	
EUPHORBIACEAE	Spurge Family
Croton setiger	turkey-mullein
POACEAE	Grass Family
*Bromus madritensis***	red brome
*Hordeum murinum**	smooth barley
*Schismus barbatus***	Mediterranean schismus

DICOTS	
ASTERACEAE	Aster Family
*Cotula coronopifolia***	brass buttons
Erigeron canadensis	horseweed
Heterotheca grandiflora	telegraph weed
*Lactuca serriola**	prickly lettuce
BORAGINACEAE	Borage Family
Amsinckia menziesii	common fiddleneck
Plagiobotrys sp.	popcorn flower
Pectocarya sp.	comb-bur
BRASSICACEAE	Mustard Family
*Brassica nigra***	black mustard
Descurainia pinnata	tansy mustard
*Sisymbrium altissimum***	London rocket
*Raphanus sativus***	wild radish
CHENOPODIACEAE	Amaranth Family
*Salsola sp.***	Russian thistle
FABACEAE	Pea Family
*Acacia sp.***	orange wattle
Lupinus bicolor	miniature lupine
GERANIACEAE	Geranium Family
*Erodium botrys**	longbeak stork's bill
*Erodium cicutarium**	redstem filaree
MALVACEAE	Mallow Family
*Malva parviflora**	cheeseweed

**Non-native*
***Non-native and Invasive according to the California Invasive Plant Council*