
MSHCP General Biological Resources Assessment & Compliance Analysis

Alessandro Project Site

City of Moreno Valley, Riverside County, California



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List of Abbreviated Terms

APN	Assessor Parcel Number
AWRS	Arid West Regional Supplement
BMP	Best Management Practice
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Ranking
CSC	California Species of Special Concern
CWA	Clean Water Act
DBESP	Determination of Biologically Equivalent or Superior Preservation
EPA	Environmental Protection Agency
FE	Federally Endangered
FT	Federally Threatened
FESA	Federal Endangered Species Act
GPS	Global Positioning System
HANS	Habitat Acquisition and Negotiation Strategy
HCP	Habitat Conservation Plan
JPR	Joint Project Review
MBTA	Migratory Bird Treaty Act
MSHCP	Western Riverside Multiple Species Habitat Conservation Plan
MOU	Memorandum of Understanding
NPDES	National Pollutant Discharge Elimination System
NOAA	National Oceanic and Atmospheric Administrations
NMFS	National Marine Fisheries Service
NPPA	Native Plant Protection Act
NRCS	Natural Resource Conservation Service
OHWM	Ordinary High Water Mark
RCA	Regional Conservation Authority
RCIP	Riverside County Integrated Project
RWQCB	Regional Water Quality Control Board
SE	State Endangered
ST	State Threatened
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TNW	Traditionally Navigable Water
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 INTRODUCTION

This report presents the results of MIG’s Biological Resources Assessment and Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) Compliance Analysis of the 17.66-acre (2.65-acre offsite) Alessandro Project Site (Project Site). The purpose of this report is to verify the type, location, and extent of potential sensitive biological resources on and around the Project Site based on an initial habitat evaluation by MIG biologists on May 21st, 2020 and additional field surveys conducted during spring/summer 2020. These surveys include a jurisdictional wetlands delineation and MSHCP riparian/riverine analysis (July 2020), burrowing owl (*Athene cunicularia*) surveys (May-July 2020), and protocol-level surveys for least Bell’s vireo (*Vireo bellii pusillus*) (May-July 2020). Based on information gathered from the field surveys listed above, this draft report provides a description of the biological setting of the Project Site, as well as a description of vegetation communities, wildlife, potential movement/migration corridors, special-status plant and animal species, sensitive natural communities including riparian/riverine resources, potentially jurisdictional waters and wetlands, and assessment of the project impacts and recommended mitigation measures/conditions of approval to ensure compliance with all California Environmental Quality Act (CEQA) and MSHCP conservation goals and guidelines.

1.1 Project Location

The 17.66-acre (2.65-acre offsite) Project Site is located immediately south of Alessandro Boulevard in the City of Moreno Valley (City), Riverside County, California, Assessor Parcel Numbers (APNs) 297-170-002 and 279-170-003 (Figure 1 and Figure 2). Offsite impacts extend into the Alessandro right-of-way to the north and APNs 297-170-088 and 279-170-089 to the south (Figure 2). The Project Site occurs within the U.S. Geological Survey (USGS) 7.5’ series Riverside East Quadrangle, Township 3 South, Range 4 West, Section 12.

The Project Site is located entirely within the MSHCP Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area.

2.0 REGULATORY SETTING

The following discussion identifies federal, state, and local environmental regulations that serve to protect sensitive biological resources relevant to the proposed Project Site, as well as the MSHCP and CEQA review process.

2.1 Federal

2.1.1 Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973, as amended, provides the regulatory framework for the protection of plant and animal species (and their associated critical habitats), which are formally listed, proposed for listing, or candidates for listing as endangered or threatened under FESA. FESA has the following four major components: (1) provisions for listing species, (2) requirements for consultation with the United States Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration’s National Marine Fisheries Service (NOAA NMFS), (3) prohibitions against “taking” (meaning harassing, harming, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct) of listed species, and (4) provisions for permits that allow incidental “take”. The FESA also discusses recovery plans and the designation of critical habitat for listed species. Section 7 requires federal

agencies, in consultation with, and with the assistance of the USFWS or NOAA NMFS, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. Both the USFWS and NOAA NMFS share the responsibility for administration of FESA.

For purposes of this assessment, the following acronyms are used for federally-listed species: federally endangered (FE) and federally threatened (FT).

The MSHCP serves as a Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the FESA of 1973, allowing participating jurisdictions to authorize "take" of plant and wildlife species. The MSHCP has been issued under this Section and provides incidental "take" for all covered species.

2.1.2 The Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act (MBTA) (16 USC. 703 et seq.), Title 50 Code of Federal Regulations (CFR) Part 10, prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. As used in the act, the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." With a few exceptions, most birds are considered migratory under the MBTA. Disturbances that cause nest abandonment and/or loss of reproductive effort or loss of habitat upon which these birds depend would be in violation of the MBTA.

2.1.3 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act that was first passed in 1940 regulates take, possession, sale, purchase, barter, transport, import and export of any bald or golden eagle or their parts (e.g., nests, eggs, young) unless allowed by permit (16 U.S.C. 668(a); 50 CFR 22). Take was broadly defined to include shoot, wound, kill, capture, collect, molest, or disturb. In the 1972 amendments, penalties for violations were raised to a maximum of fine \$250,000 for an individual or a maximum of two years in prison for a felony conviction, with a doubling for organizations instead of individuals.

2.1.4 Wetlands and Waters of the US

Section 404 of the Clean Water Act

The objective of the Clean Water Act (CWA) is to maintain and restore the chemical, physical, and biological integrity of the waters of the US (33 CFR Part 328 Section 328.4). "Waters of the US" is the encompassing term for areas that qualify for federal regulation under Section 404 of the CWA. Section 404 of the CWA gives the US Environmental Protection Agency (EPA) and the US Army Corps of Engineers (USACE) regulatory and permitting authority regarding discharge of dredged or fill material into "navigable waters of the US." Section 502(7) of the CWA defines navigable waters as "waters of the US, including territorial seas." Section 328 of Chapter 33 in the CFR defines the term "waters of the US" as it applies to the jurisdictional limits of the authority of the USACE under the CWA. A summary of this definition of "waters of the US" in 33 CFR 328.3 includes: (1) waters used for commerce and subject to tides; (2) interstate waters and wetlands; (3) "other waters" such as intrastate lakes, rivers, streams, and wetlands; (4) impoundments of waters; (5) tributaries of waters; (6) territorial seas; and (7) wetlands adjacent to waters. Therefore, for purposes of determining USACE jurisdiction under the CWA, "navigable waters" as defined in the CWA are the same as

“waters of the US” defined in the CFR above. Waters of the US include non-isolated “wetlands” and “other waters of the US”

The term “wetlands” (a subset of “waters of the US”) is defined at 33 CFR 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions.” The USACE developed field methods for identifying the location and extent of jurisdictional wetlands (a subset of waters of the US) using the USACE Wetland Delineation Manual (Environmental Laboratory 1987) Arid West Regional Supplement (AWRS) (USACE 2008a). This supplement was intended to address specific wetland issues within the arid west and supersedes much of the 1987 Wetland Delineation Manual in arid regions.

In the absence of wetlands, other waters of the US refer to unvegetated waterways and other water bodies with a defined bed and bank, such as drainages, creeks, rivers, and lakes. This approximately translates to the bank-to-bank portion of water bodies, up to the ordinary high water mark (OHWM). The limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(c)(6) as: “...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area.”

The OHWM in the Arid West Region is consistent with the physical and biological signature established and maintained at the boundaries of the active channel. Delineation of the active channel signature, and thus the OHWM, is based largely on identification of three primary physical or biological indicators—topographic break in slope, change in sediment characteristics, and change in vegetation characteristics. A break in slope refers to a localized and distinct change in the lateral topographic gradient (i.e., perpendicular to the principal direction of flow) within a stream system. Changes in sediment characteristics include any transition in the physical, chemical, or biological qualities of the sediments within and adjacent to a stream channel. For the purposes of OHWM identification, changes in vegetation characteristics include any lateral transition (i.e., perpendicular to the principal direction of flow) in the abundance, growth stage, or plant cover and composition within and adjacent to a stream channel. Supporting features including drift/wrack (i.e., debris deposits), signs of erosion/scour, bank undercutting, root exposure, point bars (meanders), silt deposits, and shelving (“benches” and breaks in slope along the active channel), were also used to help determine the location of the OHWM.

Isolated Areas Excluded from Section 404 Jurisdiction

In addition to areas that may be exempt from Section 404 jurisdiction, some isolated wetlands and waters may also be considered outside of USACE jurisdiction as a result of the Supreme Court’s decision in *Solid Waste Agency of Northern Cook County (SWANCC) v. USACE* (531 US 159 [2001]). Isolated wetlands and waters are those areas that do not have a surface or groundwater connection to and are not adjacent to a navigable waters of the US, and do not otherwise exhibit an interstate commerce connection.

Rapanos v. United States and Carabell v. United States

On June 5, 2007, the USACE and the EPA issued joint guidance on implementing the June 19, 2006 US Supreme Court opinions resulting from *Rapanos v. United States* and *Carabell v. United States* (Rapanos) cases. The agencies received 66,047 public comments on the Rapanos Guidance (65,765 form letters, 282 non-form letters), from states, environmental and conservation organizations, regulated entities, industry associations, and the general public. EPA and the USACE jointly reviewed the comments and released a

revised version of the guidance on December 2, 2008 (USACE 2008b). The revised guidance states that the agencies will assert jurisdiction over:

- Non-navigable tributaries that are not relatively permanent, where the tributaries typically flow year-round or have continuous flow at least seasonally (i.e., typically three months)
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow)
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of downstream traditional navigable waters (TNW)
- Significant nexus includes consideration of hydrologic and ecologic factors

2.1.5 Executive Order 11990 for Protection of Wetlands

Executive Order 11990 for the Protection of Wetlands (May 24, 1977) establishes a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative. On federally funded projects, impacts on wetlands must be identified in the environmental document. Alternatives that avoid wetlands must be considered. If wetland impacts cannot be avoided, then all practicable measures to minimize harm must be included. This must be documented in a specific “Wetlands Only Practicable Alternative Finding” in the final environmental document. An additional requirement is to provide early public involvement in projects affecting wetlands.

2.2 State

2.2.1 California Endangered Species Act

The State of California enacted similar laws to FESA including the California Native Plant Protection Act (NPPA) in 1977 and the California Endangered Species Act (CESA) in 1984. CESA expanded upon the original NPPA and enhanced legal protection for plants, but the NPPA remains part of the California Fish and Game Code. To align with FESA, CESA created the categories of “threatened” and “endangered” species. It converted all “rare” animals into the CESA as threatened species, but did not do so for rare plants. Thus, these laws provide the legal framework for protection of California-listed rare, threatened, and endangered plant and animal species. The California Department of Fish and Wildlife (CDFW) implements NPPA and CESA, and its Wildlife and Habitat Data Analysis Branch maintains the California Natural Diversity Database (CNDDDB), a computerized inventory of information on the general location and status of California’s rarest plants, animals, and natural communities. During the CEQA review process, the CDFW is given the opportunity to comment on the potential of the proposed project to affect listed plants and animals.

For purposes of this assessment, the following acronyms are used for state-listed species: state endangered (SE) and state threatened (ST).

2.2.2 Native Plant Protection Act

The NPPA of 1977 (California Fish and Game Code, §§ 1900 through 1913) directed CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by the CDFW, which has the authority to designate native plants as endangered or rare and to protect them from "take."

2.2.3 California Environmental Quality Act

The CEQA was enacted in 1970 to provide for full disclosure of environmental impacts to the public before issuance of a permit by state and local public agencies. CEQA (Public Resources Code Sections 21000 et. seq.) requires public agencies to review activities which may affect the quality of the environment so that consideration is given to preventing damage to the environment. When a lead agency issues a permit for development that could affect the environment, it must disclose the potential environmental effects of the project. This is done with an Initial Study and Negative Declaration (or Mitigated Negative Declaration) or with an Environmental Impact Report. Certain classes of projects are exempt from detailed analysis under CEQA. CEQA Guidelines Section 15380 defines endangered, threatened, and rare species for purposes of CEQA and clarifies that CEQA review extends to other species that are not formally listed under the state or federal Endangered Species Acts but that meet specified criteria.

2.2.4 Fully Protected Species and Species of Special Concern

The classification of "fully protected" was the CDFW's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians, reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The Fish and Game Code sections (fish at §5515, amphibian and reptiles at §5050, birds at §3511, and mammals at §4700) dealing with "fully protected" species states that these species "...may not be taken or possessed at any time and 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 species," (CDFW Fish and Game Commission 1998) although "take" may be authorized for necessary scientific research. This language makes the "fully protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003, the code sections dealing with fully protected species were amended to allow the CDFW to authorize take resulting from recovery activities for state-listed species.

Species of special concern are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing, or because they historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologists, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under the CEQA during project review.

2.2.5 California Fish and Game Code Sections 3503 and 3513

According to Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird (with limited exceptions). Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the MBTA, prohibiting the take or possession of any migratory non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by the CDFW.

2.2.6 Other Special-Status Plants – California Native Plant Society

The California Native Plant Society (CNPS), a non-profit plant conservation organization, publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version (<http://www.cnps.org/cnps/rareplants/inventory/>).

The Inventory employs the California Rare Plant Ranking (CRPR) to assign plants to the following categories:

- 1A Presumed extinct in California
- 1B Rare, threatened, or endangered in California and elsewhere
- 2A Plants presumed extirpated in California but common elsewhere
- 2B Plants rare, threatened, or endangered in California but more common elsewhere
- 3 Plants for which more information is needed – A review list
- 4 Plants of limited distribution – A watch list

Additional endangerment codes are assigned to each taxon as follows:

- 0.1 Seriously endangered in California (over 80% of occurrences threatened/high degree of immediacy of threat)
- 0.2 Fairly endangered in California (20-80% occurrences threatened)
- 0.3 Not very endangered in California (<20% of occurrences threatened or no current threats known)

CRPR 1A, 1B, and 2 plants consist of individuals that may qualify for listing by state and federal agencies. As part of the CEQA process, such species should be fully considered, as they meet the definition of threatened or endangered under the NPPA and Sections 2062 and 2067 of the California Fish and Game Code. CRPR 3 and 4 species are considered to be plants about which more information is needed or are uncommon enough that their status should be regularly monitored. Such plants may be eligible or may become eligible for state listing, and CNPS and CDFW recommend that these species be evaluated for consideration during the preparation of CEQA documents (CNPS 2001, 2020).

2.2.7 National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) program requires permitting for activities that discharge pollutants into waters of the US. This includes discharges from municipal, industrial, and construction sources. These are considered point-sources from a regulatory standpoint. Generally, these permits are issued and monitored under the oversight of the State Water Resources Control Board (SWRCB) and administered by each regional water quality control board. Construction activities that disturb one acre or more (whether a single project or part of a larger development) are required to obtain coverage under the state’s General Permit for Dischargers of Storm Water Associated with Construction Activity. All dischargers are required to obtain coverage under the Construction General Permit. The activities covered under the

Construction General Permit include clearing, grading, and other disturbances. The permit requires preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) with a monitoring program. The project will require coverage under the Construction General Permit.

2.2.8 Sensitive Natural Communities

Sensitive natural communities are vegetation communities and habitats that are either unique in constituent components, of relatively limited distribution in the region, or of particularly high wildlife value. These communities may or may not necessarily contain special-status species. Sensitive natural communities are usually identified in local or regional plans, policies or regulations, or by the CDFW (i.e., CNDDDB) or the USFWS. The CNDDDB identifies a number of natural communities as rare, which are given the highest inventory priority (Holland 1986; CNDDDB 2020). Impacts to sensitive natural communities and habitats must be considered and evaluated under the CEQA California Code of Regulations (CCR): Title 14, Div. 6, Chap. 3.

2.2.9 Waters of the State

Section 401 of the Clean Water Act

The Regional Water Quality Control Board (RWQCB) regulates activities in “waters of the state”, including wetlands, through Section 401 of the CWA. “Waters of the state” are defined by the Porter-Cologne Control Act (see below) as “any surface water or groundwater, including saline waters, within the boundaries of the state.” While the USACE administers permitting programs that authorize impacts to “waters of the US”, any USACE permit authorized for a project would be invalid unless the RWQCB has issued a project-specific water quality certification or waiver of water quality. A water quality certification requires a finding by the RWQCB that the activities permitted by the USACE will not violate water quality standards individually or cumulatively over the term of the issued USACE permit.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Act (Porter-Cologne Act) (California Water Code Section 13260) requires “any person discharging waste, or proposing to discharge waste, within any region that could affect the “waters of the state” to file a report of discharge” with the RWQCB through an application for waste discharge. The RWQCB protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters. These water bodies have high resource value, are vulnerable to filling, and may not be regulated by other programs (e.g. Section 404 of the CWA).

California Fish and Game Code Section 1600-1603

Under Section 1602 of California Fish and Game Code, CDFW has authority over any proposed activity that may substantially modify a river, stream, or lake. CDFW requires notification for any activity that will do one or more of the following: (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

The notification requirement applies to any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. The CDFW typically considers a river, stream, or lake to include its

riparian vegetation, but it may also extend to its floodplain. The term “stream”, which includes creeks and rivers, is defined in the CCR as follows: “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life”. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. Riparian is defined as “on, or pertaining to, the banks of a stream”; therefore, riparian vegetation is defined as, “vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself” (CDFW 1994).

If the CDFW determines that the activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement (LSAA) will be prepared, which includes reasonable conditions necessary to protect those resources. The applicant may then proceed with the activity in accordance with the final LSAA. Section 1602 does not extend to isolated wetlands and waters, such as small ponds not located on drainages.

2.3 Local

2.3.1 Western Riverside County MSHCP

The proposed Project Site is located completely within the MSHCP, which is a comprehensive multi-jurisdictional effort that includes western Riverside County (County) and eighteen (18) cities. Rather than addressing sensitive species on an individual basis, the MSHCP focuses on the conservation of 146 species, including those listed at the federal and state levels and those that could become listed in the future. The MSHCP provides mitigation for project-specific impacts to these species so that the impacts would be reduced to below a level of significance pursuant to the California Environmental Quality Act (CEQA). The MSHCP proposes a reserve system of approximately 500,000 acres, of which 347,000 acres are currently within public ownership and 153,000 acres will need to be assembled from lands currently in private ownership. On June 7th, 2003, the County Board of Supervisors certified the Environmental Impact Report/Environmental Impact Statement, adopted the MSHCP, and authorized the Chairman to sign the Implementing Agreement with USFWS and CDFW, the respective Wildlife Agencies. The Incidental Take Permit was issued by the Wildlife Agencies on June 22, 2004.

In order to meet overall conservation goals of the MSHCP, some of the 146 species have additional survey requirements based on a project’s occurrence within a predetermined survey area and/or based on the presence of suitable habitat. These include Narrow Endemic Plant Species and Criteria Area Plant Species; animal species identified by Survey Areas (burrowing owl, mammals, and amphibians); species associated with riparian/riverine areas and vernal pool habitats, including the least Bell’s vireo, southwestern willow flycatcher, western yellow-billed cuckoo, and listed fairy shrimp; and an additional 28 species (Table 9.3 of the MSHCP document) that are not yet adequately conserved. If portions of a property occur within Criteria Areas (areas that may be needed for inclusion in the MSHCP Conservation Area), development of the property is subject to the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process of the MSHCP. Through the HANS process, the County determines whether the portions of the subject property within the Criteria Areas (and/or supporting the above-mentioned habitats) will need to be dedicated for inclusion in the MSHCP Conservation Area.

MSHCP Sensitive Species Surveys

The Project Site is not located within an MSHCP Amphibian Species, Mammal Species, Narrow Endemic Plant or Criteria Area Plant Species Survey Area. Therefore, surveys for these species are not required (Regional Conservation Authority (RCA) GIS Data Downloads 2020). The Project Site occurs within a predetermined Survey Area for the burrowing owl. If suitable habitat is documented onsite during the habitat assessment within and adjacent to the Project Site, focused surveys and a 30-day preconstruction survey are required.

MSHCP Section 6.1.2 Riparian/Riverine and Vernal Pool Surveys

Regulated activities within inland streams, wetlands and riparian areas in Western Riverside County fall under the jurisdiction of the MSHCP Section 6.1.2. Riparian/riverine areas are defined 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 fresh water that flows during all or a portion of the year. Vernal pools are defined as seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetland plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season (Riverside County 2003). As projects are proposed within the MSHCP Plan Area, an assessment of the potentially significant effects of those projects on riparian/riverine areas and vernal pools will be performed as currently required by CEQA, using available information supported by project-specific mapping and evaluation.

MSHCP Reserve Design & Criteria Area Objectives

Regions within the MSHCP have been organized into Area Plans that generally coincide with logical political boundaries, including City limits or long-standing unincorporated communities. The Project Site is located within the Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area. Therefore, no HANS or Joint Project Review (JPR) are required.

3.0 METHODS

This analysis of potential biological resources located on the Project Site includes a review of available background information in and around the vicinity of the Project Site and completion of multiple field surveys conducted from May to July 2020.

3.1 Literature Review

Prior to conducting field surveys, MIG biologists reviewed available background information pertaining to biological resources on and in the vicinity of the Project Site. Available literature and resource mapping reviewed included the occurrence records for special-status species and sensitive natural communities and numerous other information sources listed below:

- CNDDDB record search of Riverside East and surrounding USGS 7.5' Quadrangles (CNDDDB 2020)
- CNPS Online Inventory (CNPS 2020)
- Soil Survey Staff, Natural Resource Conservation Service (NRCS), United States Department of Agricultural (USDA) (Soil Survey Staff 2020)

- State & Federally Listed Endangered, & Threatened Animals of California (CDFW 2019a)
- State and Federally Listed Endangered, Threatened, and Rare Plants of California (CDFW 2019b)
- USFWS National Wetlands Inventory (USFWS 2019a)
- USFWS, Carlsbad Office, Threatened and Endangered Species (USFWS 2019b)
- Jepson Manual: Vascular Plants of California, Second Edition (Baldwin et al. 2012)
- Western Riverside County MSHCP Burrowing Owl Survey Instructions (MSHCP 2006)

3.2 Field Surveys

Several biological field surveys were conducted to assess the existing conditions of the Project Site, record observed plant and wildlife species, characterize and delineate onsite vegetation communities and associated wildlife habitats, habitat for special-status species, and sensitive natural communities. MIG biologists conducted an initial biological field survey on May 21st, 2020. Additional field surveys conducted in in spring/summer 2020 include a jurisdictional wetlands delineation and MSHCP riparian/riverine analysis, and resource agency mandated protocol-level surveys for burrowing owl, and least Bell's vireo. The biological field surveys were conducted according to the schedule shown in Table 1.

Table 1. Summary of Survey Dates and Personnel

Survey Type	Date	Personnel ¹
Biological site reconnaissance	May 21 st , 2020	JC
Jurisdictional delineation and MSHCP riparian/riverine analysis	July 2020	JF
Burrowing owl surveys	May 21 st , June 20 th , July 10 th and 30 th , 2020	JC, RR
Riparian bird habitat suitability assessment	May 21 st , 2020	JC
Least Bell's vireo surveys	May 21 st , 31 st , June 10 th , 20 th , 30 th , July 10 th , 20 th , and 30 th , 2020	JC, RR

3.2.1 Vegetation Communities

During the field surveys, MIG biologists traversed the entire Project Site by foot and evaluated the suitability of onsite vegetation communities to support special-status species or sensitive natural communities documented in the vicinity of the Project Site. Vegetation communities were preliminarily mapped on aerial photography per A Manual of California Vegetation (MCV), 2nd Edition (Sawyer et. al 2009) or Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986) vegetation community classification systems when appropriate. When a vegetation community could not be accurately characterized using the cited literature, an updated community classification was developed to represent onsite habitat types more accurately.

3.2.2 Special-Status Species Habitat Assessment

The potential occurrence of special-status plant and animal species on the Project Site was initially evaluated by developing a list of special-status species that are known to or have the potential to occur in the vicinity of the Project Site based on: (1) a review of past studies including species-specific studies; (2) a search of current database records (e.g., CNDDDB and CNPS Electronic Inventory records); and (3) a review of the

¹ JC=Dr. Jonathan Campbell, RR=Ruben Ramirez, JF=Julie Fontaine

USFWS list of federal endangered and threatened species. The potential for occurrence of those species included on the list were then evaluated based on the habitat requirements of each species relative to the conditions observed during the field survey conducted by MIG biologists. Each species was evaluated for its potential to occur on or in the immediate vicinity of the Project Site per the following criteria:

Not Expected. There is no suitable habitat present on the Project Site (i.e., habitats on the Project Site are clearly unsuitable for the species requirements [e.g., foraging, breeding, cover, substrate, elevation, hydrology, vegetation community, disturbance regime, etc.]). Additionally, there are no recent known records of occurrence in the vicinity of the Project Site. The species has no potential of being found on the Project Site.

Low Potential. Limited suitable habitat is present on the Project Site (i.e., few of the habitat components meeting the species requirements are present and/or the majority of habitat on the Project Site is unsuitable or of very low quality). Additionally, there are no or few recent known records of occurrence in the vicinity of the Project Site. The species has a low probability of being found on the Project Site.

Moderate Potential. Suitable habitat is present on the Project Site (i.e., some of the habitat components meeting the species requirements are present and/or the majority of the habitat on the Project Site is suitable or of marginal quality). Additionally, there are few or many recent known records of occurrences in the vicinity of the Project Site. The species has a moderate probability of being found on the Project Site.

High Potential. Highly suitable habitat is present on the Project Site (i.e., all habitat components meeting the species requirements are present and/or all of the habitat on the Project Site is highly suitable or of high quality). Additionally, there are few or many recent known records of occurrences in the vicinity of the Project Site. This species has a high probability of being found on the Project Site.

Present. Species was observed on the Project Site (i.e., species was either observed during recent surveys or has a recorded observation in the CNDDDB on the Project Site).

Nomenclature used for plant names follows the Second Edition of the Jepson Manual (Baldwin, B.G., et al. 2012). Nomenclature for wildlife follows CDFW's Complete List of Amphibian, Reptile, Bird, And Mammal Species in California (CDFW 2019c) and any changes made to species nomenclature as published in scientific journals since the publication of CDFW's list were updated accordingly.

3.2.3 Focused Special-Status Plant Assessment

The Project Site does not occur within a predetermined MSHCP Survey Area for Criteria Area or Narrow Endemic plant species. Therefore, no surveys are required.

3.2.4 Focused Special-Status Wildlife Surveys

Burrowing Owl Surveys

The Project Site is situated within a predetermined MSHCP Burrowing Owl Survey Area (Regional Conservation Authority GIS Data Downloads 2020). Conducted by MIG biologist on May 21st, 2020, a

burrowing owl habitat assessment confirmed the presence of low potential habitat on the Project Site. Subsequently, focused surveys were conducted on May 21st, June 20th, July 10th and 30th, 2020 within and adjacent to the Project Site. The surveys were conducted in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (Riverside County 2006). The protocol consists of three parts: habitat assessment, burrow mapping, and owl detection. The burrow search was conducted utilizing 100-foot belt transects to ensure 100 percent coverage of the site.

Least Bell's Vireo

Conducted by MIG biologist on May 21st, 2020, a least Bell's vireo habitat assessment confirmed the presence of low potential habitat on the Project Site. A focused survey for least Bell's vireo was conducted according to *Least Bell's Vireo Survey Guidelines* (USFWS 2001). In accordance with USFWS guidelines, the protocol consists of eight (8) surveys undertaken by a qualified biologist between April and July, 2020 with a ten (10) day interval between each site visit. The surveys for least Bell's vireo were conducted on May 21st, 31st, June 10th, 20th, 30th, July 10th, 20th, and 30th, 2020. All low potential habitat including black willow woodland were surveyed to listen for calls and used binoculars to aid in visual identification. No least Bell's vireo calls were used. All surveys were conducted within the prescribed time, temperature, and wind conditions as outlined in the survey guidelines (USFWS 2001).

3.2.6 Jurisdictional Wetlands and Waters Assessment

A formal jurisdictional delineation was conducted by MIG biologist in July 2020. The delineation determined the boundaries or absence of potential wetland and non-wetland waters of the U.S. subject to the regulatory jurisdiction of the USACE pursuant to CWA Section 404; wetland and non-wetland waters of the State subject to the regulatory jurisdiction of the RWQCB pursuant to CWA Section 401 and State Porter-Cologne Water Quality Control Act (Porter-Cologne); streambed and riparian habitat subject to the regulatory jurisdiction of the CDFW pursuant Sections 1600 *et seq.* of the California Fish and Game Code (CFG Code); and Riparian/Riverine Areas and Vernal Pools defined in Section 6.1.2 of the Western Riverside County MSHCP.

3.2.7 MSHCP Section 6.1.2 Riparian, Riverine, & Vernal Pool Resources Assessment

Pursuant to Section 6.1.2 of the MSHCP (Riverside County 2003), habitats were assessed to determine if MSHCP riparian/riverine resources and/or vernal pools are present onsite. The purpose of this assessment is to ensure that the biological functions and values of these areas throughout the MSHCP Plan Area are maintained such that habitat values for riparian/riverine species inside the MSHCP Conservation Area are maintained. The MSHCP requires that as projects are proposed within the overall Plan Area, the effect of those projects on riparian/riverine areas and vernal pools must be addressed. Riparian/riverine resources are those lands that 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 fresh water flow during all or a portion of the year. Vernal pools are seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season. In addition, stock ponds, ephemeral pools, and other areas of potential fairy shrimp habitat were noted, if applicable.

4.0 EXISTING CONDITIONS

The following provides a description of the soils, vegetation communities, wildlife, and wildlife movement corridors present on the Project Site.

4.1 Physical Characteristics

The Project Site is heavily disturbed and annually disked as part of weed abatement requirements. The Project Site is flat and bordered to the south by industrial buildings, north by high density residential development, and east and west by disturbed lands. Two (2) drainage features bisect the property in a north to south direction which currently sustains disturbed wetland and riparian vegetation as described below.

4.2 Soils

The USDA NRCS Web Soil Survey maps the following soil classification within the boundary of the Project Site as shown on Figure 3 (Soil Survey Staff, NRCS, USDA 2020) and described in detail below.

Monserate sandy loam 0 to 5 percent slopes (MmB). This map unit occurs throughout the Project Site. The Monserate series consist of well to well drained and moderately slow permeable soils. These soils are found primarily on nearly level to moderately steep terraces and fans in southern California and are primarily used for growing grain or pasture. The NRCS does not list this soil as hydric.

4.3 Vegetation Communities

As described in Section 3 (Methods), vegetation communities were mapped in the field onto a color aerial photograph (Figure 4) and were evaluated to determine if they are considered sensitive under federal, state, or local regulations or policies. Vegetation communities were classified as sensitive or non-sensitive as defined by CEQA and other applicable laws and regulations. Vegetation community names and hierarchical structure follows the CDFW “List of California Terrestrial Natural Communities” or Holland (1986) classification systems. A summary of the acreages of each mapped vegetation community or land cover type is provided in Table 2. Distribution of onsite vegetation communities and representative photographs are provided as Figure 4, and 5 (a-b). The species listed below represent those individuals identified onsite during the field surveys listed in this report. All 20.31 acres of the Project Site will be permanently or temporarily (offsite) impacted as a result of project initiation. As outlined in the MSHCP, impacts will be mitigated by payment of the local development mitigation fee as established by the City of Moreno Valley (Section 5.1, BIO-1: Payment of Local Development Mitigation Fee for Conservation of Covered Species)

Table 2. Project Site Plant Communities and Land Cover Types

Plant Communities/Land Cover Type	Onsite Area (acres)	Offsite Area (acres)	TOTAL Impacts (acres)
Disturbed/Non-Native Grassland	17.19	0.00	17.19
Black Willow Woodland	0.39	0.00	0.39
Developed	0.05	2.65	2.70
Disturbed Wetland – Cattail	0.02	0.00	0.02
Ornamental (individual tree)	0.01	0.00	0.01
Mule Fat (individual shrub)	0.001	0.00	0.001
Total	17.66	2.65	20.31

Disturbed/Non-Native Grassland

The majority of the Project Site is characterized as disturbed/non-native grassland and experiences annual disking activities. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Raphanus sativus*), Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), ripgut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Black Willow Woodland

The northern region of Drainage A is dominated by black willow woodland. Common species documented within this vegetation community include Gooding's willow (*Salix gooddingii*), velvet ash (*Fraxinus velutina*), and an understory of non-native grasses and ruderal species as described above.

Developed

Developed regions of the Project Site include a culvert structure located at the southern terminus of Drainage A and existing paved roads located within the offsite impact areas.

Disturbed Wetland – Cattail

Two small patches of disturbed wetland-cattail habitat are located in the northern region of both Drainage A and B, immediately adjacent to Alessandro Boulevard. Dominant plant species observed within this vegetation community include curly dock (*Rumex crispus*), common cattail (*Typha latifolia*), tall nutsedge (*Cyperus eragrostis*), annual beard grass (*Polypogon monspeliensis*), Mexican fan palm (*Washingtonia robusta*), dallis grass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), and tarragon (*Artemisia dracunculus*).

Ornamental

A single ornamental tree, Mexican palo verde (*Parkinsonia aculeata*) is located adjacent to the black willow woodland.

Mule Fat

A single mule fat (*Baccharis salicifolia*) shrub is located near the northeast corner of the Project Site.

4.4 Wildlife

General wildlife species documented onsite or within the vicinity of the Project Site include but are not limited to red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaidura macroura*), Anna's hummingbird (*Calypte anna*), song sparrow (*Melospiza melodia*), house sparrow (*Passer domesticus*), Nuttall's woodpecker (*Picoides nuttallii*), Cassin's kingbird (*Tyrannus vociferans*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), cliff swallow (*Petrochelidon pyrrhonota*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), American crow (*Corvus brachyrhynchos*), western meadowlark (*Sturnella neglecta*), common raven (*Corvus corax*), house sparrow (*Passer domesticus*), American goldfinch (*Spinus tristis*), house finch (*Haemorhous mexicanus*), western tanager (*Piranga ludoviciana*), and desert cottontail (*Sylvilagus audubonii*).

4.5 Sensitive Natural Communities

CDFW and CNPS have identified native vegetation communities that are rare and unique to California. While they have no legal, protective status, impacts to these natural communities may be considered “significant” under CEQA. A total of 0.39-acre of black willow woodland (G4 S3) is present on the Project Site (Figure 4 and Figure 5a) that would qualify as a sensitive natural community. These features would be regulated as CDFW riparian habitat pursuant to Division 2, Chapter 6, Section 1600-1603 of the California Fish and Game Code.

All 20.31 acres of the Project Site will be permanently or temporarily (offsite) impacted as a result of project initiation. As outlined in the MSHCP, impacts will be mitigated by payment of the local development mitigation fee as established by the City of Moreno Valley (Section 5.1, BIO-1: Payment of Local Development Mitigation Fee for Conservation of Covered Species)

4.6 Special-Status Plants

The MSHCP has determined that all of the sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required for narrow endemic plants and/or criteria area plant species if suitable habitat is documented onsite and/or if the property is located within a predetermined “Survey Area” (MSHCP 2003).

The Project Site does not occur within a predetermined Survey Area for MSHCP criteria area or narrow endemic plant species (RCA GIS Data Downloads 2020). No surveys are required.

4.7 Special-Status Animals

The MSHCP has determined that all of the sensitive wildlife species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required for criteria area wildlife species if suitable habitat is documented onsite and/or if the property is located within a predetermined “Survey Area” (MSHCP 2003).

The Project Site does not occur within a predetermined Survey Area for amphibians (RCA GIS Data Downloads 2020). No surveys are required.

Burrowing Owl

The Project Site occurs within a predetermined MSHCP Survey Area for burrowing owl (RCA GIS Data Downloads 2020). Based on the presence of low potential habitat documented during the May 21st, 2020 habitat assessment² within and adjacent to the Project Site, focused surveys for burrowing owl were conducted. No burrowing owl or their sign (e.g., molted feathers, pellets with characteristic prey remains, or excrement (wash) near a burrow entrance) was observed. In compliance with the conservation goals outlined in the MSHCP, a 30-day preconstruction survey will be conducted prior to the initiation of construction to ensure protection for this species (Section 5.1 BIO-2: Conduct 30-Day Burrowing Owl Preconstruction Survey). The *Burrowing Owl Survey Report for the Alessandro Project Site* is provided in Appendix A.

² Personnel: Dr. Jonathan Campbell

Least Bell's Vireo

Low potential habitat for least Bell's vireo was initially identified onsite in the black willow woodland vegetation community (Figure 4, Vegetation Communities Map). Focused protocol surveys were conducted in spring/summer 2020 to determine the presence/absence of this species on the Project Site. No least Bell's vireo were detected during the 2020 surveys. The *Least Bell's Vireo Survey Report for the Alessandro Project Site* is provided in Appendix B.

The Project Site does not occur within a predetermined Survey Area for mammals (RCA GIS Data Downloads 2020). No surveys are required.

The Project Site falls within the Stephens' kangaroo rat (*Dipodomys stephensi*, SKR) Fee Area outlined in the Riverside County SKR Habitat Conservation Plan (HCP) (Section 5.1, BIO-3: SKR Mitigation Fee).

Nesting Songbirds and Raptors

Onsite vegetation communities represent suitable nesting habitat for common, as well as special-status resident and migratory bird/raptor species with the potential to occur within the Project Site. Typically, migratory birds and raptors nest within trees and other vegetation in areas that are removed from human disturbance; however, some species such as great horned owl (*Bubo virginianus*) and red-tailed hawk are known to nest in and adjacent to developed areas where there is nearby undeveloped land supporting an abundance of prey. The Project Site provides potential foraging and/or nesting habitat for migratory birds and raptors. The loss of an active nest of common or special-status bird species would be considered a violation of the CDFW Code, Section 3503, 3503.5, 3513. The following condition of approval will ensure no nesting birds or raptors are impacted as a result of project initiation (Section 5.1, BIO-4: Pre-Construction Surveys for Nesting and Breeding Songbirds and Raptors)

4.8 Jurisdictional Wetlands and Waters Assessment

The two (2) drainage features including A and B that bisect the Project Site represent jurisdictional resources which may be regulated by the Santa Ana Regional Water Quality Control Board and California Department of Fish and Wildlife. A formal jurisdictional delineation will be required, and all applicable regulatory permits acquired for direct and/or indirect impacts to these features (Section 5.1, BIO-5: CDFW/RWQCB Regulatory Resources, Permits and Certifications).

4.9 MSHCP Riparian/Riverine Resources and Vernal Pool Analysis

No vernal pools or suitable resources for the vernal pool fairy shrimp (*Branchinecta lynchi*) and Riverside fairy shrimp (*Streptocephalus woottoni*) were documented onsite. No surveys are required.

No suitable habitat for the southwestern willow flycatcher (*Empidonax traillii extimus*) or western yellow-billed cuckoo (*Coccyzus americanus*) was detected within or adjacent to the Project Site. These species are not expected to be present. No surveys are required.

Both drainage features A and B and associated riparian vegetation (black willow woodland and disturbed wetland-cattail) represent MSHCP Section 6.1.2 riverine/riparian resources. Direct or indirect impacts to these MSHCP Section 6.1.2 resources will require the development of an MSHCP DBESP (Section 5.1, BIO-5: MSHCP Riverine and Riparian Resources Section 6.1.2 Compliance)

4.10 Wildlife Movement Corridors

Providing functional habitat connectivity between natural areas is essential to sustaining healthy wildlife populations and allowing for the continued dispersal of native plant and animal species. The regional movement and migration of wildlife species has been substantially altered due to habitat fragmentation over the past century. This fragmentation is most commonly caused by development of open areas, which can result in large patches of land becoming inaccessible and forming a virtual barrier between undeveloped areas. Roads associated with development, although narrow, may result in barriers to smaller or less mobile wildlife species. Habitat fragmentation results in isolated islands of habitat, which affects wildlife behavior, foraging activity, reproductive patterns, immigration and emigration or dispersal capabilities, and survivability. Wildlife corridors can consist of a sequence of stepping-stones across the landscape (i.e., discontinuous areas of habitat such as isolated wetlands), continuous lineal strips of vegetation and habitat (e.g., riparian strips and ridge lines), or they may be parts of larger habitat areas selected for their known or likely importance to local wildlife.

The Project Site likely supports habitat for resident and transient species locally, and would not facilitate regional wildlife movement. Regional movement through the Project Site is substantively constrained by proximate urban development, major roads, and marginal habitat. The Project Site is not within an MSHCP Core Area or Linkage and is not otherwise identified as a regionally important wildlife movement corridor.

5.0 MSHCP & CEQA COMPLIANCE ANALYSIS

The purpose of this report is to document the existing biological resources, identify general vegetation types, and assess the potential biological and regulatory constraints associated with the proposed development within the Project Site as outlined by the MSHCP. The following sections summarize the Project Site's relationship to MSHCP criteria areas and MSHCP/CEQA compliance guidelines.

CRITERIA AREAS

The 17.66-acre Project Site including offsite assessment area (2.65-acre) is located entirely within the MSHCP Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area.

No Habitat Evaluation and Acquisition Negotiation Strategy, Joint Project Review or Criteria Area Consistency Analysis is required.

CRITERIA AREA SPECIES SURVEY AREA

The Project Site does not occur within a predetermined Survey Area for MSHCP criteria area plant species; therefore, no surveys are required (RCA GIS Data Downloads 2020).

The project is compliant with MSHCP Section 6.3.2.

NARROW ENDEMIC PLANT SPECIES SURVEY AREA

The Project Site does not occur within a predetermined Survey Area for MSHCP narrow endemic plant species; therefore, no surveys are required (RCA GIS Data Downloads 2020).

The project is compliant with MSHCP Section 6.1.3

AMPHIBIAN SPECIES SURVEY AREA

The Project Site does not occur within a predetermined Amphibian Species Survey Area; therefore, no surveys are required (RCA GIS Data Downloads 2020).

The project is compliant with MSHCP Section 6.3.2.

MAMMAL SPECIES SURVEY AREA

The Project Site does not occur within a predetermined Mammal Species Survey Area; therefore, no surveys are required (RCA GIS Data Downloads 2020).

The project is compliant with MSHCP Section 6.3.2.

BURROWING OWL SURVEY AREA

The Project Site occurs within a predetermined Survey Area for the burrowing owl. Based on the presence of low potential habitat documented during the May 21st, 2020 habitat assessment within and adjacent to the Project Site, focused surveys for burrowing owl were conducted. No burrowing owl or their sign (e.g., molted feathers, pellets with characteristic prey remains, or excrement (wash) near a burrow entrance) was observed. In compliance with the conservation goals outlined in the MSHCP, a 30-day preconstruction survey will be conducted prior to the initiation of construction to ensure protection for this species (MIG 2020a).

Following submittal, review and approval of the 30-day burrowing owl preconstruction survey report by the City of Moreno Valley and compliance with all species-specific conservation goals, if detected within or adjacent to the Project Site, the project will be compliant with MSHCP Section 6.3.2.

MSHCP RIPARIAN/RIVERINE AREAS AND VERNAL POOLS

Both drainage features A and B and associated riparian vegetation (black willow woodland and disturbed wetland-cattail) represent MSHCP Section 6.1.2 riverine/riparian resources. Direct or indirect impacts to these MSHCP Section 6.1.2 resources will require the development of an MSHCP DBESP.

No vernal pool resources, seasonal depressions or associated clay substrates were documented onsite.

Following submittal, review and approval of the DBESP report by the City of Moreno Valley and wildlife agencies, the project will be compliant with MSHCP Section 6.1.2.

URBAN/WILDLANDS INTERFACE

The MSHCP Urban/Wildlands Interface guidelines presented in Section 6.1.4 are intended to address indirect effects associated with locating commercial, mixed uses and residential developments in proximity to a

MSHCP Conservation Area. The Project Site is not located adjacent to an existing or proposed MSHCP Conservation Area.

The project is compliant with MSHCP Section 6.1.4.

FUELS MANAGEMENT

The fuels management guidelines presented in Section 6.4 of the MSHCP are intended to address brush management activities around new development within or adjacent to MSHCP Conservation Areas. The Project Site is not located adjacent to an existing or proposed MSHCP Conservation Area.

The project is compliant with MSHCP Section 6.4.

5.1 Mitigation Measures and Conditions of Approval

The following section summarizes potential constraints, mitigation measures, preconstruction survey requirements and conditions of approval which will need to be implemented to ensure development of the Project Site remains in compliance with CEQA and MSHCP guidelines.

BIO-1: Payment of Local Development Mitigation Fee for Conservation of Covered Species

In Volume 3 of the MSHCP (Implementing Agreement), a Local Development Mitigation Fee (Section 4) has been established to assist in providing revenue to acquire and preserve vegetation communities and natural areas within Riverside County which are known to support threatened, endangered or key sensitive populations of plant and wildlife species. Acquisition and preservation of these vegetation communities and natural areas will also benefit common species. The Applicant will pay the Local Development Mitigation Fee for the development of the proposed Project Site, established by the City of Moreno Valley.

BIO-2: Conduct 30-Day Burrowing Owl Preconstruction Survey

A 30-day burrowing owl preconstruction survey will be required to ensure protection for this species and compliance with the conservation goals as outlined in the MSHCP. The survey will be conducted in compliance with both MSHCP and CDFW guidelines (MSHCP 2006, CDFW 2012). A report of the findings prepared by a qualified biologist shall be submitted to the City of Moreno Valley for review and approval prior to any permit or ground disturbing activities.

If burrowing owls are detected onsite during the 30-day preconstruction survey, during the breeding season (February 1st to August 31st) then construction activities shall be limited to beyond 300 feet of the active burrows until a qualified biologist has confirmed that nesting efforts are completed or not initiated. In addition to monitoring breeding activity, if construction is proposed to be initiated during the breeding season or active relocation is proposed, a burrowing owl mitigation plan will be developed based on the City of Moreno Valley, CDFW and USFWS requirements for the passive or active relocation of individuals.

BIO-3: SKR Mitigation Fee

The Project Site falls within the SKR Fee Area outlined in the Riverside County SKR HCP. The project applicant shall pay the fees pursuant to County Ordinance 663.10 for the SKR HCP Fee Assessment Area as established and implemented by the County of Riverside.

BIO-4: Pre-Construction Surveys for Nesting and Breeding Songbirds and Raptors

To avoid impacts to nesting birds associated with the proposed development, initial construction related grubbing and grading activities should occur outside the avian nesting season (prior to February 1 or after September 1). If construction and construction noise occur within the avian nesting season (during the period from February 1 to September 1), all suitable habitats within 100 feet of the Project Site shall be thoroughly surveyed for the presence of nests by a qualified biologist no more than five (5) days before commencement of any vegetation removal. If it is determined that the Project Site is occupied by nesting birds, protective measures shall be implemented as described below.

If pre-construction nesting bird surveys result in the location of active nests, no grading, vegetation removal, or heavy equipment activity shall take place within 300 feet of non-raptor nests and 500 feet of raptor nests, or as determined by a qualified biologist. Protective measures (e.g., sampling) shall be required to ensure compliance with the California Fish and Game Code requirements. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts occur. A report of the findings, prepared by a qualified biologist, shall be submitted to the City of Moreno Valley prior to construction-related activities that have the potential to disturb any active nests during the nesting season.

BIO-5: CDFW/RWQCB Regulatory Resources, Permits and Certifications

Prior to issuance of a grading permit, the project applicant will conduct a formal jurisdictional delineation to determine the extent of resources onsite regulated by the CDFW, or RWQCB. The project applicant will be required to obtain all applicable permits which may include a 1602 Streambed Alteration Agreement from CDFW and a 401 Certification issued by the RWQCB pursuant to the California Water Code Section 13260.

Impacts to jurisdictional features shall not occur until the permits are received from the appropriate regulatory agencies, or correspondence is received from the agencies indicating that a permit is not required.

BIO-5: MSHCP Riverine and Riparian Resources Section 6.1.2 Compliance

Both drainage features A and B and associated riparian vegetation represent MSHCP Section 6.1.2 riverine/riparian resources. Direct or indirect impacts to these MSHCP Section 6.1.2 resources will require the development of an MSHCP DBESP.

To meet the criteria of a biologically equivalent or superior alternative, the applicant will offset impacts to any MSHCP riverine or riparian habitat as directed by the City of Moreno Valley. Specifically, an MSHCP DBESP will be prepared and submitted to the City of Moreno Valley, and wildlife agencies for review and approval.

6.0 REFERENCES

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FIGURES

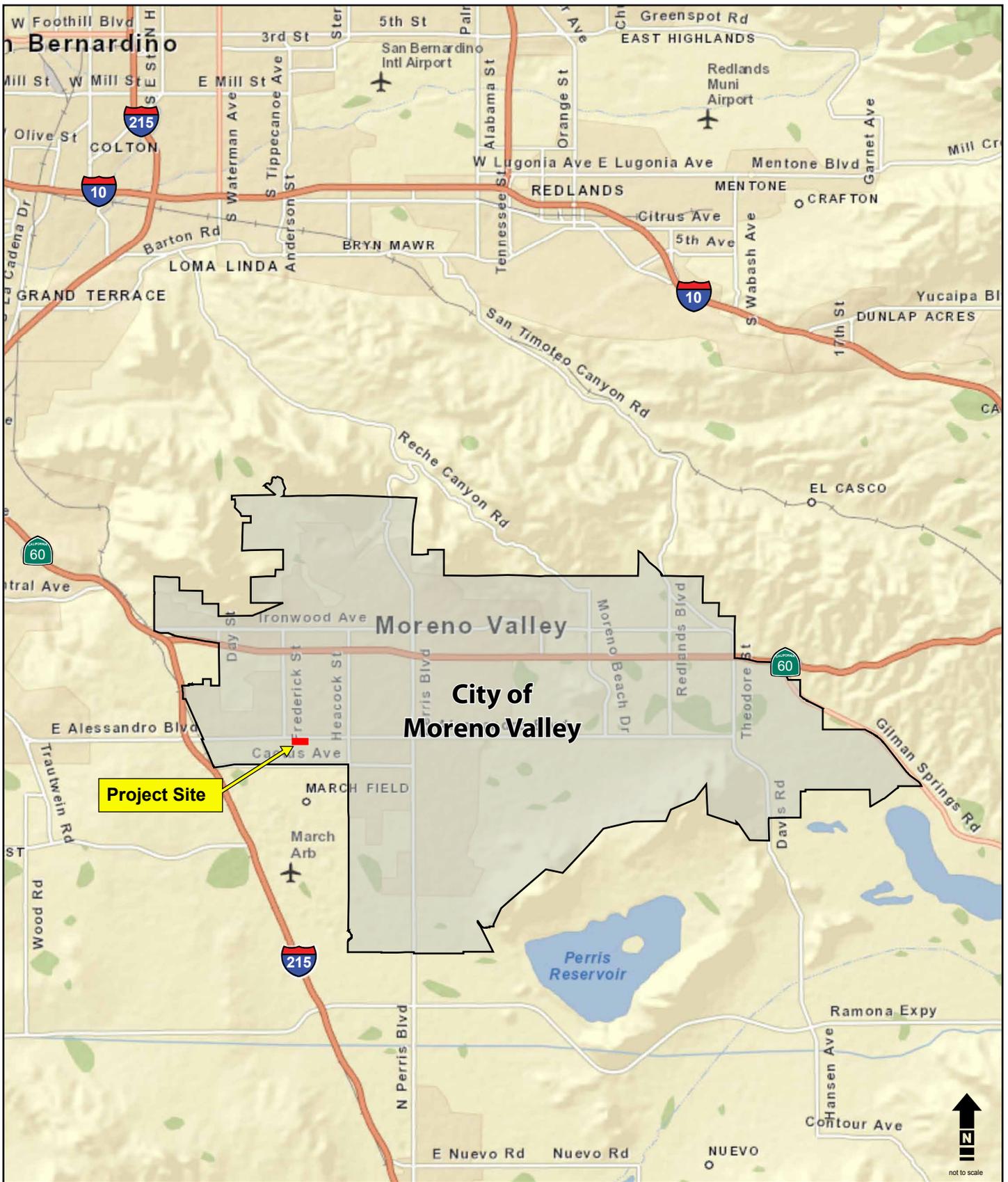


Figure 1 Regional Location Map
Alessandro Project Site, City of Moreno Valley, CA



Project Site Boundary (17.66 acres)

Offsite Assessment Area (2.65 acres)

→ Photo Point & Direction



Figure 2 Project Site Map

Alessandro Project Site, City of Moreno Valley, CA



- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)
- MmB - Monserate Sandy Loam (NRCS 2020)

Figure 3 Soils Associations Map
Alessandro Project Site, City of Moreno Valley, CA



- | | | |
|--|---|--------------------------------------|
| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | |

Figure 4 Vegetation Communities Map
Alessandro Project Site, City of Moreno Valley, CA



Photograph 1 - Southeast view of Project Site from northwest corner adjacent to Alessandro Boulevard.



Photograph 2 - Southward view of down drain located at end of the end of Drainage A

Figure 5a Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



Photograph 3 - Northwest view of Project Site from southeast corner. The Project Site is dominated by annually disked disturbed non-native grassland.



Photograph 4 - Westward view of Drainage B from northeast corner of Project Site near Alessandro Boulevard.

Figure 5b Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



MSHCP Section 6.1.2 Riparian Resources

BW Black Willow Woodland

DW Disturbed Wetland - Cattail

- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)

Figure 6 MSHCP Section 6.1.2 Resources Map
Alessandro Project Site, City of Moreno Valley, CA



- | | | |
|--|---|--------------------------------------|
| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | Impact Boundary (20.31 acres) |

Figure 7 Project Site Impact Map
Alessandro Project Site, City of Moreno Valley, CA

APPENDICES

Appendix A
Burrowing Owl Survey Report for the Alessandro Project Site

Burrowing Owl Focused Survey Report

Alessandro Project Site

City of Moreno Valley, Riverside County, California



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August 2020

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1.0 INTRODUCTION

This report presents the results of focused burrowing owl (*Athene cunicularia*) surveys conducted at the 17.66-acre (2.65-acre offsite) Alessandro project site (Project Site) in the City of Moreno Valley, Riverside County, California. The Project Site is located within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) planning area. The MSHCP is a regional multi-jurisdictional habitat conservation program that addresses multiple species' habitat needs in western Riverside County. According to MSHCP guidelines, surveys for the burrowing owl are to be conducted as part of the environmental review process. Specifically, the MSHCP Additional Surveys Needs and Procedures identify a burrowing owl Survey Area within the MSHCP Plan Area. The Project Site occurs within this predetermined Survey Area. Suitable low potential habitat was identified on the Project Site during an initial site reconnaissance conducted in May 21st, 2020. Subsequently, focused burrowing owl surveys were conducted during the breeding season in order to comply with MSHCP requirements. The purpose of this report is to document the results of the burrowing owl habitat assessment and focused burrow and burrowing owl surveys.

1.1 Project Location

The 17.66-acre (2.65-acre offsite) Project Site is located immediately south of Alessandro Boulevard in the City of Moreno Valley (City), Riverside County, California, Assessor Parcel Numbers (APNs) 297-170-002 and 279-170-003 (Figure 1 and Figure 2). Offsite impacts extend into the Alessandro right-of-way to the north and APNs 297-170-088 and 279-170-089 to the south (Figure 2). The Project Site occurs within the U.S. Geological Survey (USGS) 7.5' series Riverside East Quadrangle, Township 3 South, Range 4 West, Section 12.

The Project Site is located entirely within the MSHCP Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area.

2.0 METHODS AND RESULTS

The survey was conducted in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (2006). Survey protocol consists of three steps: Step I – Habitat Assessment; Step II – Locating Burrows and Burrowing Owls; and Step III – Reporting Requirements. Each step conducted during this survey is briefly outlined below. Surveys were conducted during weather that is conducive to observing burrowing owls outside of their burrows and detecting burrowing owl sign. All surveys were conducted from two hours before sunset to one hour after or from one hour before to two hours after sunrise. Surveys were not conducted during rain, high winds (> 20 mph), dense fog, or temperatures over 90 °F. Surveys were not conducted within five days of measurable precipitation.

2.1 Step 1 – Habitat Assessment

Step 1 of the burrowing owl focused survey consists of walking the Project Site to determine if suitable habitat is present. This initial habitat assessment was conducted on May 21st, 2020 by MIG Senior Biologist Jonathan Campbell, PhD (Table 1. Summary of Focused Survey Weather Conditions during the Nesting Season). Upon arrival at the Project Site and prior to initiating the assessment survey, binoculars were used to scan all suitable habitats on and adjacent to the property, including perch locations, to ascertain owl presence.

All suitable areas of the Project Site were surveyed on foot by walking slowly and methodically across each habitat type while recording/mapping areas that may represent suitable owl habitat onsite. Primary indicators of suitable burrowing owl habitat include, but are not limited to: native and non-native grassland, grassland interspersed with shrubland along ecotonal areas, shrublands with low density shrub cover, concrete rubble, and earthen berms. Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels (*Otospermophilus beecheyi*) or badgers (*Taxidea taxus*), but they often utilize man-made 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 near man-made structures. A majority of the habitat mapped onsite represents low potential habitat for burrowing owl.

According to the MSHCP (2006) guidelines, if suitable habitat is present, the biologist should also walk the perimeter of the property, which consists of a 150-meter (approximately 500 feet) buffer zone around the Project Site boundary. If permission to access the buffer area cannot be obtained, the biologist shall not trespass, but visually inspect adjacent habitats with binoculars.

The largest area and center of the Project Site is characterized as “disturbed/non-native grassland” and currently offers limited habitat value to plants and wildlife. The Project Site is heavily disturbed and annually disked as part of weed abatement requirements. The Project Site is flat and bordered to the south by industrial buildings, north by high density residential development, and east and west by disturbed lands. Two (2) drainage features bisect the property in a north to south direction which currently sustains disturbed wetland and riparian vegetation as described below. Natural community names and hierarchical structure follows List of Alliances and Associations (CDFW September 2010) which have been refined and augmented where appropriate to better characterize the habitat types observed onsite when not addressed by the classification system. Scientific nomenclature and common names used for plants in this report follows Hickman (1993). Vertebrate taxonomy follows Stebbins (2003) for amphibians and reptiles, the American Ornithologists’ Union (1998 and supplemental) for birds, and Jones et al. (1992) for mammals. The onsite plant communities are as follows (Figure 3, Vegetation Communities Map, Figures 4a/4b, Current Project Site Photographs):

Disturbed/Non-Native Grassland

The majority of the Project Site is characterized as disturbed/non-native grassland and experiences annual dicking activities. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Raphanus sativus*), Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), riggut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Black Willow Woodland

The northern region of Drainage A is dominated by black willow woodland. Common species documented within this vegetation community include Gooding’s willow (*Salix gooddingii*), velvet ash (*Fraxinus velutina*), and an understory of non-native grasses and ruderal species as described above.

Developed

Developed regions of the Project Site include a culvert structure located at the southern terminus of Drainage A and existing paved roads located within the offsite impact areas.

Disturbed Wetland – Cattail

Two small patches of disturbed wetland-cattail habitat are located in the northern region of both Drainage A and B, immediately adjacent to Alessandro Boulevard. Dominant plant species observed within this vegetation community include curly dock (*Rumex crispus*), common cattail (*Typha latifolia*), tall nutsedge (*Cyperus eragrostis*), annual beard grass (*Polypogon monspeliensis*), Mexican fan palm (*Washingtonia robusta*), dallis grass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), and tarragon (*Artemisia dracuncululus*).

Ornamental

A single ornamental tree, Mexican palo verde (*Parkinsonia aculeata*) is located adjacent to the black willow woodland.

Mule Fat

A single mule fat (*Baccharis salicifolia*) shrub is located near the northeast corner of the Project Site.

Results from the Step I - Habitat Assessment indicate that the disturbed/non-native grassland (described above) represent low potential habitat for the burrowing owl. Accordingly, due to the presence of potential habitat onsite, Step II – Locating Burrows and Burrowing Owls is required. In addition, due to the presence of potential habitat onsite, a pre-construction survey within 30 days of any project-related or construction-related activities is therefore required.

2.2 Step II – Locating Burrows and Burrowing Owls

Part A – Focused Burrow Survey

Due to the presence of low potential burrowing owl habitat, focused burrow surveys, including documentation of appropriately sized natural burrows or suitable man-made structures that may be utilized by burrowing owl, were conducted as part of the protocol on May 21st, 2020 (Table 1. Summary of Focused Survey Weather Conditions during the Nesting Season).

The systematic surveys for burrows, including burrowing owl signs, were conducted by walking across all potential habitat mapped at the Project Site. Pedestrian survey transects were spaced to allow 100% visual coverage of the ground surface. The distances between transect centerlines were no more than 30 meters (approximately 100 feet) apart. The burrow survey began within two hours prior to sunset. Accordingly, due to the presence of suitable burrowing owl burrows onsite, Step II, Part B – Focused Burrowing Owl Surveys are required.

General wildlife species documented onsite or within the vicinity of the Project Site include but are not limited to red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaidura macroura*), Anna's hummingbird (*Calypte anna*), song sparrow (*Melospiza melodia*), house sparrow (*Passer domesticus*), Nuttall's woodpecker (*Picoides nuttallii*), Cassin's kingbird (*Tyrannus vociferans*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), cliff swallow (*Petrochelidon pyrrhonota*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*),

American crow (*Corvus brachyrhynchos*), western meadowlark (*Sturnella neglecta*) common raven (*Corvus corax*), house sparrow (*Passer domesticus*), American goldfinch (*Spinus tristis*), house finch (*Haemorhous mexicanus*), western tanager (*Piranga ludoviciana*), and desert cottontail (*Sylvilagus audubonii*).

Part B – Focused Burrowing Owl Surveys

If any burrows are found during the Part A – Focused Burrow Survey, Part B – Focused Burrowing Owl Surveys are required to determine presence or absence of the species. The Part B effort consists of at least four focused surveys to search for signs of occupation at the burrows, or observations of burrowing owls. Focused surveys are to be conducted within the breeding season between March 1st and August 31st. A review of local documentation (CNDDDB 2020) suggests that no burrowing owls have been historically identified within the extent of the Project Site boundary. In addition to the breeding season survey conducted on May 21st, 2020, three additional breeding season surveys were conducted throughout the Project Site on June 20th, July 10th, and 30th, 2020 (Figure 5, Burrowing Owl Survey Area Map). All surveys were conducted during times and conditions conducive to observing burrowing owl (Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season). A thorough investigation of the potentially suitable burrows concluded that no evidence of burrowing owl activity was present in any of the onsite burrow complexes.

Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season

Date	Time Start/End	Temperature (°F)	Wind Speed (mph)	Conditions
5/21/2020	6:30AM – 7:30AM	72	2-5	Clear
6/20/2020	6:00AM – 9:00AM	68	0-4	Clear
7/10/2020	6:00AM – 9:00AM	66	4-8	Clear
7/30/2020	6:00AM – 9:00AM	66	2-8	Clear

2.3 Step III – Reporting Requirements

This report represents the third step of the burrowing owl focused survey, the preparation of a report that provides the results of each step of the survey protocol. After completion of appropriate surveys, a final report shall be submitted to the City of Moreno Valley, which discusses the survey methodology, transect width, duration, conditions, and results of the survey.

2.4 Preconstruction Surveys

All project sites containing burrows or suitable habitat (based on Step I/Habitat Assessment), whether owls were found or not, require pre-construction surveys that shall be conducted within 30 days prior to ground disturbance to avoid direct take of burrowing owls (MSHCP Species-Specific Objective 6).

3.0 CONCLUSIONS AND RECOMMENDATIONS

Both low potential burrowing owl habitat and burrowing owl burrows were identified within the Project Site during the Step I – Habitat Assessment performed on May 21st, 2020 and the Step II, Part A – Focused Burrow Survey performed on May 21st, 2020. Three additional Step II, Part B – Focused Burrowing Owl Surveys were therefore performed during the breeding season on June 20th, July 10th, and 30th, 2020 throughout the Project Site. No evidence of burrowing owl activity was observed during any of the surveys.

A pre-construction burrowing owl survey will need to be completed within 30 days prior to any project-related or construction-related disturbances to onsite areas.

4.0 REFERENCES

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- Riverside County Transportation and Land Management Agency. 2003. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Final MSHCP—Volumes 1 and 2. Approved June 17, 2003.
- USFWS. 2020. Threatened and Endangered Species. Pacific Southwest Region. Carlsbad Office. Available online at <http://www.fws.gov/carlsbad/TEspecies.html>. Accessed [July 2020].

FIGURES



Figure 1 Regional Location Map
Alessandro Project Site, City of Moreno Valley, CA



Project Site Boundary (17.66 acres)

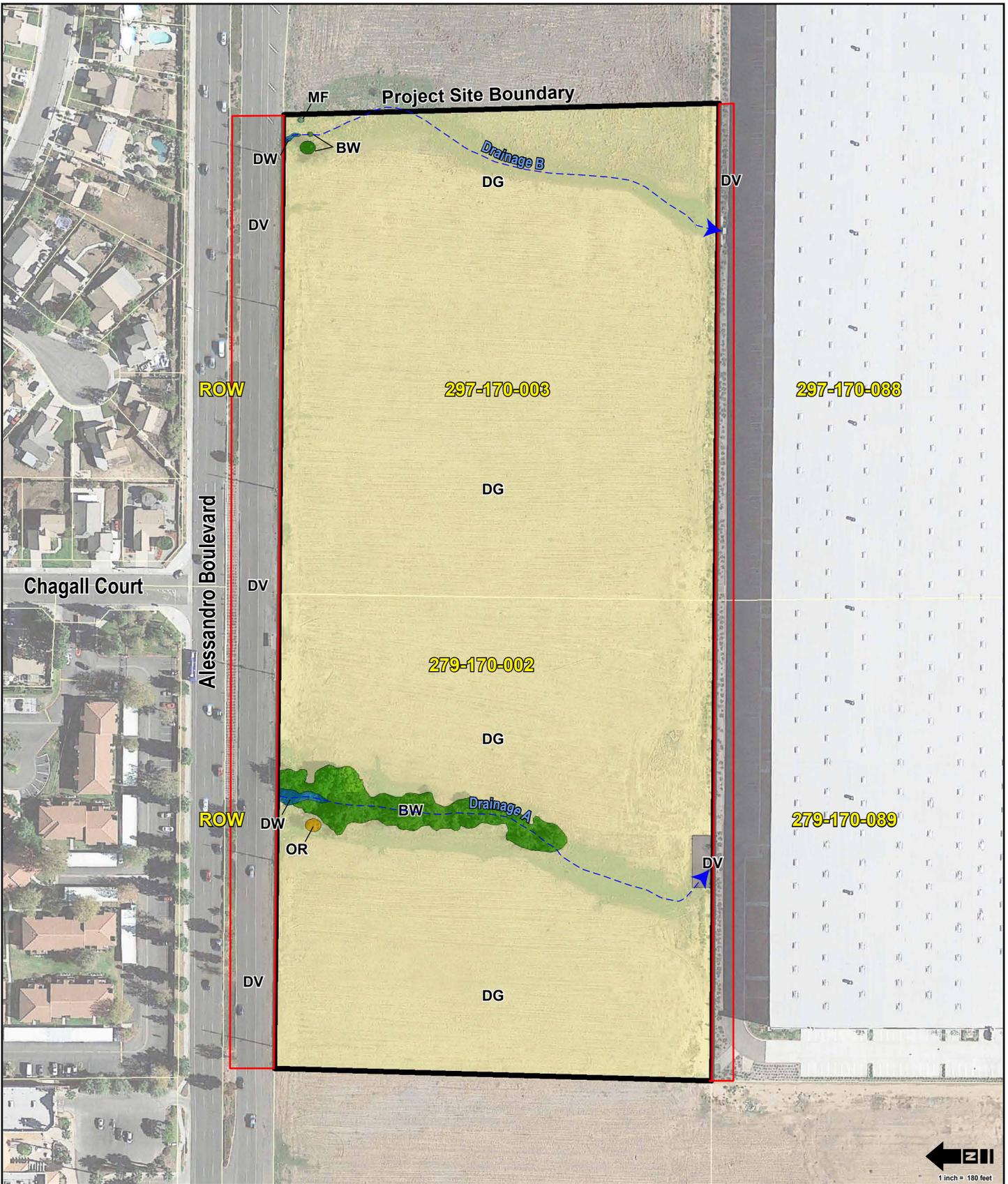
Offsite Assessment Area (2.65 acres)

→ Photo Point & Direction



Figure 2 Project Site Map

Alessandro Project Site, City of Moreno Valley, CA



- | | | |
|--|---|--------------------------------------|
| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | |

Figure 3 Vegetation Communities Map
Alessandro Project Site, City of Moreno Valley, CA



Photograph 1 - Southeast view of Project Site from northwest corner adjacent to Alessandro Boulevard.



Photograph 2 - Southward view of down drain located at end of the end of Drainage A

Figure 4a Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



Photograph 3 - Northwest view of Project Site from southeast corner. The Project Site is dominated by annually disked disturbed non-native grassland.



Photograph 4 - Westward view of Drainage B from northeast corner of Project Site near Alessandro Boulevard.

Figure 4b Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



--- Survey Transects

- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)

Figure 5 Burrowing Survey Area Map
 Alessandro Project Site, City of Moreno Valley, CA

Appendix B
Least Bell's Vireo Survey Results for the Alessandro Project Site

Least Bell's Vireo Focused Survey Report

Alessandro Project Site

City of Moreno Valley, Riverside County, California



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August 2020

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1.0 INTRODUCTION

This report presents the results of focused least Bell's vireo (*Vireo bellii pusillus*) surveys conducted at the 17.66-acre (2.65-acre offsite) Alessandro project site (Project Site) in the City of Moreno Valley, Riverside County, California. The Project Site is located within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) planning area. The MSHCP is a regional multi-jurisdictional habitat conservation program that addresses multiple species' habitat needs in western Riverside County. According to MSHCP Section 6.1.2 guidelines, surveys for riparian birds are to be conducted as part of the environmental review process, if suitable habitat is present. Suitable low potential habitat was identified on the Project Site during an initial site reconnaissance conducted in May 21st, 2020 for the least Bell's vireo. Subsequently, focused surveys were conducted during the breeding season in order to comply with MSHCP Section 6.1.2 requirements. The purpose of this report is to document the results of the least Bell's vireo assessment and focused surveys.

1.1 Project Location

The 17.66-acre (2.65-acre offsite) Project Site is located immediately south of Alessandro Boulevard in the City of Moreno Valley (City), Riverside County, California, Assessor Parcel Numbers (APNs) 297-170-002 and 279-170-003 (Figure 1 and Figure 2). Offsite impacts extend into the Alessandro right-of-way to the north and APNs 297-170-088 and 279-170-089 to the south (Figure 2). The Project Site occurs within the U.S. Geological Survey (USGS) 7.5' series Riverside East Quadrangle, Township 3 South, Range 4 West, Section 12.

The Project Site is located entirely within the MSHCP Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area.

2.0 METHODS AND RESULTS

An initial habitat assessment for potential least Bell's vireo habitat was conducted on May 21st, 2020. As described below, all vegetation communities onsite were mapped and assessed for suitability for least Bell's vireo. A single vegetation community including black willow woodland was characterized as representing low potential habitat for the species. Therefore, focused United States Fish and Wildlife Service (USFWS) protocol surveys were initiated. As stated by the USFWS:

“Under normal circumstances, all riparian areas and any other potential vireo habitats should be surveyed at least eight (8) times during the period from April 10 to July 31. However, we may concur, on a case by case basis, with a reduced effort if unusual circumstances dictate that this is a prudent course of action. For instance, intensive surveys of small, marginal or extralimital habitats by experienced personnel may well result in defensible conclusions that eight (or more) individual surveys are unnecessary. Under such unusual circumstances, we will consider requests for reductions in the prescribed number of individual surveys. In any case, site visits should be conducted at least 10 days apart to maximize the detection of, for instance, late and early arrivals, females, particularly “non-vocal” birds of both sexes, and nesting pairs.

- 1) *Although the period from April 10 to July 31 encompasses the period during which most vireo nesting activity occurs, eight surveys are generally sufficient to detect most*

- (if not all) vireo adults in occupied habitats. Precise vireo censuses and estimations of home range likely will not be possible unless surveys are conducted outside of this time window. Although focused surveys conducted in accordance with these guidelines substantially reduce the risk of an unauthorized take* that could potentially occur as a result of land development or other projects, individual project proponents may wish to conduct surveys that are more rigorous than those that would otherwise result from strict adherence to these survey guidelines. If additional information (e.g., extent of occupied habitat, total numbers of adult and juvenile vireos in study area) is desired or necessary, surveys should be extended to August 31 and conducted in such a manner as to collect the data necessary to prepare reports that reflect the methods and standards established in the current scientific literature on this subject. In particular, information collected after July 15 will reflect a broader extent to the riparian habitat and other adjacent habitat types that the vireo typically utilizes during the latter phase of the breeding season, especially when the young become independent of the adults.*
- 2) *Surveys should be conducted by a qualified biologist familiar with the songs, whisper songs, calls, scolds, and plumage characteristics of adult and juvenile vireos. These skills are essential to maximize the probability of detecting vireos and to avoid potentially harassing the species in occupied habitats.*
 - 3) *Surveys should be conducted between dawn and 11:00 a.m. Surveys should not be conducted during periods of excessive or abnormal cold, heat, wind, rain, or other inclement weather that individually or collectively may reduce the likelihood of detection.*
 - 4) *Surveyors should not survey more than 3 linear kilometers or more than 50 hectares of habitat on any given survey day. Although surveyors should generally station themselves in the best possible locations to hear or see vireos, care should be taken not to disturb potential or actual vireo habitats and nests or the habitat of any sensitive or listed riparian species.*
 - 5) *All vireo detections (e.g., vocalization points, areas used for foraging, etc.) should be recorded and subsequently plotted to estimate the location and extent of habitats utilized. These data should be mapped on the appropriate USGS quadrangle map.*
 - 6) *Data pertaining to vireo status and distribution (e.g., numbers and locations of paired or unpaired territorial males, ages and sexes of all birds encountered) should be noted and recorded during each survey. In addition, surveyors should look for leg bands on vireo adults and juveniles if, in fact, it is possible to do so without disturbing or harassing the birds. If leg bands or other markers are observed, then surveyors should record and report the detection and associated circumstances to us by telephone, facsimile, or electronic mail as soon as possible. Reports should include the colors and relative locations of any and all bands detected, the age and sex of the marked bird, and the precise location of the detection.*

- 7) *The numbers and locations of all brown-headed cowbirds (Molothrus ater) detected within vireo territories should be recorded during each survey and subsequently reported to us. In addition, all detections of the State and federally endangered southwestern willow flycatcher (Empidonax trallii extimus, flycatcher) and State endangered yellow-billed cuckoo (Coccyzus americanus, cuckoo) should be recorded and reported. Any and all cuckoo and flycatcher adults, young, or nests should not be approached, and taped vocalizations of these species should not be used unless authorized in advance by scientific permits to take* issued by us (if appropriate) and the California Department of Fish and Game. Flycatcher presence/absence surveys require a recovery permit issued by us per section 10(a)(1)(A) of the Endangered Species Act.” (USFWS 2001)*

A total of eight (8) focused least Bell’s vireo surveys were conducted on May 21st, 31st, June 10th, 20th, 30th, July 10th, 20th, and 30th, 2020 by Senior Biologist Jonathan Campbell, PhD and Ruben Ramirez throughout the black willow woodland documented onsite and described below. All surveys were conducted during times and conditions conducive to observing least Bell’s vireo (Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season).

Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season

Date	Time Start/End	Temperature (°F)	Wind Speed (mph)	Conditions
5/21/2020	7:30AM – 9:00AM	74	0-5	Clear
5/31/2020	8:00AM – 9:30AM	70	3-5	Clear
6/10/2020	6:00AM – 9:00AM	66	2-8	Clear
6/20/2020	6:00AM – 9:00AM	68	0-4	Clear
6/30/2020	6:00AM – 9:00AM	64	0-4	Clear
7/10/2020	6:00AM – 9:00AM	66	4-8	Clear
7/20/2020	6:00AM – 9:00AM	70	2-8	Clear
7/30/2020	6:00AM – 9:00AM	66	2-8	Clear

The largest area and center of the Project Site is characterized as “disturbed/non-native grassland” and currently offers limited habitat value to plants and wildlife. The Project Site is heavily disturbed and annually disked as part of weed abatement requirements. The Project Site is flat and bordered to the south by industrial buildings, north by high density residential development, and east and west by disturbed lands.

Two (2) drainage features bisect the property in a north to south direction which currently sustains disturbed wetland and riparian vegetation as described below. Natural community names and hierarchical structure follows List of Alliances and Associations (CDFW September 2010) which have been refined and augmented where appropriate to better characterize the habitat types observed onsite when not addressed by the classification system. Scientific nomenclature and common names used for plants in this report follows Hickman (1993). Vertebrate taxonomy follows Stebbins (2003) for amphibians and reptiles, the American Ornithologists’ Union (1998 and supplemental) for birds, and Jones et al. (1992) for mammals. The onsite plant communities are as follows (Figure 3, Vegetation Communities Map, Figures 4a/4b, Current Project Site Photographs):

Disturbed/Non-Native Grassland

The majority of the Project Site is characterized as disturbed/non-native grassland and experiences annual dicking activities. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Raphanus sativus*), Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), ripgut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Black Willow Woodland

The northern region of Drainage A is dominated by black willow woodland. Common species documented within this vegetation community include Gooding's willow (*Salix gooddingii*), velvet ash (*Fraxinus velutina*), and an understory of non-native grasses and ruderal species as described above.

Developed

Developed regions of the Project Site include a culvert structure located at the southern terminus of Drainage A and existing paved roads located within the offsite impact areas.

Disturbed Wetland – Cattail

Two small patches of disturbed wetland-cattail habitat are located in the northern region of both Drainage A and B, immediately adjacent to Alessandro Boulevard. Dominant plant species observed within this vegetation community include curly dock (*Rumex crispus*), common cattail (*Typha latifolia*), tall nutsedge (*Cyperus eragrostis*), annual beard grass (*Polypogon monspeliensis*), Mexican fan palm (*Washingtonia robusta*), dallis grass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), and tarragon (*Artemisia dracuncululus*).

Ornamental

A single ornamental tree, Mexican palo verde (*Parkinsonia aculeata*) is located adjacent to the black willow woodland.

Mule Fat

A single mule fat (*Baccharis salicifolia*) shrub is located near the northeast corner of the Project Site.

General wildlife species documented onsite or within the vicinity of the Project Site include but are not limited to red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaidura macroura*), Anna's hummingbird (*Calypte anna*), song sparrow (*Melospiza melodia*), house sparrow (*Passer domesticus*), Nuttall's woodpecker (*Picoides nuttallii*), Cassin's kingbird (*Tyrannus vociferans*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), cliff swallow (*Petrochelidon pyrrhonota*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), American crow (*Corvus brachyrhynchos*), western meadowlark (*Sturnella neglecta*), common raven (*Corvus corax*), house sparrow (*Passer domesticus*), American goldfinch (*Spinus tristis*), house finch (*Haemorhous mexicanus*), western tanager (*Piranga ludoviciana*), and desert cottontail (*Sylvilagus audubonii*).

3.0 CONCLUSIONS

No least Bell's vireo were detected onsite during the focused survey efforts conducted during the 2020 breeding season.

4.0 REFERENCES

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FIGURES

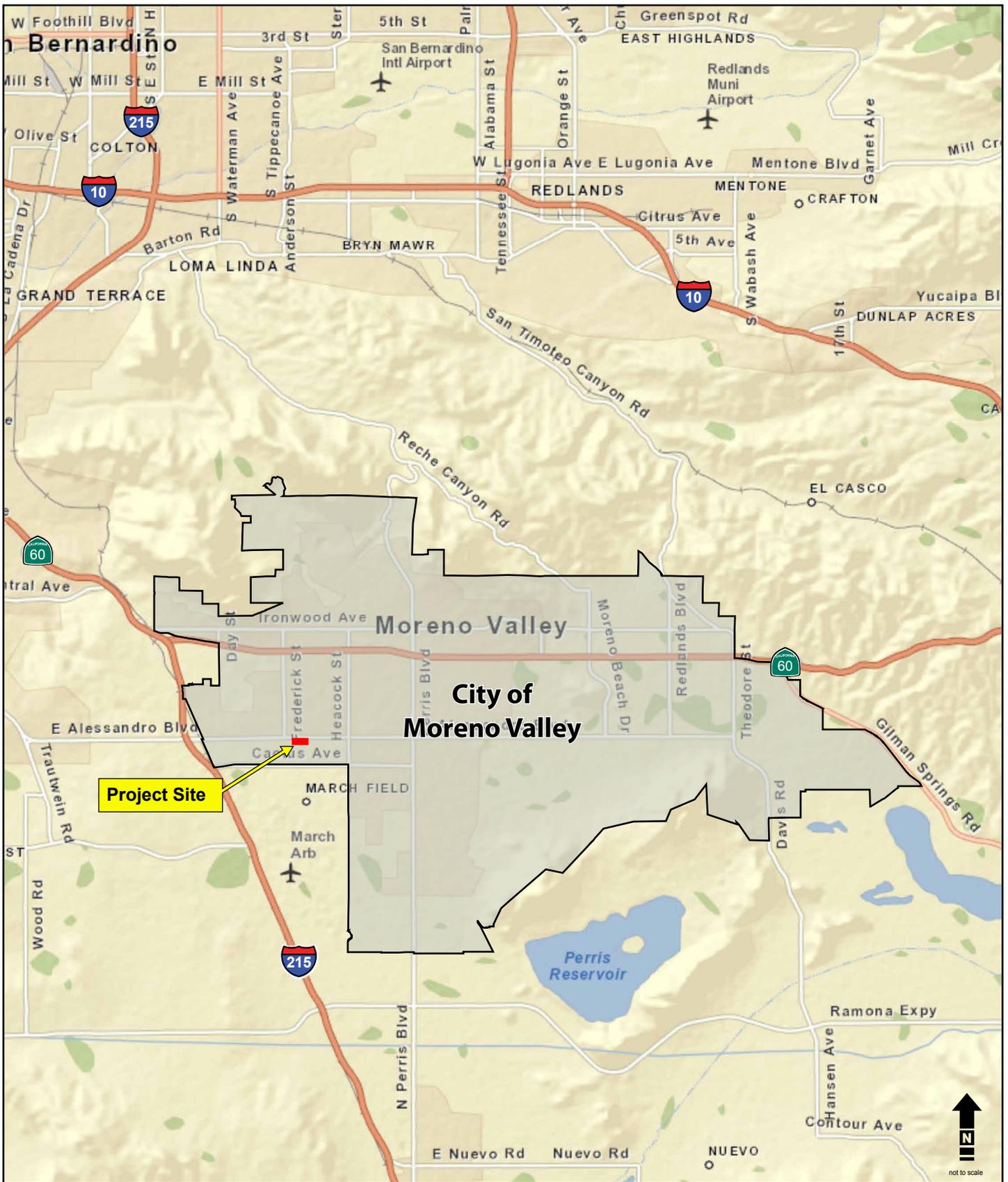


Figure 1 Regional Location Map
Alessandro Project Site, City of Moreno Valley, CA



Project Site Boundary (17.66 acres)

Offsite Assessment Area (2.65 acres)

Photo Point & Direction



Figure 2 Project Site Map

Alessandro Project Site, City of Moreno Valley, CA



- | | | |
|--|---|--------------------------------------|
| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | |

Figure 3 Vegetation Communities Map
Alessandro Project Site, City of Moreno Valley, CA



Photograph 1 - Southeast view of Project Site from northwest corner adjacent to Alessandro Boulevard.



Photograph 2 - Southward view of down drain located at end of the end of Drainage A

Figure 4a Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



Photograph 3 - Northwest view of Project Site from southeast corner. The Project Site is dominated by annually disked disturbed non-native grassland.



Photograph 4 - Westward view of Drainage B from northeast corner of Project Site near Alessandro Boulevard.