

General Biological Resource Assessment Report Warmington Residential Brodiaea Project

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1.0 Introduction

1.1 Project Location and Description

Marsh and Mallow Land Resources Consulting (MMLRC) biologist Darian Wong conducted a biological habitat assessment at Brodiaea Ave (APN: 47-080-003, -004, -005, and 47-070-013, -014, -015), within the City of Moreno Valley, CA. The purpose of these surveys is to determine whether the proposed Warmington Residential Brodiaea Project (Project) will impact any biological natural resources as required per the California Environmental Quality Act (CEQA). Specifically, CEQA analyzes how the construction, operation and maintenance of a project will impact federal, state, regional and local biological resource regulations such as the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), Migratory Bird Treaty Act (MBTA), and California Fish and Game Code (FGC). Additionally, a Consistency Analysis for the Western Riverside Multiple Species Habitat Conservation Plan (WRMSHCP) has been included as appendix 5.

The Project is located at the corner of Brodiaea Ave and Moreno Beach Drive within the City of Moreno Valley, Riverside County. Figures 1 and 2 below show the regional and Project location maps. The Project parcels lie within the U.S. Geological Survey (USGS) 7.5-minute *Sunnymead, California* topographic quadrangle, section 14 of township 3 south, and range 3 west. The elevation of the Project site is approximately 1,587 ft above mean sea level (msl).

The proposed Project consists of 134 single family homes to be built on 14.4 acres of land. The floor plans range from approximately 1700 sf to 2120 sf for each single-family home. Private open spaces will be included in the development and will consist of 34 open parking spaces. Proposed construction is anticipated to impact the entire Project area through grading, excavation, best management practices (BMP) installation, paving, construction of structures and landscaping.

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Figure 1: Regional Map

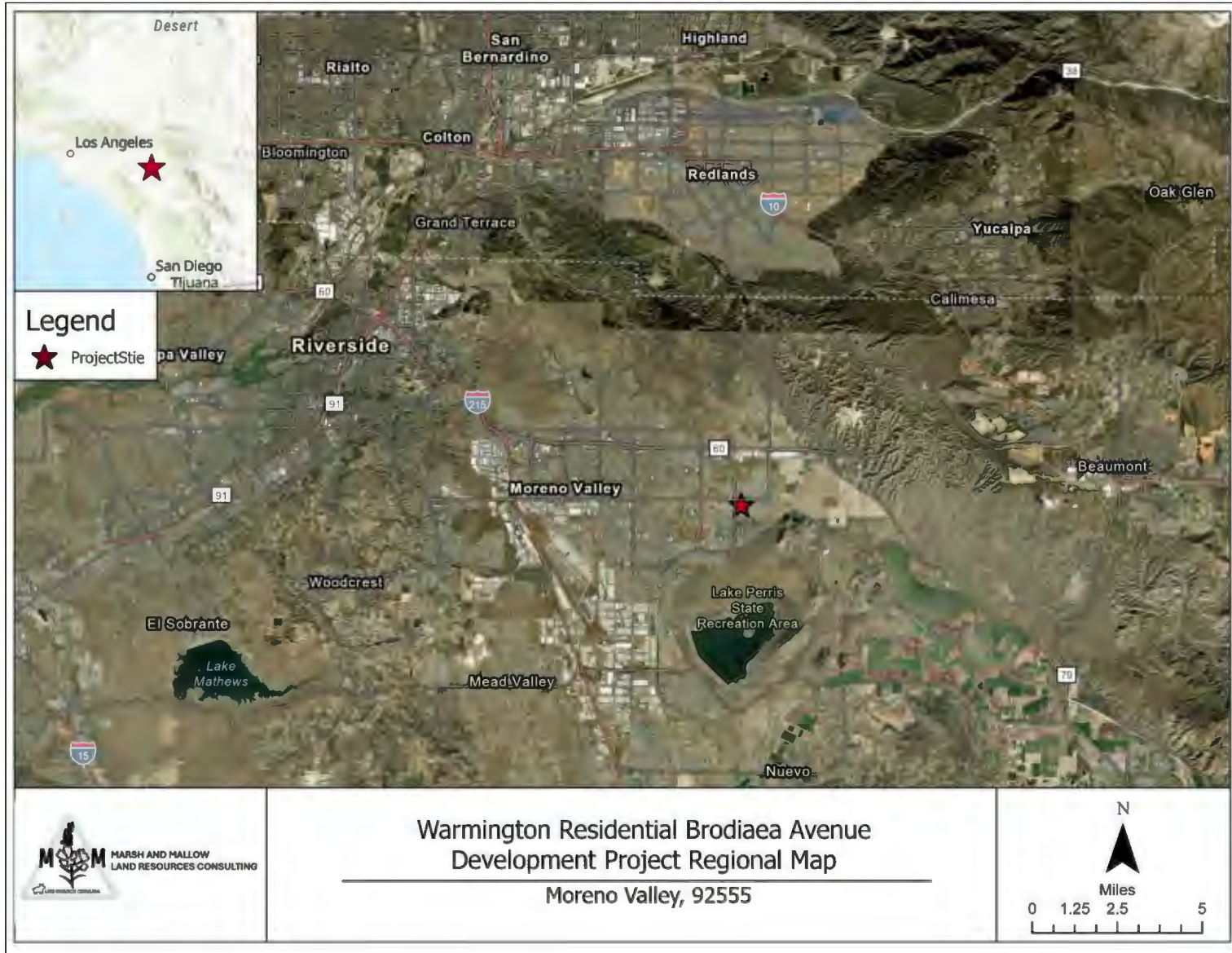
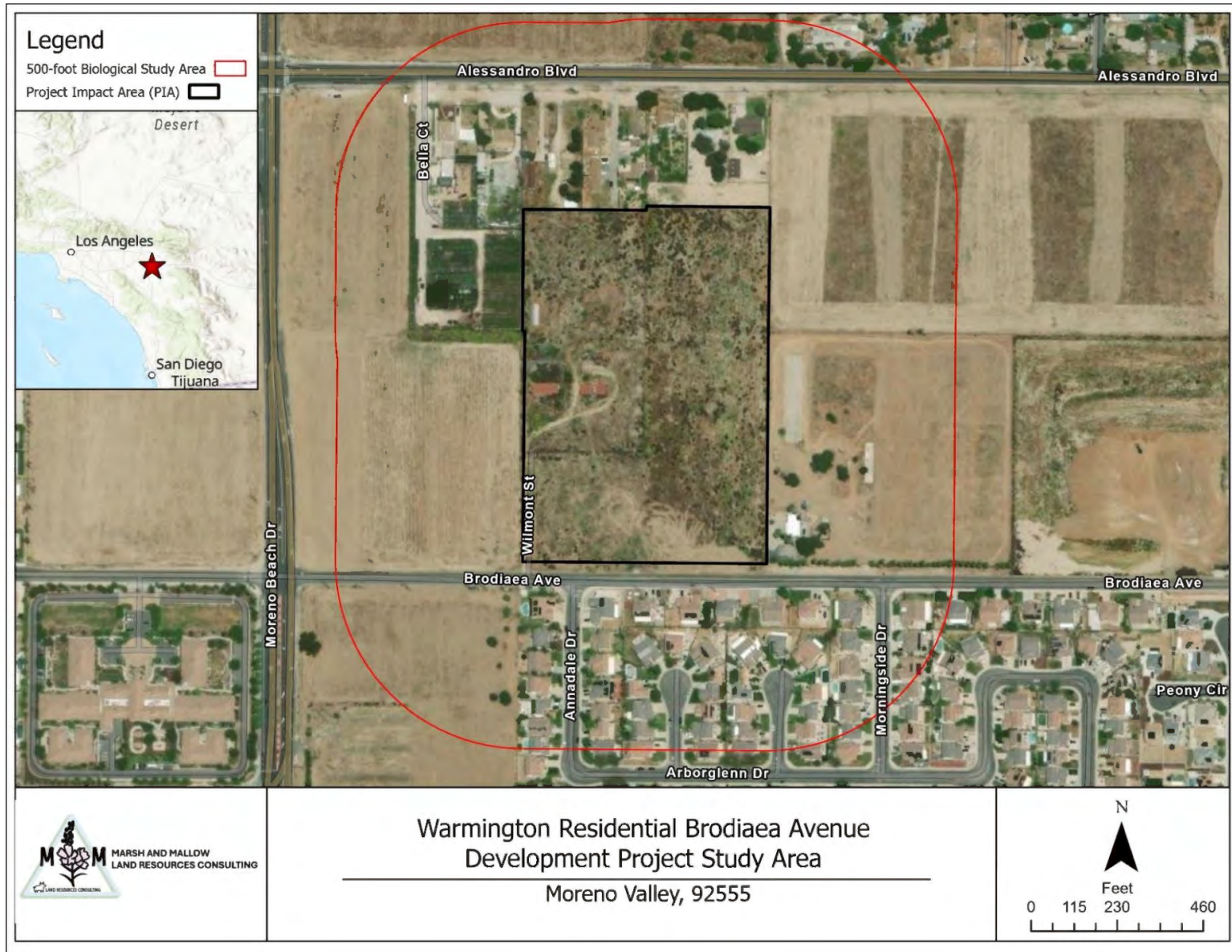




Figure 2: Project Site Aerial View



2.0 Study Methods

MMLRC biologist Darian Wong conducted a biological desktop survey which included literature review of similar projects in the area, database search, aerial imagery analysis and policy research. Additionally, a general field survey of the Project site was conducted by Biologist Darian Wong to assess habitats within the site and to determine whether it can support special-status species and to determine the presence of protected natural resources.

2.1 Regulatory Requirements

Section 401 and 404 of the Clean Water Act of 1972


The Federal Clean Water Act (CWA) Sections 401 and 404 are administered by the Regional Water Quality Control Board (RWQCB) and U.S. Army Corps of Engineers (USACE), respectively, to provide guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. These regulations are described more thoroughly below.

Under Section 404, the USACE regulates discharge of dredged or fill material into Waters of the U.S. including, but not limited to, the following: placement of fill necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes, and subaqueous utility lines [33 Code of Federal Regulations (CFR) Section 328.2(f)].

The state of California has established water quality control regulations under Section 401 of the CWA (33 U.S. Code [USC] 1341), that are administered by the RWQCB and require any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into Waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards. Section 401 Certification, “gives states and authorized tribes the authority to grant or waive certification of proposed federal licenses or permits that may discharge into waters of the US” (33 USC 1251).

On May 25, 2023, the Supreme Court of the United States adopted a narrower definition of WOTUS in the case Sackett v. Environmental Protection Agency. Under the majority opinion, WOTUS refers to “geographical features that are described in ordinary parlance as ‘streams, oceans, rivers, and lakes’ and to adjacent wetlands that are “indistinguishable” from those bodies of water due to a





continuous surface connection.” On August 29, 2023, the agencies issued a final rule to amend the final “Revised Definition of ‘Waters of the United States’” rule to conform the definition of “waters of the United States” to the U.S. Supreme Court’s May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*.

Parts of the January 2023 Rule are invalid under the Supreme Court’s interpretation of the Clean Water Act in the *Sackett* decision. Therefore, the agencies have amended key aspects of the regulatory text to conform to the Court’s decision. Key changes under the amendment include:

- Definition of “adjacent” is now “having a continuous surface connection”
- Only tributaries that are relatively permanent, standing or continuously flowing bodies of water (or tributaries with a continuous surface connection to those) are considered jurisdictional
- Interstate wetlands are no longer jurisdictional just by virtue of being interstate
- Significant nexus test is eliminated

On September 27, 2023, the EPA published its final 2023 Clean Water Act Section 401 Quarter Quality Certification Improvement Rule (88 Fed. Reg. 66558.) The final 2023 Rule revises and replaces the 2020 Rule’s regulatory requirements for water quality certification that were adopted by the prior federal administration. The updates realign the scope of the Section 401 certification process with established practices, while also restoring the roles of states, territories, and authorized Tribes as certifying agencies.


Rivers and Harbors Act

The Rivers and Harbors Appropriation Act of 1899, commonly known as the Rivers and Harbors Act, requires permits for all structures such as bridges, causeways, riprap and for other activities such as dredging which are placed within navigable waters of the U.S. Navigable waters are defined as those which are subject to the ebb and flow of the tide and susceptible to use in their natural condition or by reasonable improvements as means to transport interstate or foreign commerce. The USACE grants or denies permits based on the effects on navigation.

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) defines and lists species, subspecies, and distinct population segments as “endangered” and “threatened” and provides regulatory protection for listed species. FESA provides a program for conservation and recovery of threatened and endangered species; it also ensures





the conservation of designated critical habitat the U.S. Fish and Wildlife Service (USFWS) has determined is required for the survival and recovery of these listed species. Section 9 of FESA prohibits the “take” of species listed by USFWS as threatened or endangered. Take is defined as follows: “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in such conduct.” In recognition that take cannot always be avoided, Section 10(a) of FESA includes provisions for take that is incidental to, but not the purpose of, otherwise lawful activities.

Section 10 allows an individual or private citizen to “take” a listed species if they develop a Habitat Conservation Plan (HCP). This is in contrast to Section 7 of the ESA, which regulates federal government actions. The purpose of the HCP process and issuance of Incidental Take Permits (ITPs) is to authorize the incidental take of threatened or endangered species, not to authorize the underlying activities that result in take (typically the CEQA process will identify the potential need for a HCP in California).

Migratory Bird Treaty Act of 1918

This treaty with Canada, Mexico and Japan makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds. The law applies to the removal of nests occupied by migratory birds during the breeding season. California Fish and Game Code Sections 3503 and 3503.5 (protection of birds’ nests) and 3513 (taking Migratory Bird Treaty Act birds) also prohibit the destruction of any nest, egg, or nestling.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d), enacted in 1940, and amended several times since, prohibits anyone, without a permit issued by the Secretary of the Interior, from “taking” bald or golden eagles, including their parts (including feathers), nests, or eggs. The Act provides criminal penalties for persons who “take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part (including feathers), nest, or egg thereof.”

The Act defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.” Regulations further define “disturb” as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior” (50 CFR 22.6).





California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires that the significant environmental impacts of proposed projects or actions undertaken, funded, or requiring an issuance of a permit by a State or local agency are identified, government decision makers and the public are informed about the effects of those actions and that steps are taken in order to avoid or mitigate those environmental impacts, if feasible.

California Code of Regulations Title 14 Section 15064.7 establishes the thresholds of significance required for CEQA. Each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant.

California Code of Regulations Title 14 Section 15380 defines “Endangered, Rare or Threatened Species” as part of the CEQA Guidelines. This section also mandates lead agencies to consider a species endangered, rare, or threatened if it can be shown to meet the qualifying criteria described therein, even when the species is not listed under either the California Endangered Species Act (CESA) or federal Endangered Species Act (ESA). Public agencies serving as a CEQA lead or responsible agency carry the responsibility to consider a species’ qualification as endangered, rare, or threatened under CEQA based on the facts of the project. This responsibility raises important issues for the environmental practitioner.

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code [FGC] §§ 2050 et seq.) (California Legislative Info 2019) prohibits the take of listed species, except as otherwise provided in state law. Take under CESA is defined as “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Unlike FESA, CESA also applies the take prohibitions to species that are candidates for listing, as well as listed species. State lead agencies are required to consult with the CDFW to ensure that any actions undertaken by the lead agency are not likely to jeopardize the continued existence of any state-listed species or result in destruction or degradation of required habitat. Permits for incidental take of species protected pursuant to CESA are available under certain circumstances as described in Sections 2080 and 2081 of the California Fish and Game Code.



Section 2080 of the California Fish and Game Code states, “No person shall import into this state (California), export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission (State Fish and Game Commission) determines to be an endangered species or threatened species, or attempt any of those acts, except as otherwise provided in this chapter (Chapter 1.5, Endangered Species), or the Native Plant Protection Act, or the California Desert Native Plants Act.” Pursuant to Section 2081 of the California Fish and Game Code, CDFW may authorize individuals or public agencies to import, export, take, or possess, any state-listed endangered, threatened, or candidate species through permits as follows: (1) if the take is incidental to an otherwise lawful activity, (2) if impacts of the authorized take are minimized and fully mitigated, (3) if the permit is consistent with any regulations adopted pursuant to any recovery plan for the species, and (4) if the applicant ensures adequate funding to implement the measures required by CDFW. CDFW shall make this determination based on available scientific information and shall include consideration of the ability of the species to survive and reproduce.

Native Plant Protection Act

The Native Plant Protection Act, California Fish and Game Code Sections 1900–1913 includes measures to preserve, protect, and enhance rare and endangered native plants. The list of native plants afforded protection pursuant to the Native Plant Protection Act includes those listed as rare and endangered under CESA. The Native Plant Protection Act provides limitations that no person would import into this state—or take, possess, or sell within the State of California—any rare or endangered native plant, except in compliance with provisions of the act. Where individual landowners have been notified by CDFW that rare or native plants are growing on their land, the landowners are required to notify CDFW at least 10 days in advance of changing land uses to allow the CDFW to salvage any rare or endangered native plant material.

California Fish and Game Code Sections 3503-3503.5

It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation adopted pursuant thereto. With the implementation of avoidance and minimization measures the proposed Project would not be in violation of FGC § 3503.

It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. With the implementation of avoidance and minimization measures take of birds-of-prey, their nest or eggs as defined by FGC § 3503.5 would not occur.





Fully Protected Species

California Fish and Game Code Sections 3511, 4700, 5050 and 5515 designate 37 species of wildlife as Fully Protected in California. The classification of Fully Protected provides additional protection to those animals that are rare or face possible extinction. Most Fully Protected Species have also been listed as threatened or endangered species under CESA. Fully Protected species may not be taken or possessed at any time and **no licenses or permits may be issued for their take** except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock, or if the fully protected species is listed as a covered species whose conservation and management is provided for in a Natural Community Conservation Plan (NCCP).

CDFW may authorize the take of fully protected species that is incidental to a project only for the five types of projects listed below.


- A maintenance, repair, or improvement project to the State Water Project, including existing infrastructure, undertaken by the Department of Water Resources.
- A maintenance, repair, or improvement project to critical regional or local water agency infrastructure.
- A transportation project, including any associated habitat connectivity and wildlife crossing project, undertaken by a state, regional, or local agency, that does not increase highway or street capacity for automobile or truck travel.
- A wind project and any appurtenant infrastructure improvement, and any associated electric transmission project carrying electric power from a facility that is
- located in the state to a point of junction with any California-based balancing authority.
- A solar photovoltaic project and any appurtenant infrastructure improvement, and any associated electric transmission project carrying electric power from a facility that is located in the state to a point of junction with any California-based balancing authority.

Natural Communities Conservation Planning Act

California has a number of formal acts in statute. Fish and Game Code Division 3, Chapter 10 provides the Natural Community Conservation Planning Act, which is contained in Section 2800 to 2835. Chapter 10 was added in 2002 by Chapter 4. Section 2800 names the Act.

CDFW's Natural Community Conservation Planning (NCCP) program is an unprecedented effort by the State of California, and numerous private and public partners, that takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. The NCCP program began in





1991 as a cooperative effort to protect habitats and species. It is broader in its orientation and objectives than the California and Federal Endangered Species Acts (opens in new tab), as these laws are designed to identify and protect individual species that have already declined in number significantly.

California Fish and Game Code (Sec. 1600-1603)

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California are subject to the regulatory authority of the California Department of Fish and Wildlife (CDFW) pursuant to Sections 1600 through 1603 of the California Fish and Game Code and require a Lake or Streambed Alteration Agreement (LSA) (California Department of Fish and Game [CDFG] 2004). Pursuant to the Code, a stream is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Based on this definition, a watercourse with surface or subsurface flows that support or have supported riparian vegetation is a stream and is subject to CDFW jurisdiction. Altered or artificial waterways valuable to fish and wildlife are also subject to CDFW jurisdiction. The CDFW must be notified of an LSA for any project that may impact a streambed or wetland. The CDFW has maintained a “no net loss” policy regarding potential impact, requiring replacement of lost habitats on at least an acre-for-acre ratio.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act requires “any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the State to file a report of discharge” with the RWQCB through State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures) (California Code of Regulations [CCR], title 23, § 3855) (State Water Resources Control Board [SWRCB] 2024). Waters of the State is defined as any surface water or groundwater, including saline waters, within the boundaries of the State (California Water Code § 13050[e]). Pollution is defined as an alteration of the quality of the waters of the state by waste to a degree that unreasonably affects its beneficial uses (California Water Code § 13050) and includes filling in waters of the State. Note that CCR, title 23, § 3855 applies only to individual water quality certifications, but the new Procedures extend the application of § 3855 to individual waste discharge requirements for discharges of dredged or fill material to Waters of the State and waivers thereof.





Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP)

The purpose of the WRCMSHCP is to focus on the collective conservation of 146 sensitive species known to occur in the Plan area, rather than deal with them individually on a case-by-case basis, as has been the traditional method since the enactment of the FESA and CESA. The WR-MSHCP proposes to establish an approximate 500,000-acre reserve system throughout western Riverside County to compensate for unavoidable impacts to these species resulting from development projects throughout the Plan area. The WRCMSCHP will contribute to the economic viability of Riverside County by providing landowners and developers with a more efficient and cost-effective regulatory and permitting process. The WRCMSHCP has been approved by the County Board of Supervisors, and on 22 June 2004, the USFWS and CDFW signed the necessary incidental take permits, thereby approving the final WRCMSHCP. This Plan satisfies the requirements of the Natural Community Conservation Plan (NCCP) legislation.

The WR-MSHCP is a criteria-based plan, focused on the preservation of individual plant and animal species through conservation based on specific habitat requirements and geographic distribution of each species. The existing database for the WR-MSHCP does not, however, provide enough level of detail to determine the extent of the presence or distribution of some biological resources including, but not limited to: Narrow Endemic Plant Species Survey Areas (NEPSSA), Criteria Area Plant Species (CAPS), federally-listed fairy shrimp (Branchiopods) and burrowing owls (*Athene cunicularia*). For these reasons, additional data regarding the presence of these biological resources are required, where specified, to ensure that appropriate conservation of these species is implemented where necessary.

Moreno Valley Municipal Code Section 9.05.040 Landscape and Water Efficiency Requirements: Heritage Trees

In Moreno Valley, Heritage Trees are protected under Municipal Code Section 9.17.040 due to their historical, cultural, or ecological significance. These trees are defined as those with a trunk diameter of 15 inches or more (measured 24 inches above ground), a height of at least 15 feet, or trees officially designated as historically or culturally important—such as mature palm or olive trees. Their removal, alteration, or damage is prohibited unless they pose a safety hazard, are dead or dying despite preservation efforts, or are located within a public or future right-of-way. Removal of officially designated heritage trees also requires review by



the Ecological Historical Preservation Board. Commercial nursery or tree farm stock is exempt from these protections.

2.2 Literature Review

A literature review was conducted by MMLRC Biologist Darian Wong to identify previously reported special-status species and habitats within the Project area. The search included the 14.4-acre Project site as well as a 500-foot biological study area (BSA) to identify resources that may be impacted indirectly by different project components such as water quality impacts, noise or light pollution. The following databases and sources were reviewed:

- California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB) (2025)
- California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants (2025)
- Calflora (2025)
- US Fish and Wildlife Service (USFWS) Threatened & Endangered Species Active Critical Habitat Report Online Mapper (2025)
- Regional Conservation Authority WRCMSCHP Interactive Map (2025)
- The University and Jepson Herbaria- Jepson eFlora (2025)
- USFWS National Wetlands Inventory (NWI) Wetlands Mapper (2025)
- US Department of Agriculture Natural Resources Conservation Service (NRCS) (2025) and National Hydric Soils List (2025)


A CNDDDB query search was conducted for the USGS 7.5-minute *Sunnymead* quadrangle to identify previously recorded occurrences of special-status species in the area. This information as well as other database searches were used in the field surveys.

2.3 Biological Habitat Assessment and Reconnaissance Survey

A biological survey was conducted by MMLRC biologist Darian Wong on March 14, 2025. The survey consisted of meandering transects that covered the immediate project impact area (PIA) as well as the 500 ft. BSA to identify existing habitats onsite as well as record any plant and wildlife species observed. Habitat assessments were conducted for special-status species listed from the CNDDDB search that were determined to have potential to occur within the study area. Areas inaccessible were surveyed using binoculars.

Plant species were identified in the field based on the nomenclature described in Jepson eFlora (2025). Bird species were identified through visual and audio recognition. Reptiles and amphibians were searched for by carefully exposing,





inspecting and repositioning potential shelters such as cardboard, rocks and other debris. Mammal species were identified through visual and audio recognition of individuals or through certain diagnostic signs like burrows and scat.

Nomenclature of wildlife species were based on the Special Animals List (CDFW 2025), Sibley Field Guide to Birds of Western North America (Sibley 2016), Mammals of California (Jameson, 2004), and Field guide to Amphibians and Reptiles of California (Stebbins and Mcginnis, 2012).

2.4 Preliminary Aquatic Resources Delineation

Prior to conducting the field portion of the preliminary aquatic resource delineation, aerial imagery and various databases were reviewed to determine whether there were previously mapped aquatic resources including any wetland hydrology, hydrophytic plants and hydric soils which are indicators of wetland habitat as defined by the Corps of Engineers Wetland Delineation Manual: Arid West Region (USACE 2008). The field survey consisted of a meandering transect throughout the Project site and BSA to determine the presence of the aquatic resources listed above. Additionally, to assess the presence of non-wetland waters, signs of ordinary high-water mark (OHWM) as defined by the *A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual* (Lichvar and McColley 2008) were surveyed for.

2.5 Western Riverside Multi-Species Habitat Conservation Plan Consistency Analysis

The Western Riverside Multi-Species Habitat Conservation Plan (WRMSHCP) is a comprehensive plan focused on preserving 146 wildlife and plant species found in Western Riverside County while providing opportunities for economic development throughout the protection area. The WRMSHCP protects and conserves the species by focusing on an ecosystem approach to preserving that habitat of each species. These methods include identifying an excess 500,000 acres of land to commit to the conservation of the “covered species” listed by the WRMSHCP. Additionally, the WRMSHCP divides into 16 separate Area Plans which have its own conservation goals. The Area Plans further divide into Subunits which contain Cell groups and individual Criteria Cells. The purpose of separating the plan in such a way is to determine potential land for acquisition towards the goals of WRMSHCP. Projects that occur with the Criteria Cells are subject to additional review through the Joint Project Review (JPR) in which the Regional Conservation Authority (RCA) will determine whether the Project is consistent with the overall objectives of the WRMSHCP.



The proposed Project does fall within the WRMSHCP boundaries but does not fall within any mapped Criteria Cell. However, the proposed Project does fall within the WRMSHCP Burrowing Owl Survey Area. As such, additional focused surveys will be conducted to evaluate the project site for consistency with the conservation goals of the WRMSHCP and reports will be included in the Consistency Report (Appendix 5).

3.0 Results: Environmental Setting

The biological habitat assessment and preliminary jurisdictional delineation were conducted by MMLRC Biologist Darian Wong on March 14, 2025. Mr. Wong has extensive experience conducting biological surveys for special-status species and habitat assessment while working with public agencies and private entities. Mr. Wong conducted meandering transects to identify habitats that exist within the Project site and to determine whether any special-status species listed in table 3 would be impacted by the Project. Additionally, Mr. Wong recorded current site conditions through photographs and noted the location of sensitive biological resources with a Global Position System (GPS) unit. Table 1 notes the start and end time of the survey, and the weather conditions observed during the survey.

In addition to the general habitat assessment survey, an additional survey was completed on April 12, 2025 to assess the presence of burrowing owl. No suitable burrows (characterized by a 4in or higher diameter opening, whitewash, owl pellets or feathers) were observed during this focused burrow survey. Therefore, no additional assessments were necessary.

Table 1: March 14th Survey Weather Conditions

Date	Beginning to End	Beginning Weather	End Weather
3/14/2025	10:00am – 1:00pm	Light rain to cloudy, 6 mph wind, 42 degrees F	100% cloud cover, 8 mph wind,
4/12/2025	06:00 am – 08:00 am	60% cloud cover, 2 mph wind, 52 degrees F	50% cloud cover, 2mph wind, 55 degrees F





3.1 Physical Environmental Setting

The Project is approximately a 14.4-acre parcel located in the City of Moreno Valley. It is located within the San Jacinto Habitat Management Unit of the Western Riverside Multiple Species Habitat Conservation Plan. The Project site sits approximately 1,587 ft above mean sea level (AMSL) and USDA Web Soil Survey identifies the site to be primarily composed of San Emigdio loam (USDA 2025). A detailed map is included as Appendix 4 below. Temperature averages for the City of Moreno Valley range from highs of 94°F in August to lows of 41°F in December (weatherspark.com).

The Project site is a relatively flat parcel with low to medium vegetation cover and the occasional dispersed tree. Three structures, an abandoned dwelling, barn and greenhouse were observed at the site with a partial chain-link fence along sections of the property. The 500-ft BSA buffer included Alessandro Blvd, Brodiaea Ave., existing residential development south and north of the property, and agricultural land to the east and west of the property. The Project has debris associated with the previous residence and farming activities.


3.2 Biological Condition

Surveys conducted by Biologist Darian Wong found the PIA is primarily dominated by nonnative plant species such as common fiddleneck (*Amsinckia intermedia*), Prickly Russian thistle (*Kali Tragus*), Black mustard (*Brassica nigra*), Shortpod mustard, and (*Hirschfeldia incana*). The presence of many of these ruderal species typically indicates that the habitat is largely disturbed. The Project site appeared to be dominated by the invasive species listed above and to be regularly trimmed back, disked or mowed in an attempt as fire suppression. Ornamental species such as Italian cypress (*Cupressus sempervirens*), Torch Cactus (*Trichocereus grandifloras*), Chinese pistachio (*Pistacia chinensis*) and California juniper (*Juniperus californica*) were found onsite adjacent to the abandoned structures and the dirt road/driveway leading up the building. Additional plant species observed outside the PIA and within the 500ft BSA include nonnative ornamental species such as blue gum, Peruvian pepper tree, Mexican fan palm, and the same ruderal vegetation as listed for the PIA.

Wildlife species observed onsite were a majority avian species including the common crow and mourning dove. See Table 2 below for a full compendium of species observed. Small reptiles or mammal burrows were also observed onsite.

Existing habitat with the project impact area (PIA) can be characterized as Disturbed Habitat (11300) which is characterized by the presence of Invasive non - native forb species such as the Russian prickly thistle (*Salsola tragus*), or London rocket (*Sisymbrium irio*). Although the presence of native species that can be





associated with nonnative grasslands, the Project site and surrounding fields were observed to be actively disturbed by human activities related to weed abatement such as disking and mowing (Holland 1986).

Existing habitats within the 500-foot biological study area (BSA) include Developed Land (12000), and Disturbed Habitat (11300) (Holland 1986, Sawyer et. Al 2009). Table 2 below lists the two existing habitats onsite as well as the area that exists within the 500 ft BSA. Figure 3 below demarcates the boundaries of each habitat within the PIA.

Developed Land is characterized by the presence of permanent structures or other anthropogenic improvements such as roads, houses, and landscaping. Additionally, residential and commercial structures were observed in the northern and southern portion of the BSA.

Table 2: Existing Habitat Within the BSA

Habitat Type	Holland Code	Total area within BSA (Acres)
Developed Land	12000	1.96
Disturbed Habitat	13000	12.38

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Figure 3: Existing Habitats Within the BSA

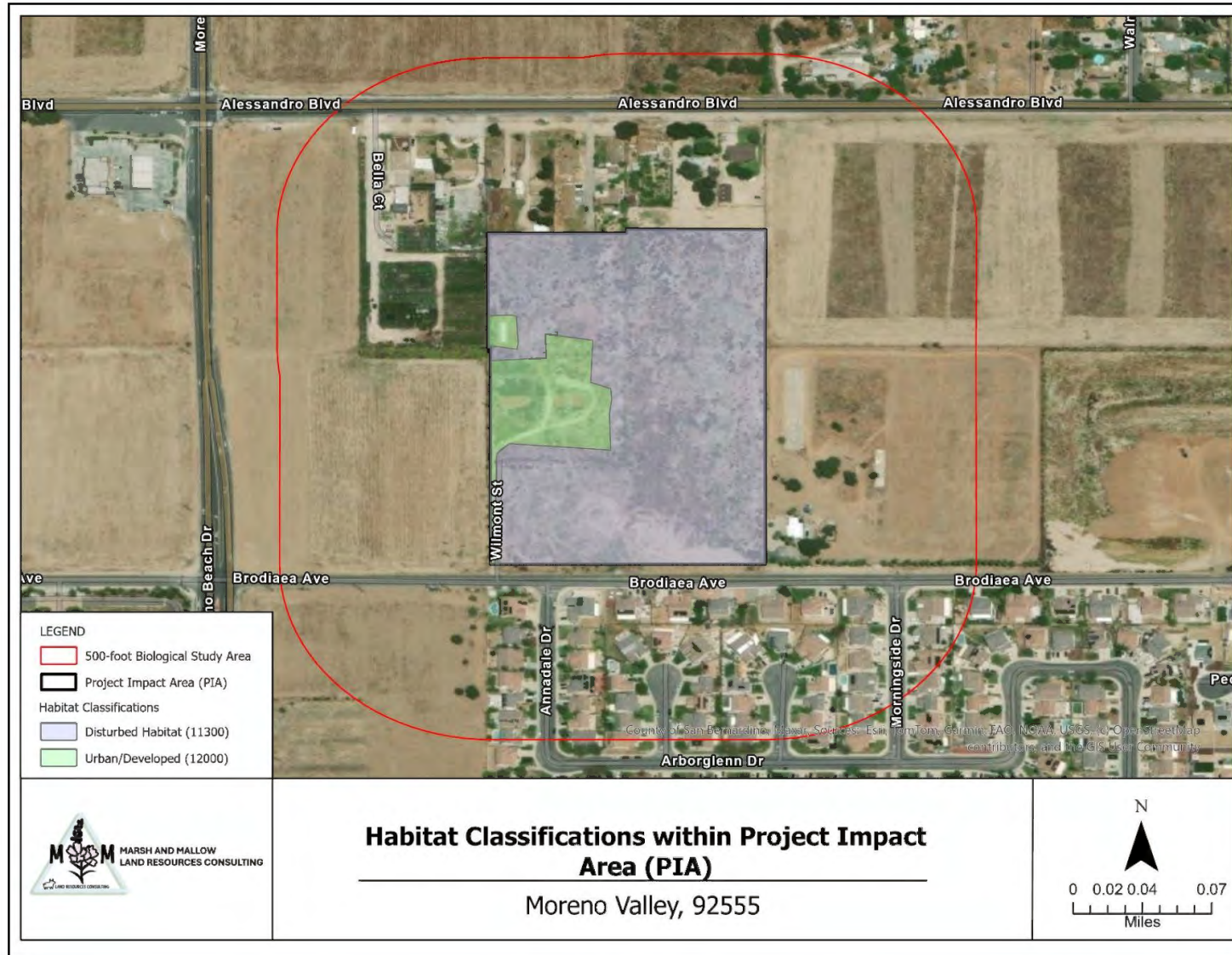


Table 3: Species observed onsite

Scientific Name	Common Name
<i>Malva parviflora</i>	cheeseweed mallow
<i>Datura spp.</i>	Datura spp.
<i>Carduus pycnocephalus</i>	Italian Thistle
<i>Schinus molle</i>	Peruvian Pepper Tree
<i>Lupinus succulentus</i>	Arroyo lupin
<i>Kali tragus</i>	Prickly Russian Thistle
<i>Heterotheca grandiflora</i>	Telegraph weed
<i>Washingtonia robusta</i>	Mexican fan palm
<i>Brassica nigra</i>	Black mustard
<i>Olea europaea</i>	Olive
<i>Erodium cicutarium</i>	Storks bill
<i>Amsinckia intermedia</i>	Common fiddleneck
<i>Juniperus californica</i>	California juniper
<i>Sisymbrium irio</i>	London rocket
<i>Trichocereus grandiflorus</i>	Torch cactus
<i>Cupressus sempervirens</i>	Italian Cypress
<i>Parkinsonia aculeata</i>	Mexican palos verde
<i>Encelia californica</i>	California brittlebush
<i>Hesperoyucca whipplei</i>	Chaparral Yucca
<i>Agave spp.</i>	Agave spp.
<i>Lactuca serriola</i>	Prickly lettuce
<i>Hirschfeldia incana</i>	Shortpod mustard
Western sycamore	Western sycamore
<i>Pistacia chinensis</i>	Chinese pistachio
<i>Washingtonia robusta</i>	Mexican Fan Palm
<i>Eriobotrya japonica</i>	Loquat

Scientific Name	Common Name
<i>Eucalyptus globulus</i>	Blue Gum Eucalyptus
<i>Oncosiphon pilulifer</i>	Globe chamomile
<i>Avena spp.</i>	Wild oats
<i>Bromus spp.</i>	Brome-grasses
Birds	
<i>Corvus brachyrhynchos</i>	Common crow
<i>Melospiza crissalis</i>	California Towhee
<i>Setophaga coronata</i>	Yellow rumped warbler
<i>Melospiza melodia</i>	Song sparrow
<i>Bubo virginianus</i>	Great horned Owl
<i>Calypte anna</i>	Anna's hummingbird
<i>Columba livia</i>	Rock pigeon
<i>Thryomanes bewickii</i>	Bewick's wren
<i>Haemorhous mexicanus</i>	House Finch
<i>Spinus tristis</i>	American Goldfinch
<i>Psaltriparus minimus</i>	Bushtit
<i>Corvus brachyrhynchos</i>	American Crow
<i>Zenaidura macroura</i>	Mourning Dove
<i>Corvus corax</i>	Common Raven
Reptiles	
<i>Uta stansburiana</i>	Common side-spotted lizard
Mammals	
<i>Sciurus niger</i>	Fox Squirrel





3.3 Habitat Connectivity

Habitat connectivity allows for uninterrupted wildlife movement throughout their range. Wildlife movement is essential to their survival as it allows day-to-day activities such as feeding, seasonal migration and offspring dispersal. Examples of habitat that would facilitate movement and dispersal include undisturbed scrublands that would provide adequate vegetation cover to shelter large and small wildlife species or drainages and riparian areas which provide cover and food for various species. By disrupting this connectivity, impacts on wildlife include loss of gene flow and genetic diversity, and increased competition for resources. In recent times, increased development, human activity, habitat conversion and new infrastructure has impacted habitat connectivity and thus isolating population and decreasing food and other resources to wildlife species.

The survey of the immediate Project site found that it contains low quality habitat for wildlife movement. Although it contains vegetation and potential shelter for wildlife, there were no drainages or washes that provided connectivity to other higher quality habitats.

Dispersed trees and abandoned structures within the BSA serve as potential refuge, for nesting and roosting activities.

Additionally, through the database review of the California Department of Fish and Wildlife's (CDFW) Areas of Conservation Emphasis' (ACE) Terrestrial Connectivity dataset, the Project site was labeled in an area with limited connectivity opportunity or rank 1. This typically means that the location as well as the surrounding 2.5 square miles has more than 50% land cover determined to be urbanized or be utilized for agriculture. This area lacks channelized areas that prioritize species movements and lacks core natural areas (CDFW). Additionally, the Project site does not occur within a mapped linkage area or wildlife corridor area within the WRMSHCP.



Table 4: Listed, Proposed Species, Natural Communities and Critical Habitat potentially occurring or Known to Occur in the Project Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present / Absent	Rationale
Natural Communities					
Southern Sycamore Alder Riparian Woodland	N/A	S4	Holland Classification Code: 62400 Sawyer-Keeler-Wolf equivalent: <i>Platanus racemosa</i> Woodland Alliance	A	No Potential: The study area does not contain southern sycamore alder riparian woodland.
Plants					
San Diego ambrosia	<i>Ambrosia pumila</i>	FE, CNPS 1B.1, WRMSHCP Species	Occurs in the valleys of chaparral, coastal scrub, and valley and foothill grassland habitats within sandy loam, clay, and (sometimes) alkaline soils. Found on margins or near vernal pools or artificially-disturbed areas at 3-580 meters (~10-11,745 feet) in elevation. Bloom Period: April to October	HP	Unlikely to Occur: The study area contains marginally suitable (low potential) disturbed habitat. There are no CNDDDB documented occurrences in the study area or vicinity.

San Diego sagewort	<i>Artemisia palmeri</i>	CNPS 4.2	Found in sandy coastal ravines in the coastal sage scrub plant community and riparian riverbeds. Bloom Period: May to September	A	No Potential: The study area is comprised of disturbed habitats or developed land. The study area does not contain suitable coastal sage scrub, and riparian habitats capable of supporting this species.
San Jacinto valley crownscale	<i>Atriplex coronata</i> var. <i>notatior</i>	FE, CNPS 1B.1, WRMSHCP species	San Jacinto River Valley resident in alkaline soils. Inhabits alkali playas; valley and foothill grassland; vernal pool; and wetland habitats at 35-460 meters (~115-1,509 feet) in elevation. Bloom Period: April to August	HP	Unlikely: The study area contains marginally suitable (low potential) disturbed habitats with the presence of low-lying grasses and shrubs. There are no CNDDDB documented occurrences in the study area or vicinity.
Nevin's barberry	<i>Berberis nevinii</i>	FE, SE, CNPS 1B.1, WRMSHCP Species	Found on steep, north-facing slopes or in low grade sandy washes. Inhabits chaparral, cismontane woodland, coastal scrub, and riparian scrub (CNDDDB 2020); species naturally occurs at elevations below 650 meters (~2,133 feet) in	A	No Potential: The study area is comprised of disturbed habitats or developed land. The study area does not contain suitable chaparral, and coastal scrub habitat capable of supporting this species.



			elevation (Jepson Interchange 2012). Bloom Period: March to May		
thread-leaved brodiaea	<i>Brodiaea filifolia</i>	FE, SE, CNPS 1B.1, WRMSHCP Species	Found in chaparral (openings); cismontane woodland; coastal scrub; playas; valley and foothill grassland; vernal pool; and wetland habitats but is typically associated with annual grassland and vernal pools. Often surrounded by shrubland habitats in openings on clay soils at 15-1,030 meters (~49-3,379 feet) in elevation. Bloom Period: March to June	HP	Unlikely: The study area contains marginally suitable (low potential) disturbed habitats with the presence of low-lying grasses and shrubs. There are no CNDDDB documented occurrences in the study area or vicinity.

Plummer's mariposa lily	<i>Calochortus plummerae</i>	CNPS 4.2, WRMSHCP Species	Occurs in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, and lower montane coniferous forest habitat on rocky and	HP	No Potential: The study area contains marginally suitable (low potential) disturbed habitats with the presence of low-lying grasses and shrubs. There are no CNDDDB
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			<p>sandy sites, usually of granitic or alluvial material at 60-2,500 meters (~197-8,202 feet) in elevation. Can be very common after fire.</p> <p>Bloom Period: May to July</p>		documented occurrences in the study area or vicinity.
Paysonn's jewel flower	<i>Caulanthus simulans</i>	CNPS 4.2, WRMSHCP Species	<p>Occurs in chaparral and coastal scrub habitats; frequently found in sandy, granitic soils within disturbed sites such as streambeds; burned areas; and rocky, steep slopes at 90-2,200 meters (~300-7,225feet) in elevation.</p> <p>Bloom Period: March to May</p>	A	No Potential: The study area is comprised of disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable chaparral, and coastal scrub habitat capable of supporting this species.
smooth tarplant	<i>Centromadia pungens</i> ssp. <i>laevis</i>	CNPS 1B.1, WRMSHCP Species	<p>Found in alkali playa; chenopod scrub; meadow and seep; riparian woodland; valley and foothill grassland; wetlands; and disturbed habitats at 5 to 1,170 meters (~ 16-3,839 feet) in elevation.</p>	HP	No Potential: The study area contains marginally suitable (low potential) disturbed habitats with the presence of low-lying grasses and shrubs. There are no CNDDDB documented occurrences in the study area or vicinity.



			Bloom Period: April to September		
Peninsular spineflower	<i>Chorizanthe leptotheca</i>	CNPS 4.2, WRMSHCP Species	Occurs in chaparral, coastal scrub, lower montane coniferous forest habitats on granitic soils within alluvial fans at 300-1,900 meters (~984-6,234 feet) in elevation. Bloom Period: May to August	A	No Potential: The study area is comprised of disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable chaparral, and coastal scrub habitat capable of supporting this species.
Parry's spineflower	<i>Chorizanthe parryi</i> var. <i>parryi</i>	CNPS 1B.1, WRMSHCP Species	Found in coastal scrub; chaparral; cismontane woodland; and valley and foothill grassland habitats, as well as dry and sandy-soiled slopes and flats, sometimes at the interface of 2 vegetation types such as chaparral and oak woodland, at 90-1,220 meters (~ 295-4,003 feet) in elevation. Bloom Period: May to June	HP	Unlikely: The study area contains marginally suitable (low potential) disturbed habitats with the presence of low-lying grasses and shrubs. There are no CNDDDB documented occurrences in the study area or vicinity.



<p>paniculate tarplant</p>	<p><i>Deinandra paniculata</i></p>	<p>CNPS 4.2</p>	<p>Found in coastal scrub, valley and foothill grassland, vernal pools, and wetlands, usually in vernal mesic sites and sometimes in vernal pools or on mima mounds near them at 25-940 meters (~82-3,084 feet) in elevation.</p> <p>Bloom Period: May to November</p>	<p>HP</p>	<p>Unlikely: The study area contains marginally suitable (low potential) disturbed habitats with the presence of low-lying grasses and shrubs. There are no CNDDDB documented occurrences in the study area or vicinity.</p>
<p>Southern California black walnut</p>	<p><i>Juglans californica</i></p>	<p>CNPS 4.2, WRMSHCP Species</p>	<p>Chaparral, coastal scrub, cismontane woodland, and riparian woodland on slopes, canyons, and alluvial habitats at 50-900 meters (~164-2,953 feet) in elevation.</p> <p>Bloom Time: March to May</p>	<p>A</p>	<p>No Potential: The study area is comprised of disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable chaparral, cismontane woodland, and coastal scrub habitat capable of supporting this species. The species was not observed during habitat assessment survey.</p>

Coulter's goldfields	<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	CNPS 1B.1, WRMSHCP Species	Found in coastal salt marshes; playas; vernal pools; alkali playa; marsh and swamp; and wetland habitats, usually in alkaline soils on playas, sinks, and grasslands at 1-1,375 meters (~3-4,511 feet) in elevation. Bloom Time: April to May	A	No Potential: The study area is comprised of disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable wetland habitats capable of supporting this species.
Slender-horned spineflower	<i>Dodecahema leptoceras</i>	FE, SE, CNPS 1B.1, WRMSHCP Species	Found in chaparral, cismontane woodland, and alluvial fan sage scrub habitats, as well as flood-deposited terraces and washes with sandy soils. Associated vegetation includes Encelia, Dalea, Lepidospartum, etc. at 200-765 meters (~ 656-2,510 feet) in elevation. Bloom Period: May to June	A	No Potential: The study area is comprised of disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable chaparral, cismontane woodland, and alluvial fan sage scrub habitats capable of supporting this species.
Robinson's pepper-grass	<i>Lepidium virginicum</i> var. <i>robinsonii</i>	CNPS 4.3	Found in chaparral and coastal sage scrub habitats with dry soils at 4-1,435 meters (~ 13-4,708 feet) in elevation.	A	No Potential: The study area is comprised of disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable chaparral, and



			Bloom Period: March to June		coastal scrub habitat capable of supporting this species.
spreading navarretia	<i>Navarretia fossalis</i>	FT, CNPS 1B.1, WRMSHCP Species	Occurs within vernal pool; chenopod scrub; marshes and swamp; alkali playa; and wetland habitat within San Diego hardpan and claypan vernal pools; in swales and vernal pools, often surrounded by other habitats at 15-850 meters (~ 49-2,789 feet) in elevation. Bloom Period: April to June	A	No Potential: The study area does not contain suitable wetland habitats and vernal pools capable of supporting this species.
San Bernardino aster	<i>Symphotrichum defoliatum</i>	CNPS 1B.2	Inhabits meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, and valley and foothill grassland habitats. Occurs in vernal mesic grassland or near ditches, streams and springs, and disturbed areas at 3-2,045 meters (~10-6,709 feet) in elevation.	HP	Unlikely: The study area contains marginally suitable (low potential) disturbed habitats with the presence of low-lying grasses and shrubs. There are no CNDDDB documented occurrence in the study area or vicinity.



			Bloom Period: July to November		
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Invertebrates					
vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	FT, WRMSHCP Species	Endemic to the valley and foothill grasslands, vernal pools, and wetlands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools; inhabits small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	A	No Potential: The study area does not contain suitable or potential vernal pool habitat capable of supporting this species.
monarch butterfly	<i>Danaus plexippus</i>	FPT	Milkweed is required for monarch habitat for egg laying and to provide food for larvae. The species ranges from South America to Canada and overwintering populations are found in Mexico, California, Arizona, and along the US East Coast. They require access to streams, plenty of sunlight, and appropriate roosting	A	No Potential: The study area disturbed habitats with the presence of low-lying grasses and shrubs. No listed host plants were observed on site.



			vegetation that is relatively free from predators. While breeding, monarchs can be found in agricultural fields, pastureland, prairie remnants, urban and suburban residential areas, gardens, trees, and roadsides.		
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>	FE, WRMSHCP Species	Endemic to Western Riverside, and San Diego counties in areas of tectonic swales/earth slump basins in valley and foothill grassland; vernal pool; wetlands; and coastal sage scrub habitats; inhabits seasonally astatic pools filled by rain; hatch times are in warm water later in the season.	A	No Potential: The study area does not contain suitable or potential vernal pool habitat capable of supporting this species.
Amphibians					



western spadefoot	<i>Spea hammondi</i>	FPT, SSC, WRMSHCP Species	Inhabits cismontane woodland; coastal scrub; valley and foothill grassland; vernal pools; and wetland habitats. Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	A	No Potential: The project site does not contain suitable or potential vernal pools or water systems necessary for supporting this species.
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Reptiles					
Southern California legless lizard	<i>Anniella stebbinsi</i>	SSC	Found in a variety of habitats including broadleaved upland forest; chaparral; and coastal scrub habitats, south of the Transverse Range and extending to northwestern Baja California. Occurs in moist, sandy, or loose loamy soils under sparse vegetation. Soil preference is high moisture soils.	A	Unlikely: The study area is comprised of disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable chaparral, and coastal scrub habitat capable of supporting this species.



orange-throated whiptail	<i>Aspidoscelis hyperythra</i>	WL, WRMSHCP Species	Inhabits low-elevation coastal scrub; chaparral; cismontane woodland; and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants are necessary for termites, its main food source.	A	Unlikely: The project area contains mostly disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable coastal scrub, chaparral, and cismontane woodland habitats capable of supporting this species.
coastal whiptail	<i>Aspidoscelis tigris stejnegeri</i>	SSC, WRMSHCP Species	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas within firm, sandy, or rocky substrate.	A	Unlikely: The study area is characterized disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable semi-arid scrublands, woodlands, and riparian habitats capable of supporting this species.



red-diamond rattlesnake	<i>Crotalus ruber</i>	SSC, WRMSHCP Species	Occurs in chaparral; Mojavean desert scrub; Sonoran Desert scrub; woodland; grassland; and desert areas, often in rocky and dense vegetation, from coastal San Diego County to the eastern slopes of the mountains. Needs rodent burrows, cracks in rocks or surface cover objects.	HP	Unlikely: The study area contains marginally suitable (low potential) disturbed habitats with the presence of low-lying grasses and shrubs. There are no CNDDDB documented occurrences in the study area or vicinity.
southwestern pond turtle	<i>Actinemys pallida</i>	FPT, SSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking.	A	No Potential: The project area contains mostly disturbed habitats with the presence of low-lying grasses and shrubs with minimal trees. The study area does not contain suitable habitat including standing water capable of supporting this species.

coast horned lizard	<i>Phrynosoma blainvillii</i>	SSC, WRMSHCP Species	Frequents a variety of habitats, including chaparral; cismontane woodland; coastal bluff scrub; coastal scrub; desert wash; pinon & juniper woodlands; riparian scrub; riparian woodland; and valley & foothill grassland habitats. Most common in lowlands along sandy washes with scattered low bushes.	HP	Unlikely: The study area contains marginally suitable (low potential) disturbed habitats with the presence of low-lying grasses and shrubs. There are no CNDDDB documented occurrence in the study area or vicinity.
coast patch-nosed snake	<i>Salvadora hexalepis virgulata</i>	SSC	Found in brushy or shrubby vegetation (coastal scrub) in coastal Southern California. Requires small mammal burrows for refuge and overwintering sites.	A	No Potential: The study area is comprised of disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable coastal scrub habitat capable of supporting this species.
Birds					
Cooper's hawk	<i>Accipiter cooperii</i>	WL, WRMSHCP Species	Inhabits cismontane woodland, riparian, and riparian forest habitats. Found in woodlands, chiefly of the open, interrupted or marginal type. Nest sites are mainly in riparian growths of deciduous trees,	A	Unlikely: The study area is comprised of disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable cismontane woodland, riparian, and open woodland habitats capable of supporting this species.



			as in canyon bottoms on river flood-plains, and live oaks.		
tricolored black bird	<i>Agelaius tricolor</i>	ST, SSC	Largely endemic to California. Inhabits freshwater marsh, marsh and swamp, swamp, and wetland habitats. Species is highly colonial and most numerous in the Central Valley & vicinity. Species requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	A	No Potential: The study area does not contain suitable wetland habitats capable of supporting this species.
Southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	WL, WRMSHCP Species	A resident in Southern California coastal sage scrub and sparse mixed chaparral habitat. Frequents relatively steep, often rocky hillsides with grass and forb patches.	A	Unlikely: The study area is comprised of disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable coastal scrub, and chaparral habitat capable of supporting this species.
Bell's sparrow	<i>Artemisiospiza belli belli</i>	WL, WRMSHCP Species	Primarily nests in chaparral habitat dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Species is a ground-nester that nests	A	Unlikely: The study area is comprised of disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable coastal scrub, and



			beneath shrubs or in a shrub 6-18 inches above ground. Territories are about 50 yards apart.		chaparral habitat capable of supporting this species.
burrowing owl	<i>Athene cunicularia</i>	SSC, WRMSHCP Species	Found within coastal prairie; coastal scrub; Great Basin grassland; Great Basin scrub; Mojavean desert scrub; Sonora Desert scrub; and valley and foothill grassland, often within dry annual or perennial grasslands, deserts, and scrublands with low-growing vegetation; depends on other mammal burrows, particularly the California ground squirrel.	HP	Moderate Potential: The study area contains marginally suitable habitat for this species. The project site and surrounding PIA can be classified as majority disturbed habitat with nonnative grasses, and invasive plants. Since burrowing owls are adapted to these conditions, the project site may provide habitat for this species. There are no CNDDDB documented occurrences in the study area or vicinity.



Ferruginous hawk	<i>Buteo regalis</i>	WL	Inhabits Great Basin grassland, Great Basin scrub, pinyon and juniper woodlands, and valley and foothill grasslands in open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Species eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	HP	Unlikely: The study area contains marginally suitable foraging habitat (low potential) disturbed habitats with the presence of low-lying grasses and shrubs. There are no CNDDDB documented occurrences in the study area or vicinity.
western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	FT, SE, WRMSHCP Species	Found within riparian forest. A riparian forest nester that nests along broad, lower flood-bottoms of larger river systems. Species nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	A	No Potential: The study area is comprised of disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable riparian forest habitat capable of supporting this species.



yellowbreasted chat	<i>Icteria virens</i>	SSC	A summer resident; Inhabits riparian forest, riparian scrub, and riparian woodland habitats. Inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of the ground.	A	No Potential: The study area is comprised of disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable riparian habitat capable of supporting this species.
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	FT, SSC, WRMSHCP Species	Found in low, coastal sage scrub or coastal bluff scrub within arid washes on top of mesas and slopes. An obligate, permanent resident of coastal sage scrub below 2,500 feet in Southern California. Not all areas classified as coastal sage scrub are occupied.	A	No Potential: The project area contains mostly disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable coastal sage scrub habitat capable of supporting this species.



least Bell's vireo	<i>Vireo bellii pusillus</i>	FE, SE, WRMSHCP Species	A summer resident of Southern California within riparian forest, riparian scrub, or riparian woodland habitats; nests are along margins of bushes or twigs projecting into pathways, usually willow, <i>Baccharis</i> , or mesquite species, in low riparian in vicinity of water or in dry river bottoms below 2,000 feet in elevation.	A	No Potential: The study area is comprised of disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable riparian habitat capable of supporting this species.
Mammals					
San Bernardino kangaroo rat	<i>Dipodomys merriami parvus</i>	FE, SE, WRMSHCP Species	Found within coastal sage scrub and alluvial scrub vegetation on sandy loam substrates that is characteristic of alluvial fans and floodplains. Needs early to intermediate seral stages.	A	No Potential: The study area is comprised of disturbed habitats with the presence of low-lying grasses and shrubs. The study area does not contain suitable coastal sage scrub, and alluvial scrub habitat capable of supporting this species.

Stephens' kangaroo rat	<i>Dipodomys stephensi</i>	FT, ST, WRMSHCP Species	Occurs primarily in coastal scrub and valley and foothill grassland habitat, as well as sagebrush with sparse canopic cover. Prefers buckwheat, chamise, brome grass and filaree species. Will burrow into firm soil.	A	No Potential: The study area does not include habitat that would support this species. Additionally, there are no CNDDDB documented occurrences in the study area or vicinity. The project location is not within the Stephen's kangaroo rat HCP.
western mastiff bat	<i>Eumops perotis californicus</i>	SSC	Found in many open, semiarid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	HP	Moderate Potential: The study area contains marginally suitable (low potential) disturbed habitats with the presence of low-lying grasses and shrubs. There are potential roost sites in large ornamental Eucalyptus or pine species surrounding the project site. There are no CNDDDB documented occurrences in the study area or vicinity.
western yellow bat	<i>Lasiurus xanthinus</i>	SSC	Inhabits valley foothill riparian; desert riparian; desert wash; and palm oasis habitats. Roosts in trees, especially palms, and forages over water among trees.	HP	Moderate Potential: The study area contains marginally suitable (low potential) disturbed habitats with the presence of low-lying grasses and shrubs. There are potential roost sites in large ornamental Eucalyptus or pine species surrounding the project site. There are no CNDDDB



					documented occurrences in the study area or vicinity.
Los Angeles pocket mouse	<i>Perognathus longimembris brevinasus</i>	SSC, WRMSHCP Species	Habitat consists of sandy soils in washes, uplands, and sand dune ecosystems communities within the Los Angeles Basin. Prefers open ground with fine, sandy soils. May not dig extensive burrows and hides under weeds and dead leaves instead.	A	No Potential: The study area does not contain habitat for this species as there are no washes and sand dune communities. There are no CNDDDB documented occurrences in the study area or vicinity.
American badger	<i>Taxidea taxus</i>	SSC	Found in a variety of habitats. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	HP	Unlikely: The study area contains marginally suitable (low potential) disturbed habitats with the presence of low-lying grasses and shrubs. There are no CNDDDB documented occurrences in the study area or vicinity.



Absent [A] - no habitat present and no further work needed. Habitat Present [HP] -habitat is, or may be present. The species may be present. Present [P] - the species is present. Critical Habitat [CH] - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Candidate Endangered (SCE); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS). Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP) Species

No Potential: The area and its surroundings clearly lack the necessary conditions for the species to survive or thrive, including unsuitable foraging and breeding areas, vegetation, elevation, hydrology, substrate, and disturbance history.

Unlikely: Only a few elements of suitable habitat are present, and the majority of the site and nearby areas offer low-quality or inappropriate conditions. The species is not expected to occur in the area.

Moderate Potential: Some essential habitat features are available, although certain portions of the site or nearby environment may be unsuitable. There is a moderate chance the species could be present.

High Potential: Most or all of the critical habitat requirements are met on-site and/or in the surrounding areas, offering highly suitable conditions. The likelihood of the species being present is high.

Present: The species has been directly observed on-site or documented in recent reports or databases (e.g., CNDDB) as occurring at the location.

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4.0 Results: Biological Resources, Discussion of Impacts and Mitigation

4.1 Habitats and Natural Communities of Special Concern

Field survey of the PIA conducted on March 14th, 2025 found that the Project site was dominated by disturbed nonnative (ruderal) annual grasses and invasive plant species. The project is outside of any USFWS- designated Critical Habitat and does not contain natural communities of special concern as designated by CDFW. A preliminary jurisdictional delineation was conducted and found no sensitive habitats such as wetlands or vernal pools were within the Project site or BSA.

4.1.1 Project impacts

The Project proposes subdivide the parcel into 134 subdivisions with residential structures to be constructed. Project components include clearing, grubbing, grading, paving utility installation and construction of permanent structures throughout the entire Project site. Since there are no critical habitats or any mapped or visually confirmed natural communities of special concern within the Project site, the Project is anticipated to have no impact on any of these resources. However, there is low quality habitat for wildlife movement outside of the Project area but within the BSA. By implementing the storm water short-term erosion and sedimentation controls outlined in the City's NPDES permit and associated Municipal Code requirements (Title 8, Chapter 8.10 Stormwater/urban Runoff Management and Discharge Controls), the proposed Project is expected to have no impacts on wildlife movement, habitat connectivity, nursery sites and wildlife corridors.

Sensitive Natural Communities

Database review indicated the presence of 1 sensitive natural community within the USDA *Sunnymead* Quadrangle; southern sycamore alder riparian woodland. This sensitive natural community is typically characterized by the presence of an intermittent water source or floodplain dominated by Western Sycamore (*Platanus racemosa*) and Alder (*Alnus* spp.). Both species do not occur onsite. Habitats mapped by the CNDDDB as this sensitive natural community are located further north within the *Sunnymead* Quadrangle.



State and Federally Protected Wetlands and Waters of the United States

Since the BSA and Project site contain no aquatic resources, there is no potential direct or indirect impact expected to occur. See Figure 4 to see the nearest mapped wetlands from the National Wetlands Inventory map (USFWS 2025).

Habitat Connectivity, Wildlife Corridor and Nursery Sites

Surveys of the Project site and BSA found that the Project site serves as low quality habitat for wildlife movement due to the high disturbance and human activity on and near the site. Three busy roadways exist to the south, east, and west, and residential tract to the south and north which isolate the Project site from sensitive habitats. With the implementation of storm water short-term erosion and sedimentation controls outlined in the City's NPDES permit and associated Municipal Code requirements (Title 8, Chapter 8.10 Stormwater/urban Runoff Management and Discharge Controls). There will be no indirect impacts to habitats, wildlife corridors and nursery sites outside of the project study area resulting from construction-related erosion.

4.1.2 Avoidance and Minimization Efforts

No avoidance and minimization measure necessary.

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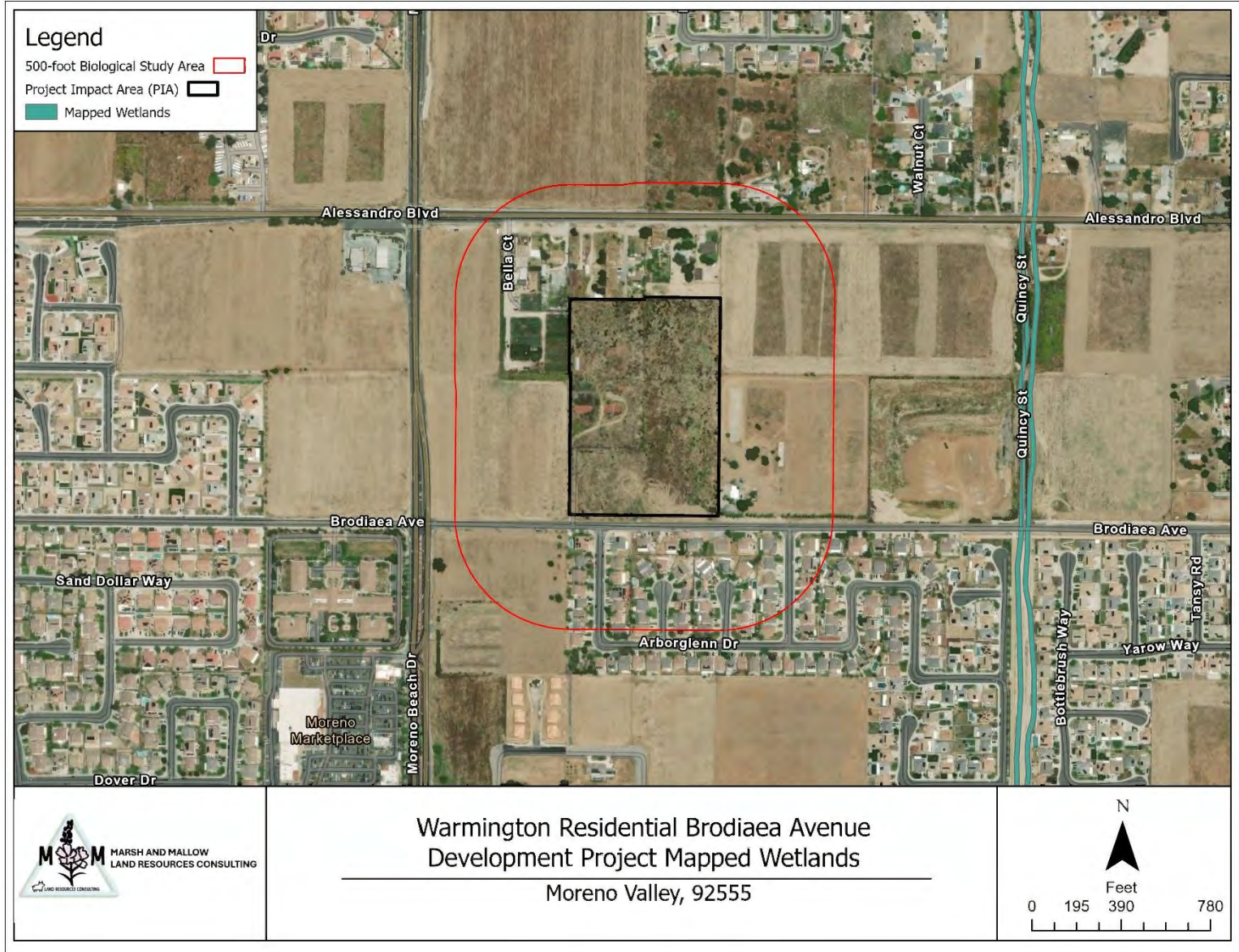


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Figure 4: National Wetland Inventory Map



Marsh and Mallow
Land Resources Consulting

4.2 Special Status Plant Species

Table 4 provides a summary of special-status plants reported to occur within the Project region. It lists the protection status as well as identifies how likely it would occur within the Project site. The desktop and field surveys identified suitable habitat for the following 8 species: San Diego ambrosia, San Jacinto valley crowscale, thread-leaved brodiaea, Plummer's mariposa lily, smooth tarplant, Parry's spineflower, paniculate tarplant, San Bernardino aster.

During surveys of the Project site and BSA, no plant species listed in Table 4 was observed. Additionally, no record in any database search identified the presence of any individuals of each of the listed species. Due to the disturbed nature and the prevalence of invasive species within the site, it is unlikely for the species listed above to occur on site.

There are approximately thirteen trees fitting the definition of "heritage tree" according to the City of Moreno Valley's Section 9.17.030 ordinance regarding landscape design and irrigation design standards. These trees include nine ornamental California junipers (*Juniperus californica*) and four Italian cypress (*Cupressus sempervirens*) which reach 15 feet in height on the western edge of the parcel.

4.2.1 Project impacts

The Project proposes subdivide the parcel into 134 subdivisions with residential structures to be constructed. Project components include clearing, grubbing, grading, paving utility installation and construction of permanent structures throughout the entire Project site. Since the site is dominated by invasive plant species and evidence of regular mechanical and agricultural disturbance within the site, the habitat does not contain the necessary constituents to support sensitive plant species. Additionally, database searches yielded negative results for rare plant species within one mile of the site. Therefore, there is low potential for special status plant species to occur on site and impacts will be less than significant. The project will follow the City of Moreno Valley Ordinance section 9.17.030 regarding heritage trees if removal of any qualified heritage tree is necessary.


4.2.2 Avoidance and Minimization Measures

No Mitigation Measures Necessary.

4.3 Special Status Bird Species

Table 4 provides a summary of special-status bird species reported to occur within the Project region. It lists the protection status as well as identifies how likely it would occur within the Project site. During the survey of the Project site and BSA, no listed or special-status individuals were observed on site.





Additionally, desktop analysis of the Project site found that it lies within the WRMSHCP survey area for burrowing owl (*Athene cunicularia*). Field surveys found that low quality habitat does exist for burrowing owl. However, since the species has adapted to human disturbance and is known to utilize crevices, or burrows that are manmade such as culverts, and rock piles burrow owls may still occur within the site. An additional focused burrowing owl survey was conducted on April 12, 2025. The survey, based on the WRMSHCP Burrowing Owl Survey Instructions (RCA 2006) Part II(a) yielded negative results for burrowing owls suitable burrows onsite identified by existing burrows or openings greater than 4 inches in diameter or signs including whitewash, scat or feathers at the opening of burrows. Therefore, it was determined that no Burrowing owls are currently utilizing the site.

4.3.1 Project impacts

The Project proposes subdivide the parcel into 134 subdivisions with residential structures to be constructed. Project components include clearing, grubbing, grading, paving utility installation and construction of permanent structures throughout the entire Project site. Although the habitat is disturbed, it may still provide foraging and nesting habitat for the identified bird species. Since construction work is projected to impact the entirety of the Project site, any birds nesting onsite will be impacted. Additionally, construction noise, debris and pollutants will impact any sensitive bird resources outside of the Project area. **MM-BIO-1** Preconstruction nesting bird survey, and **MM-BIO-2** Preconstruction burrowing owl survey will require qualified biologists to conduct surveys prior to construction start. If any nesting birds or listed and/or special-status birds are found onsite, a construction buffer will be implemented, and further mitigation and avoidance measures may be required. The proposed mitigation measures will help avoid impacts to nesting birds or listed/special-status birds.

4.3.2 Avoidance and Minimization Measures

MM-BIO-1 Preconstruction nesting bird survey: If work occurs within nesting bird season (February 1st to August 30th), a qualified biologist will be required to conduct a pre-construction nesting bird survey within 7 days of construction. The survey will include the entire project area and surrounding 500ft. If any active nests are found, a construction buffer will be established, 300ft for passerines and 500ft for raptors and listed birds. A biologist will monitor the active nest once a week until nesting has ceased, or the fledglings have fledged.

MM-BIO-2 Preconstruction burrowing owl survey: A CDFW protocol burrowing owl survey will be completed by a qualified biologist within 30 days of construction start. If it is determined that burrowing owls are nesting or utilizing the site, work must cease and a burrowing owl plan consistent with CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFW 2012) will be prepared. The plan will identify burrowing owl habitat that is being disturbed, avoidance measures including



construction buffer. Consultation with CDFW will be required if relocation of any burrowing owl is necessary.

4.4 Special Status Invertebrate Species

Table 4 provides a summary of special-status invertebrate species reported to occur within the Project region. Desktop surveys and field surveys did not yield positive results for special status invertebrate species including monarch butterfly, vernal pool fairy shrimp, and Riverside fairy shrimp. The lack of evidence that the site can support vernal pools such as having soils in the following classifications Huerhuero, Stockpen, Redding, and Olivenhain (Bauder 1996), and evidence of ponding, mottling and cracking in the ground after rain suggests that fairy shrimp species which require that specific habitat will have no potential to occur onsite. Additionally, no host plants within the genus *Asclepias* spp. were observed onsite and therefore there is low potential for the monarch butterfly to occur onsite for foraging and nesting.

4.4.1 Project impacts

The Project proposes subdivide the parcel into 134 subdivisions with residential structures to be constructed. Project components include clearing, grubbing, grading, paving utility installation and construction of permanent structures throughout the entire Project site. Since the site is considered, disturbed habitat characterized by regular machine disturbance, evidence of human development and the dominance of invasive plant species such as prickly Russian thistle, the habitat is considered low quality habitat for sensitive invertebrate species. Additionally, with no evidence of vernal pool habitat within the PIA, there will be no impacts to fairy shrimp species. And with the lack of host plants for monarch butterfly, there is low potential for the species to be impacted onsite.

4.4.2 Avoidance and Minimization Measures

No mitigation measures necessary.

4.5 Special Status Fish Species

The literature and database searches did not result in any special-status fish species documented within the Project region. Furthermore, field surveys did not yield any positive results for potentially suitable fish habitat within the 500 ft BSA.

4.5.1 Project impacts

Since there was no habitat or presence of any listed fish species within the Project site and BSA, there will be no impact on any listed or protected fish species.





4.5.2 Avoidance and Minimization Measures

No avoidance and minimization measure necessary.

4.6 Special Status Reptile Species

Table 4 provides a summary of special-status reptile species reported to occur within the Project region. Desktop surveys and field surveys found potential habitat for coast horned lizards and red-diamond rattlesnake. No individuals were observed.

4.6.1 Project impacts

The Project proposes subdivide the parcel into 134 subdivisions with residential structures to be constructed. Project components include clearing, grubbing, grading, paving utility installation and construction of permanent structures throughout the entire Project site. The habitat is disturbed, and low-quality habitat exists for coast horned lizard and red-diamond rattlesnake. No occurrences for coast horned lizard exist within 1-mile of the PIA. The occurrence of red-diamond rattlesnake was recorded more than 2 decades prior and recent development surrounding the site has created barriers for the species to disperse into the site. Records indicate that the orange-throated whiptail has occurred within 1 mile of the site, but habitats described in the occurrence are not consistent with the habitats found onsite. Therefore, there is no potential for coast horned lizard, red-diamond rattlesnakes and orange-throated whiptails to occur onsite.

4.6.2 Avoidance and Minimization Measures

No mitigation measure necessary.

4.7 Special Status Amphibian Species

Table 4 provides a summary of special-status amphibian species reported to occur within the Project region. Desktop surveys and field surveys found no potential habitat for one species: western spadefoot (*Spea hamondii*) as it requires suitable vernal pool and other aquatic habitats to support their various life stages not present within the study area.

4.7.1 Project impacts

Since there was no habitat or presence of any listed amphibian species within the Project site and BSA, there will be no impacts on any listed or protected amphibian species.

4.7.2 Avoidance and Minimization Measures

No avoidance and minimization measure necessary.



4.8 Special Status Mammal Species

Table 4 provides a summary of special-status mammal species reported to occur within the Project region. Desktop surveys and field surveys found potential low-quality habitat for Stephens Kangaroo Rat (*Dipodomys stephensi*), western mastiff bat (*Eumops perotis californicus*), western yellow bat (*Lasiurus xanthinus*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), and American badger (*Taxidea taxus*) within the 500 ft BSA. The Project site and BSA contains potential foraging and roosting habitat for the bat species in the form of abandoned structures and large trees surrounding the PIA. Field surveys did not yield any positive identification for any of the listed mammal species. No occurrence for American badger, Los Angeles pocket mouse, and western yellow bat have been recorded within 1-mile of the site. The occurrence of Stephen's kangaroo rat and western mastiff bat were recorded within 1-mile of the site.

4.8.1 Project impacts

The Project proposes subdivide the parcel into 134 subdivisions with residential structures to be constructed. Project components include clearing, grubbing, grading, paving utility installation and construction of permanent structures throughout the entire Project site. Surveys of the site did not yield any signs for American badgers or Stephen's Kangaroo rat, western mastiff bat, western yellow bat, and Los Angeles pocket mouse. Observations recorded for Stephen's kangaroo rat and western mastiff bat are more than 2 decades prior and the surrounding environment has since had increased development, roadways and agriculture use which create barriers for the species to disperse onto the site. The site itself has been regularly disturbed with residential and agricultural use. Therefore, there is little to no potential for impacts to American badger, Stephen's Kangaroo rat and Los Angeles pocket mouse. Physical development is less of a barrier to bat species that may utilize existing structures or ornamental trees as roosting sites. Therefore, with the implementation of **MM-BIO-3** preconstruction bat survey, there will be no potential for impacts to special-status bat species.

4.8.2 Avoidance and Minimization Measures

MM-BIO-3 Preconstruction bat survey: Within 30 days prior to construction, a pre-construction survey must be completed by a qualified biologist to determine the presence of bats within and adjacent to the Project site. The focus of the surveys should be on the abandoned structures onsite and surrounding trees. If any signs or individuals of special-status bats are identified, a bat management plan will be drafted which outlines additional surveys and additional measures to avoid impacting the special-status bat species.





5.0 Conclusions

The entire proposed Project site is classified as disturbed habitat (11300) with the presence of low-lying grasses and shrubs., characterized by low lying vegetation, invasive grasses and weeds, and sparse ornamental trees. The reason, the site is characterized as disturbed habitat and not nonnative grasslands is the presence of regular human disturbance such as disking and mowing through the entire area as well as the dominance of prickly Russian Thistle (*Salsola tragus*) throughout the site. The surround 500-foot buffer is comprised of the same disturbed annual grasslands to the East and West. The northern and southern portion of the BSA is comprised of residential development and associated landscaped vegetation. Because of the disturbance, the habitat is considered low quality for sensitive or special-status species. No positive identification of any listed or special-status species was observed onsite or within the BSA, however, potential foraging habitat or nesting habitat exists for some the species listed on Table 4 above. **MM-BIO-1, MM-BIO-2 and MM-BIO-3** will require surveys to determine the presence of special- status including bat species, nesting birds and burrowing owls. Construction buffers will be required if any are found, additional consultation may be required with the appropriate wildlife agency. By following these measures, there will be a less than significant impact to wildlife species and their habitats.

Approximately thirteen “Heritage Trees” including ornamental California juniper and Italian cypress as defined by the City of Moreno Valley occur on the western portion of the project site. Since the project will comply with the Heritage Tree ordinance section 9.17.030 of Moreno Valley Code of Ordinances, there will be no impact to heritage trees.

There are no riparian or riverine features within the BSA or Project site and no impact on any riparian or riverine feature or any protected wetlands as defined and regulated by section 404 of the Clean Water Act would occur. Additionally, there is no sensitive natural community within the Project site. Therefore, there will be no impacts to water natural resources.

The Project site may serve as low value as a wildlife corridor but it is surrounded by highly disturbed habitat, developed land, and busy roadways. This means that it may only provide localized movements within the area. Additionally, the Project site does not occur within a mapped linkage area or wildlife corridor area within the WRMSHCP. Since the project is required to implement the storm water short-term erosion and sedimentation controls outlined in the City’s NPDES permit and associated Municipal Code requirements (Title 8, Chapter 8.10 Stormwater/urban Runoff Management and Discharge Controls) the proposed Project will have no impact to the surrounding wildlife movement. The proposed Project occurs within the WRMSHCP area and is subject to the provisions and policies of the MSHCP. To be considered a covered activity, Permittees need to demonstrate that proposed actions are consistent with the MSHCP, the Permits, and the



Implementing Agreement. Therefore, a Consistency Determination from the regional conservation authority (RCA) and wildlife agencies may be required.

5.1 Mitigation Measure List

MM-BIO-1 Preconstruction nesting bird survey: If work occurs within nesting bird season (February 1st to August 30th), a qualified biologist will be required to conduct a pre-construction nesting bird survey within 7 days of construction. The survey will include the entire project area and surrounding 500ft. If any active nests are found, a construction buffer will be established, 300ft for passerines and 500ft for raptors and listed birds. A biologist will monitor the active nest once a week until nesting has ceased, or the fledglings have fledged.

MM-BIO-2 Preconstruction burrowing owl survey: A CDFW protocol burrowing owl survey will be completed by a qualified biologist within 30 days of construction start. If it is determined that burrowing owls are nesting or utilizing the site, work must cease and a burrowing owl plan consistent with CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFW 2012) will be prepared. The plan will identify burrowing owl habitat that is being disturbed, avoidance measures including construction buffer. Consultation with CDFW will be required if relocation of any burrowing owl is necessary.

MM-BIO-3 Preconstruction bat survey: Within 30 days prior to construction, a pre-construction survey must be completed by a qualified biologist to determine the presence of bats within and adjacent to the Project site. The focus of the surveys should be on the abandoned structures onsite and surrounding trees. If any signs or individuals of special-status bats are identified, a bat management plan will be drafted which outlines additional surveys and additional measures to avoid impacting the special-status bat species.

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Works Cited

- “Areas of Conservation Emphasis (ACE).” Ca.gov, 2018, wildlife.ca.gov/Data/Analysis/Ace. Accessed 10 March. 2025.
- Baldwin, Bruce G, et al. *The Jepson Manual : Vascular Plants of California*. Berkeley, Calif., University Of California Press, 2012.
- California Department of Fish and Wildlife, CDFW. “Natural Communities.” *California Natural Communities List*, 2018, wildlife.ca.gov/Data/VegCAMP/NaturalCommunities. Accessed 1 January. 2025.
- California Invasive Plant Council), Cal-IPC . “California Invasive Plant Council.” *California Invasive Plant Council*, www.cal-ipc.org.
- CDFW. “CNDDDB Maps and Data.” Ca.gov, 2019, wildlife.ca.gov/Data/CNDDDB/Maps-and-Data.
- ebird. “Online Bird Guide, Bird ID Help, Life History, Bird Sounds from Cornell.” *All about Birds*, 2019, www.allaboutbirds.org.
- Everett Williams Jameson, and Hans J Peeters. *Mammals of California*. Univ of California Press, 2004.
- Holland, Robert F. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. 1986.
- iNaturalist. “iNaturalist a Community for Naturalists.” *iNaturalist*, 2023, www.inaturalist.org.
- NatureServe. “NatureServe Explorer 2.0.” *Explorer.natureserve.org*, explorer.natureserve.org.
- NRCS. “Web Soil Survey.” *Usda.gov*, 2019, websoilsurvey.nrcs.usda.gov/app/.
- San Bernardino County. *PROTECTED PLANT PRESERVATION PLAN*. 2021.
- Sawyer, John Orvel, et al. *A Manual of California Vegetation*. California Native Plant Society, 2009.
- Sibley, David. *Sibley Birds. West : Field Guide to Birds of Western North America*. New York, Alfred A. Knopf, 2016.
- Stebbins, Robert C, and Samuel M McGinnis. *Field Guide to Amphibians and Reptiles of California*. Univ of California Press, 4 Sept. 2012.
- The U.S. National Vegetation Classification – Your Guide to the Nations Vegetation*. usnvc.org/.






U S Department Of Agriculture. *Field Indicators of Hydric Soils in the United States - a Guide for Identifying and ... Delineating Hydric Soils - Version 8.2, 2018.* 2019.

UC Berkeley. "California Flora, Jepson EFlora Main Page." *Ucjeps.berkeley.edu*, ucjeps.berkeley.edu/eflora/.

USACE. "A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual – California Water Library." *Cawaterlibrary.net*, 2024, cawaterlibrary.net/document/a-field-guide-to-the-identification-of-the-ordinary-high-water-mark-ohwm-in-the-arid-west-region-of-the-western-united-states-adelineation-manual/. Accessed 1 Sept. 2024.

USFWS. "National Wetlands Inventory." *Usgs.gov*, 2025, fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/.

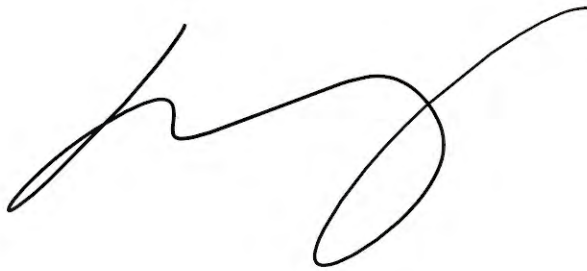
Weather Spark. "The Typical Weather Anywhere on Earth - Weather Spark." *Weatherspark.com*, 2020, weatherspark.com/.



CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits presents the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Fieldwork conducted for this assessment was performed by Darian Wong. I certify that I have not signed a nondisclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date: 5/16/2025

Signed: Darian Wong
Wildlife biologist



Appendix 1: CNDDDB Special Status Species List





Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: Quad IS (Sunnymead (3311782))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Accipiter cooperii</i> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<i>Actinemys pallida</i> southwestern pond turtle	ARAAD02032	Proposed Threatened	None	G2G3	SNR	SSC
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S4	WL
<i>Anniella stebbinsi</i> Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
<i>Artemisospiza belli belli</i> Bell's sparrow	ABPBX97021	None	None	G5T2T3	S3	WL
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	ARACJ02060	None	None	G5	S2S3	WL
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	Candidate Endangered	G4	S2	SSC
<i>Buteo regalis</i> ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
<i>Centromadia pungens ssp. laevis</i> smooth tarplant	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
<i>Chaetodipus fallax fallax</i> northwestern San Diego pocket mouse	AMAFD05031	None	None	G5T3T4	S3S4	
<i>Chorizanthe parryi var. parryi</i> Parry's spineflower	PDPGN040J2	None	None	G3T2	S2	1B.1
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
<i>Crotalus ruber</i> red-diamond rattlesnake	ARADE02090	None	None	G4	S3	SSC
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	AMAFD03143	Endangered	Endangered	G5T1	S1	SSC
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	AMAFD03100	Threatened	Threatened	G2	S3	
<i>Eumops perotis californicus</i> western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
<i>Icteria virens</i> yellow-breasted chat	ABPBX24010	None	None	G5	S4	SSC
<i>Lasiurus xanthinus</i> western yellow bat	AMACC05070	None	None	G4G5	S3	SSC



Selected Elements by Scientific Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<i>Lasthenia glabrata ssp. coulteri</i> Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
<i>Lepidium virginicum var. robinsonii</i> Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	AMAEB03051	None	None	G5T3T4	S3S4	
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	AMAFD01041	None	None	G5T2	S1S2	SSC
<i>Phrynosoma blainvillii</i> coast horned lizard	ARACF12100	None	None	G4	S4	SSC
<i>Polioptila californica californica</i> coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
<i>Salvadora hexalepis virgultea</i> coast patch-nosed snake	ARADB30033	None	None	G5T4	S3	SSC
<i>Southern Sycamore Alder Riparian Woodland</i> Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
<i>Spea hammondi</i> western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
<i>Spinus lawrencei</i> Lawrence's goldfinch	ABPBY06100	None	None	G3G4	S4	
<i>Symphotrichum defoliatum</i> San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S3	SSC
<i>Vireo bellii pusillus</i> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	

Record Count: 33



Appendix 2: Project Site Photos

Photo 1

Northern corner of the project site looking east. The picture depicts disturbed habitat dominated by prickly Russian thistle. The site has visible evidence of mowing and other vegetation management efforts.



Photo 2

Southwest corner of the project site looking east along Brodiaea Ave. The picture depicts disturbed habitat dominated by prickly Russian thistle. The site has visible evidence of mowing and other vegetation management efforts.





Photo 3

Northwest corner of the project site looking south. The picture depicts disturbed habitat dominated by prickly Russian thistle. The site has visible evidence of mowing and other vegetation management efforts. Additionally, three structures are seen on the property.



Photo 4

Southeast corner of the project site looking north. The picture depicts disturbed habitat dominated by prickly Russian thistle. The site has visible evidence of mowing and other vegetation management efforts.





Photo 5

Southwest corner of the project site looking north along Wilmont St. The picture depicts disturbed habitat dominated by prickly Russian thistle. Juniper trees line the street. The site has visible evidence of mowing and other vegetation management efforts.



Photo 6

Northern portion of the project site looking southwest. The picture depicts disturbed habitat dominated by prickly Russian thistle. The site has visible evidence of mowing and other vegetation management efforts. Additionally, three structures are seen on the property.





Appendix 3: Project Plans

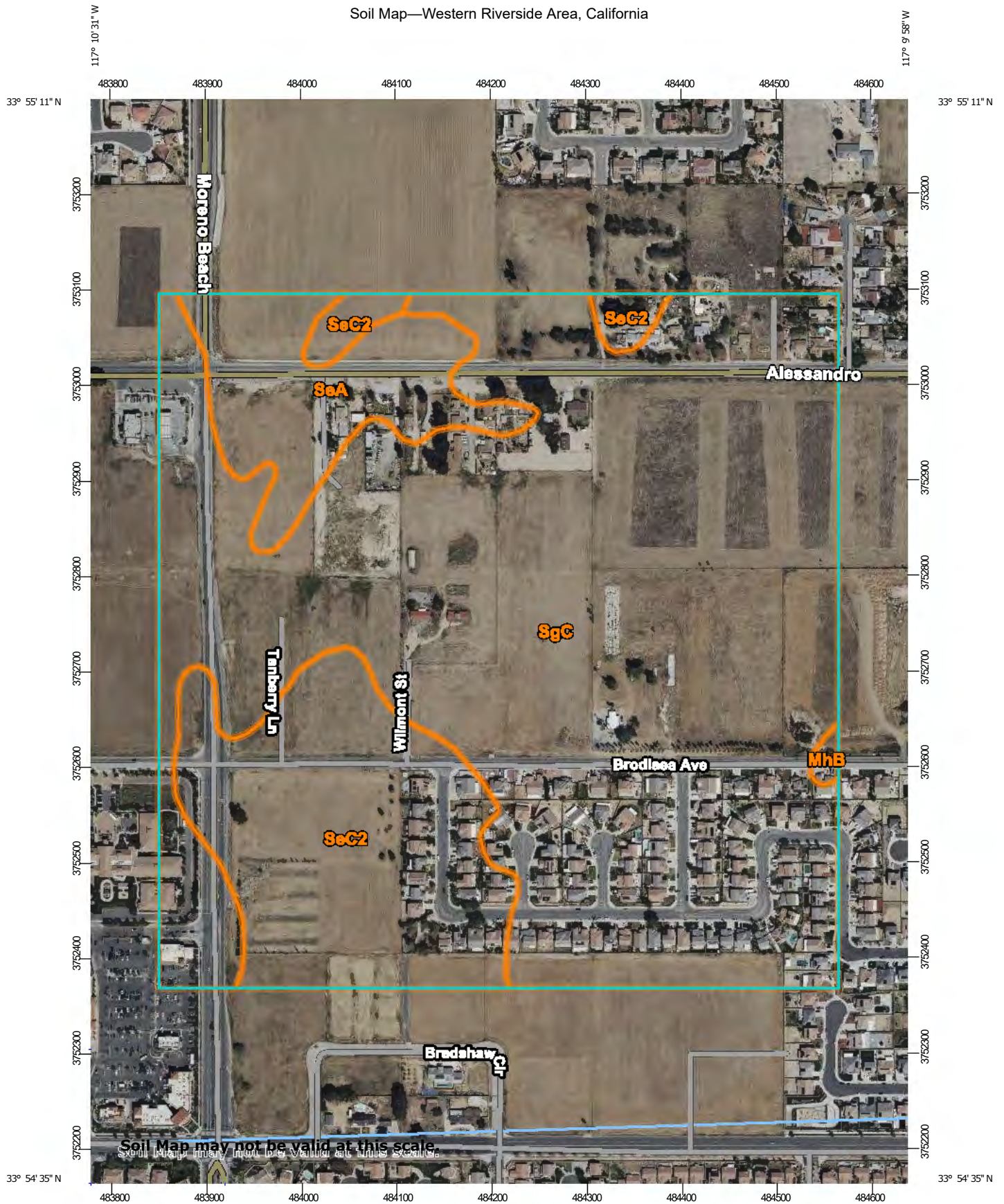




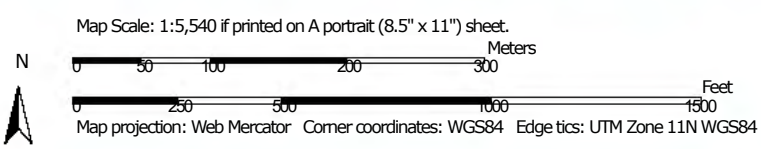
Appendix 4: USDA Soil Map



Soil Map—Western Riverside Area, California




Soil Map may not be valid at this scale.




MAP LEGEND


Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Western Riverside Area, California

Survey Area Data: Version 17, Aug 30, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 14, 2022—Mar 17, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
MhB	Metz loamy fine sand, sandy loam substratum, 0 to 5 percent slopes	0.3	0.3%
SeA	San Emigdio fine sandy loam, 0 to 2 percent slopes, occasional frost	11.1	8.6%
SeC2	San Emigdio fine sandy loam, 2 to 8 percent slopes, eroded	24.5	19.0%
SgC	San Emigdio loam, 2 to 8 percent slopes	93.0	72.1%
Totals for Area of Interest		129.0	100.0%



Appendix 5: Western Riverside MSHCP Consistency Analysis



**Western Riverside County
Multiple Species Habitat Conservation Plan
Consistency Analysis**

Warmington Residential Brodiaea Project

Moreno Valley, CA

[Permittee Name]
[Permittee Contact]
Prepared By:



Marsh and Mallow Land Resources Consulting
195 Eureka Place.
Upland, CA 91786

Date
5/16/2025

MSHCP Consistency Analysis

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EXHIBIT

Attachment Burrowing Owl Report

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1 EXECUTIVE SUMMARY

The proposed Project will construct single family residential structures utilizing approximately 14.4 acres of land within the Western Riverside Multi-Species Habitat Conservation Plan (WRMSHCP) boundaries. As such, this consistency report analyzes the project impacts and determined that the project falls within the WRMSHCP conservation goals. The project will not impact riparian habitat, riverine features, vernal pools, fairy shrimp, riparian birds narrow endemic plant species, any criteria areas, or WRMSHCP conserved amphibians, mammals, invertebrate, birds and reptiles. The project will be consistent with the WRMSHCP goals.

2 INTRODUCTION

The proposed Project consists of 134 single family homes to be built on approximately 14.4 acres of land. The floor plans range from approximately 1700 sf to 2120 sf for each single-family home. Private open spaces will be included in the development and will consist of 34 open parking spaces. Proposed construction is anticipated to impact the entire Project area through grading, excavation, best management practices (BMP) installation, paving, construction of structures and landscaping.

2.1 Project Location

The project location consists of 6 APNs: 478-070-015, 478-070-013, 478-070-014, 478-080-003, 478-080-004, and 478-080-005 within the city of Moreno Valley, CA. (See figure 1 below) The Project is located north of Brodiaea Ave, south of Alessandro Blvd., east of Moreno Beach Dr with Wilmont St. along the southwestern portion of the parcels within the City of Moreno Valley, Riverside County. The parcels lie within the U.S. Geological Survey (USGS) 7.5-minute *Sunnymead, California* topographic quadrangle, section 14 of Township 3 south, and range 3 west. The elevation of the Project site is approximately 1,587 ft above mean sea level (msl).

2.2 General Setting

The Project is approximately six parcels totaling 14.4-acres located in the Rancho Belago community within the City of Moreno Valley. It is located within the San Jacinto Habitat Maintenance Unit of the Western Riverside Multiple Species Habitat Conservation Plan. The site sits approximately 1,587 ft above mean sea level (AMSL) and USDA Web Soil Survey identifies the site to be primarily composed of San Emigdio loam. Temperature averages for the City of Moreno Valley range from highs of 94°F in August to lows of 41°F in December (weatherspark.com).

The Project site is a relatively flat parcel with low to medium vegetation cover and the occasional dispersed tree. Three structures, an abandoned dwelling, barn and greenhouse were observed at the site with a partial chain-link fence along sections of the property. The surrounding land use includes a residential community to the south, several single-family homes to the north, a nursery to the northwest, and open fields to the east and west.

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3 RESERVE ASSEMBLY ANALYSIS

According to the RCA's online MSHCP Information Application, the project site is not located within any Subunits, Criteria Cells, Conservation Areas, Cores/Linkages, or P/QP lands identified by the MSHCP (refer to Figure 1, MSHCP Conservation Areas). Therefore, a Reserve Assembly discussion related to the proposed project is not warranted.

3.1 Public Quasi-Public Lands

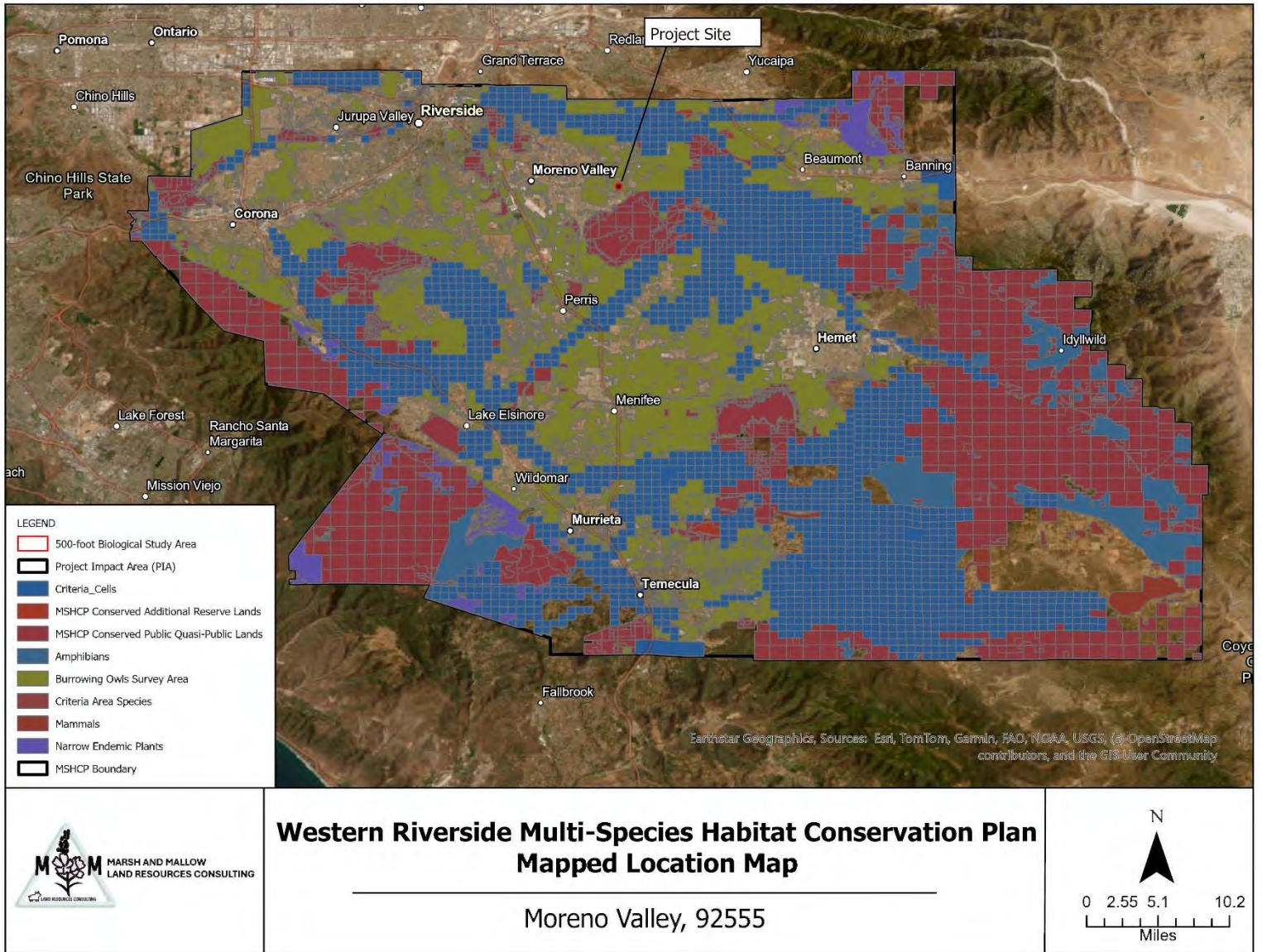
According to the RCA's online MSHCP Information Application, the project site is not located within any P/QP lands identified by the MSHCP. Therefore, a discussion related to P/QP lands, and the proposed project is not warranted.

4 VEGETATION MAPPING AND SPECIES COMPENDIA

As stated in Section 6.3.1 of the MSHCP, project-level vegetation mapping may be required for projects that meet certain criteria to assess whether conservation is required. A vegetation habitat assessment field survey was conducted in March 14, 2025. During the survey the extent and condition of the vegetation communities occurring within the boundaries of the project site was mapped and documented. Vegetation communities occurring within the project site were recorded using a handheld GPS device during the field surveys and later digitized using the GIS ArcGIS Pro software to quantify the area of each vegetation community in acres. Vegetation communities occurring within the project site were classified in accordance with the vegetation descriptions provided in the Jepson Herbarium eFlora and cross referenced with the vegetation communities described in the 2012 vegetation layer presented in the CDFW Western Riverside 2012 Vegetation Map. Based on the 2012 map, the immediate project site is entirely described as a disturbed/developed land. Field surveys confirmed evidence of weed abatement activities performed regularly but recently, the site has been invaded with plant species such as cheeseweed mallow (*Malva parviflora*), Prickly Russian Thistle (*Kali tragus*), Common fiddleneck (*Amsinckia intermedia*), and Black mustard (*Brassica nigra*). Due to the disturbed nature of the site, no native vegetation communities occur, and plants species are primarily dominated by ruderal/weedy, low-growing plant species and ornamental plant species. Refer to Table 1 below for a summary of the vegetation communities and land cover types within the project site and 500-foot survey area.

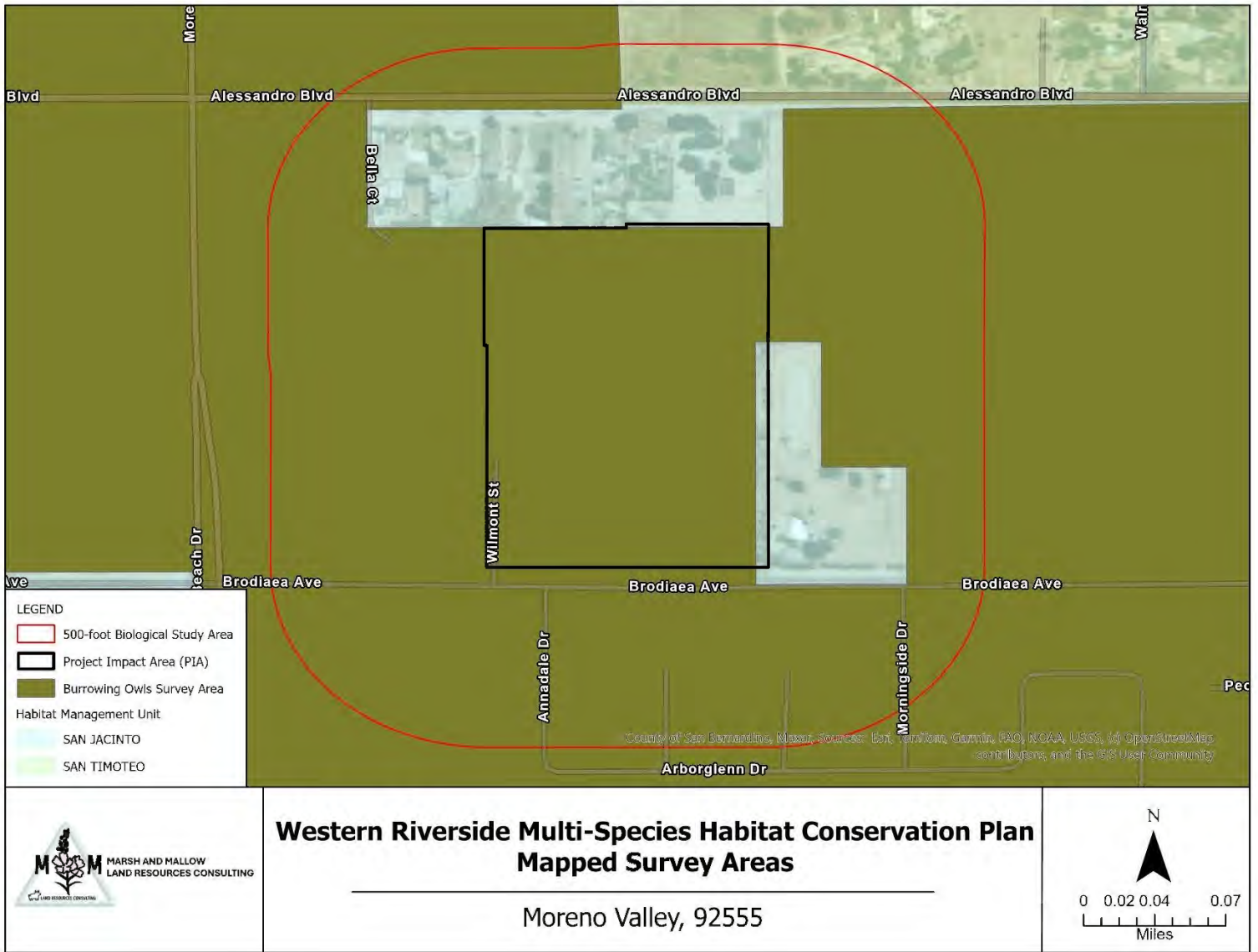
MSHCP Consistency Analysis

Figure 1: WRMSHCP Project Location Map



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Figure 2: WRMSHCP Survey Areas Map



MSHCP Consistency Analysis

Figure 3: Existing Habitat within the 500-foot BSA

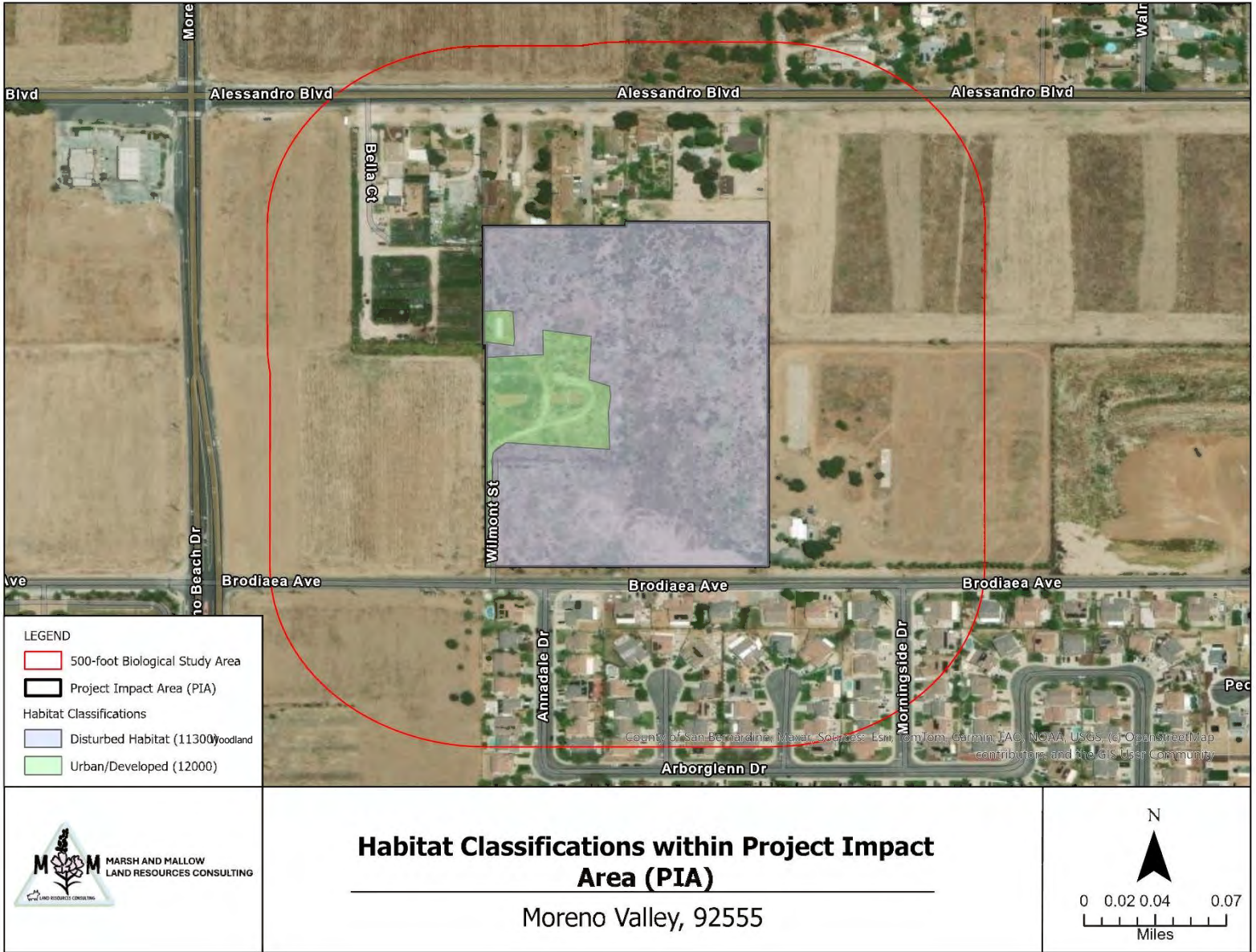


Table 1: Existing Habitat within the 500-foot BSA

Habitat Type	Holland Code	Total area within BSA (Acres)
Developed Land	12000	1.96
Disturbed Habitat	13000	12.38

MSHCP Consistency Analysis

5 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AREAS AND VERNAL POOLS (SECTION 6.1.2)

According to Section 6.1.2 of the MSHCP the presence of aquatic natural resources, including riparian/riverine resources, vernal pool fairy shrimp, and riparian birds should be assessed within the project area. The intention of this section is to identify potential resources listed MSHCP Covered Species as well as existing and future downstream conservation areas and to mitigate or avoid any impacts to the resources.

Riparian/Riverine Areas are lands which contain Habitat dominated by trees, shrubs, persistent 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 wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands 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. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the way the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrological records.

Fairy Shrimp. For Riverside, vernal pool and Santa Rosa fairy shrimp, mapping of stock ponds, ephemeral pools and other features shall also be undertaken as determined appropriate by a qualified biologist.

5.1 Riparian/Riverine

5.1.1 Methods

On March 14, 2025, Biologist Darian Wong conducted a general habitat assessment to determine the existing biological conditions within the proposed Project area and within a 500-foot buffer (BSA) exceeding the boundaries of the Project. A meandering transect was conducted to achieve 100% visual observation of the proposed Project area and the buffer where publicly accessible. Private property and inaccessible areas were surveyed as best as possible using binoculars.

If any indicators or riverine features or riparian habitats were found, they were noted and recorded on a handheld GPS device. The information would then be used to cross reference with a desktop analysis of the project area to determine its historical conditions and to determine if the feature is connected to other existing resources.

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If the riverine feature or riparian habitat are expected to be impacted temporarily or permanently, a Jurisdictional Delineation will be conducted and attached to this report. Based on the project details, no temporary or permanent impacts are expected to occur to any riparian habitat or riverine features during construction and operation of the proposed Project.

5.1.2 Existing Conditions and Results

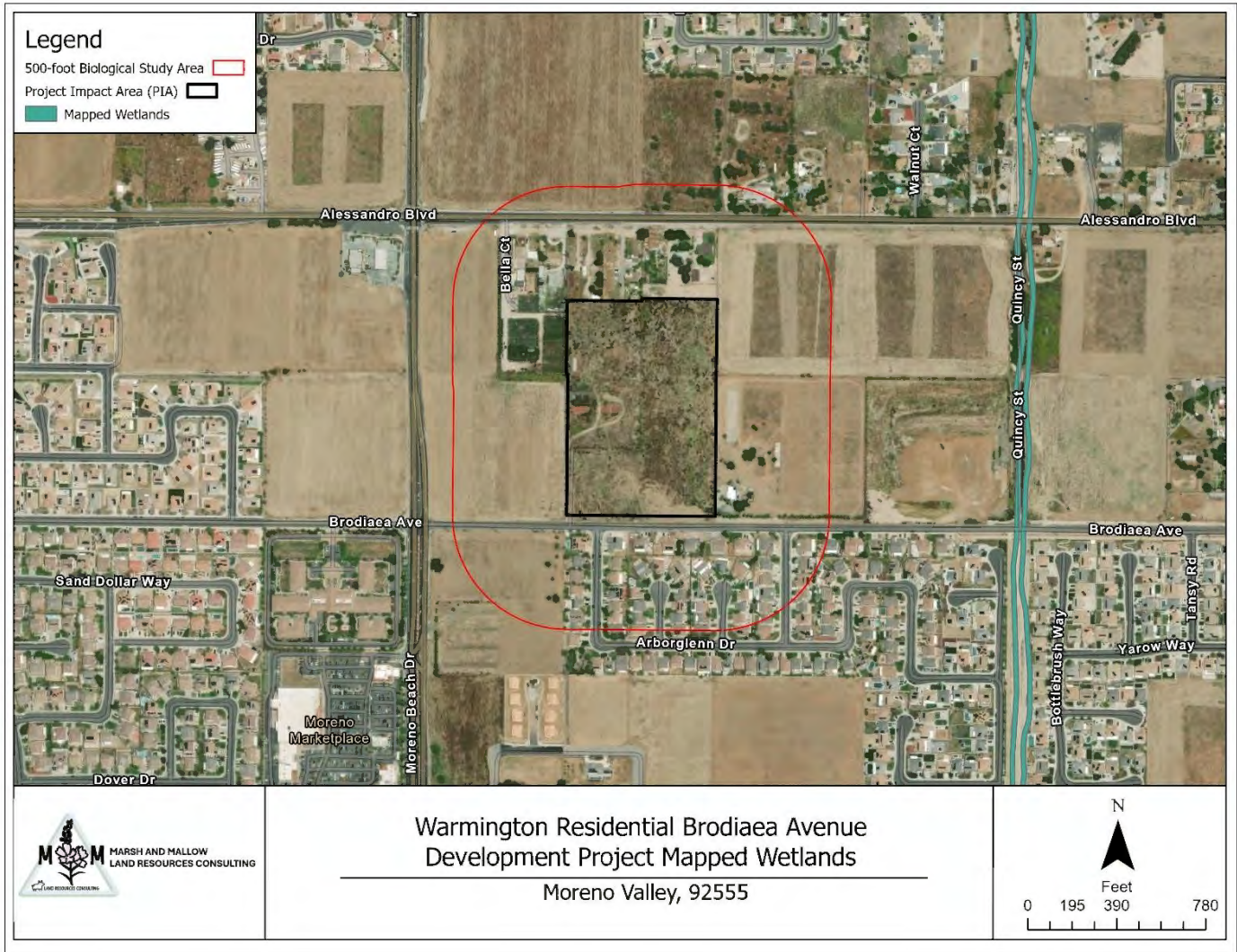
The March 14, 2025, habitat assessment survey found that the proposed Project area does not contain any riparian or riverine habitats. Additionally, riparian habitats and riverine features were not identified within the BSA. Desktop surveys also supported the findings as no mapped riverine features were identified within the proposed Project area (USFWS NWI).

The USDA Web Soil survey has classified the soils within the project area to be San Emigdio fine sandy loam (SeC2) or San Emigdio loam (SgC). Typically, the San Emigdio series of soils are found in alluvial fans and are characterized as well drained suitable for agriculture usage. Typically, this classification of soil is not associated as hydric soil, an indicator of wetland conditions associated with riparian or riverine habitat.

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Figure 4: National Wetland Inventory Map



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5.1.3 Impacts

Since no riparian habitats, riverine features, and potential drainages were observed on the project site as well as the 500-foot BSA, there will be no expected impacts to these sensitive natural resources.

5.1.4 Mitigation

Since it is determined that no riparian or riverine features will be impacted because of the proposed Project, no mitigation is proposed. Additionally, since no riparian or riverine habitat was found during the preliminary habitat assessment, no additional surveys including jurisdictional delineations are required to quantify impacts to the habitats.

5.2 Vernal Pools

Vernal Pools are typically seasonal wetlands that contain ponded water from precipitation or other wet weather events. These ponded waters provide important habitat for various sensitive species that have specifically adapted their life history to the cycles of a vernal pool. Vernal pools require an impervious soil layer, and within the following soil series classifications: Huerhuero, Stockpen, Redding, and Olivenhain (Bauder 1996). Additionally, some plant genera typically associated with vernal pools include but are not limited to *Navarretia spp.*, *Lasthenia spp.*, *Psilocarphus spp.*, *Plagiobothrys spp.*, *Limnanthes spp.*, *Pogogyne spp.*, and *Downingia spp.*

5.2.1 Methods

A desktop survey was conducted to determine the soil makeup of the site and to confirm any preexisting observances of the biological or physical features vernal pools within the project area. This includes a USDA web soil survey, CNDDDB occurrences check for listed plants or sensitive wildlife associated with vernal pools.

A field visit on March 14, 2025 was conducted to assess whether the habitat immediate project area and surrounding 500-foot can support sensitive or protected wildlife and plant species. The survey focused on determining the presence of any listed species or species that may indicate the occurrences of vernal pools. The survey consisted of a meandering transect that allowed the biologist to have visual on 100% of the project site and BSA where publicly accessible. If areas were not accessible, they were scanned using binoculars.

Additional surveys were conducted on April 12th, 2025 in accordance with burrowing owl survey requirements of the MSHCP. Although, these focused surveys were primarily focused on finding and mapping burrowing owl signs and suitable burrows, it was noted at the end of the surveys that no signs of vernal pools were observed onsite.

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5.2.2 Existing Conditions and Results

Habitat assessment and additional focused survey yielded negative results for clay soils (evidence of cracking, mottling, or ponding) or ponding onsite that would indicate the project site's ability to support vernal pool conditions. Vegetation communities within the project area were highly disturbed and did not indicate the presence of the vernal pool.

5.2.3 Impacts

Since the desktop and field surveys concluded that no physical or biological features supportive of vernal pools were found within the immediate project area, there is no expected impacts to vernal pools and their associated wildlife and plant species.

5.2.4 Mitigation

No mitigation for vernal pools will be necessary as no impacts is expected to vernal pools within the project site.

5.3 Fairy Shrimp

Fairy shrimp are often associated with vernal pools but they can also occur in manmade astatic water such as troughs, stock ponds, road ruts etc.

5.3.1 Methods

A desktop survey was conducted to determine the soil makeup of the site and to confirm any preexisting observances of the biological or physical features vernal pools within the project area. This includes a USDA web soil survey, CNDDDB occurrences check for listed plants or sensitive wildlife associated with vernal pools.

A field visit on March 14, 2025 was conducted to assess whether the habitat immediate project area and surrounding 500-foot can support sensitive or protected wildlife and plant species. The survey focused on determining the presence of any listed species or species that may indicate the occurrences of vernal pools. The survey consisted of a meandering transect that allowed the biologist to have visual on 100% of the project site and BSA where publicly accessible. If areas were not accessible, they were scanned using binoculars.

Additional surveys were conducted on April 12th, 2025 in accordance with burrowing owl survey requirements of the MSHCP. Although, these focused surveys were primarily focused on finding and mapping burrowing owl signs and suitable burrows, it was noted at the end of the surveys that no signs of vernal pools were observed onsite.

5.3.2 Existing Conditions and Results

The surveys concluded that no vernal pools or astatic water sources were observed within the project area and surrounding 500-foot BSA. Additionally, no fairy shrimp were found within the project area and 500-foot BSA.

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5.3.3 Impacts

Since no vernal pools or astatic water sources were observed within the survey area, it was determined that no biological or physical features that supported fairy shrimp would be impacted by project activities.

5.3.4 Mitigation

Since it was determined that fairy shrimp would not be impacted by project activities, no mitigation would be needed.

5.4 Riparian Birds

The MSHCP provides protection to riparian birds which are birds that inhabit the transitional vegetation between upland habitats and waterbodies such as streams or rivers. These protected birds include three listed species: least Bell's vireo (*Vireo bellii pusillus*) (LBVI), southwestern willow flycatcher (*Empidonax trallii extimus*) (SWFL) or yellow-billed cuckoo (*Coccyzus americanus*) (YBCU)

5.4.1 Methods

A desktop survey was conducted to determine historical occurrences of any sensitive riparian bird species that may have occurred within the project area or 500-foot BSA. Aerial imagery was used to determine the historical conditions of preexisting habitat that the riparian bird species may inhabit.

A desktop survey was conducted to determine the soil makeup of the site and to confirm any preexisting observances of the biological or physical features vernal pools within the project area. This includes a USDA web soil survey, CNDDDB occurrences check for listed plants or sensitive wildlife associated with vernal pools.

A field visit on March 14, 2025 was conducted to assess whether the habitat immediate project area and surrounding 500-foot can support sensitive or protected wildlife and plant species. The survey focused on determining the presence of any listed species or riparian/riverine habitats that may provide habitat for the sensitive riparian birds listed above. The survey consisted of a meandering transect that allowed the biologist to have visual on 100% of the project site or BSA. If areas were not accessible, they were scanned using binoculars.

Additional surveys were conducted on April 12th, 2025 in accordance with burrowing owl survey requirements of the MSHCP. Although, these focused surveys were primarily focused on finding and mapping burrowing owl signs and suitable burrows, it was noted at the end of the surveys that no signs of riparian habitats, riverine features or sensitive riparian birds were observed onsite.

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5.4.2 Existing Conditions and Results

CNDDDB desktop analysis found no sensitive riparian bird species were mapped within the project vicinity. Field surveys confirmed that riparian habitats did not occur within the project site or 500-foot BSA.

5.4.3 Impacts

Since there was no riparian habitats or riverine features found within the project site or 500-foot BSA, and no riparian birds were observed during the initial habitat assessment or additional focused surveys, the project is not expected to impact Southwestern willow flycatcher (*Empidonax trallii extimus*) (SWFL) or yellow-billed cuckoo (*Coccyzus americanus*) (YBCU) or last Bell's vireo (*Vireo bellii pusillus*).

5.4.4 Mitigation

No sensitive or listed riparian bird species are expected to be impacted as a result of the project. However, the following mitigation measure will ensure that all nesting birds are surveyed for and mitigated for during project.

MM-BIO-1 Preconstruction nesting bird survey: If work occurs within nesting bird season (February 1st to August 30th), a qualified biologist will be required to conduct a pre-construction nesting bird survey within 7 days of construction. The survey will include the entire Project area and surrounding 500ft. If any active nests are found, a construction buffer will be established, 300ft for passerines and 500ft for raptors and listed birds. A biologist will monitor the active nest once a week until nesting has ceased, or the fledglings have fledged.

5.5 Other Section 6.1.2 Species

Other 6.1.2 species are not expected to occur within the project area and will not be impacted due to the proposed Project. Riparian habitats are outside of the immediate project area. See table 2 below for additional details regarding section 6.1.2 species

Table 2: Other Section 6.1.2 Species

Species	Habitat	Potential for Occurrence
Plants		
Southern California black walnut (<i>Juglans californica</i>)	Small trees that are found in mixed woodlands such as riparian woodlands.	The species is absent from the immediate project area and not expected to occur within the BSA. Individuals were not observed during the survey within the BSA.
Coulter's Matilija poppy (<i>Romneya coulteri</i>)	Typically, this species occupies coastal sage scrub or chaparral.	This species is not likely to occur within the project area and BSA since the habitat described does not

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		exist for the species in the study area.
Engelmann Oak (<i>Quercus engelmannii</i>)	Inhabits riparian habitat within Foothill woodland, chaparral or valley grassland communities.	This species is absent from the immediate project area and BSA. The species is not likely to occur.
Fish's milkwort (<i>Polygala cornuta</i> var. <i>fishae</i>)	Usually occurs within wetlands or riparian habitat.	No wetlands or riparian habitat occur within the project impact area. Additionally, the species was not observed during any of the surveys conducted for the project. The species has little to no potential to occur within the project area.
Graceful tarplant (<i>Holocarpha virgata</i> ssp. <i>elongata</i>)	Typically inhabits coastal sage scrub, cismontane woodlands, chaparral or valley grasslands.	Low quality habitats exist for the species, but no individuals were found during any of the surveys. Additionally, no documented occurrences of the species were found during the desktop analysis of CNDDDB, CalFlora, and CNPS. There is low potential for the species to occur onsite due to the disturbed nature of the habitat.
Lemon lily (<i>Lilium parryi</i>)	Typically occurs in wetlands or riparian habitats.	No wetlands or riparian habitat occur within the project impact area. Additionally, the species was not observed during any of the surveys conducted for the project. The species has little to no potential to occur within the project area.
Deinandra mohavensis (<i>Mojave tarplant</i>)	Typically occurs in Chaparral or Joshua tree woodland	No chaparral or Joshua tree woodland occur within the project impact area. Additionally, the species was not observed during

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		any of the surveys conducted for the project. The species has little to no potential to occur within the project area.
Mud nama (<i>Nama stenocarpa</i>)	Typically occurs in wetlands, riparian habitat.	No wetlands or riparian habitat occur within the project impact area. Additionally, the species was not observed during any of the surveys conducted for the project. The species has little to no potential to occur within the project area.
Ocellated Humboldt lily (<i>Lilium humboldtii</i> ssp. <i>ocellatum</i>)	Typically occurs in openings in conifer forests, woodlands or chaparral.	No wetlands or riparian habitat occur within the project impact area. Additionally, the species was not observed during any of the surveys conducted for the project. The species has little to no potential to occur within the project area.
Orcutt's brodiaea (<i>Brodiaea orcuttii</i>)	Occurs in wetlands, meadows or vernal pools.	No wetlands or riparian habitat occur within the project impact area. Additionally, the species was not observed during any of the surveys conducted for the project. The species has little to no potential to occur within the project area.
Parish's meadowfoam (<i>Limnanthes alba</i> ssp. <i>parishii</i>)	Occurs in wetlands or non-wetlands at higher elevations within yellow pine forests.	No wetlands or riparian habitat occur within the project impact area. Additionally, the species was not observed during any of the surveys conducted for the project. The species has little to no potential to occur within the project area.

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Prostrate vernal pool navarretia (<i>Navarretia prostrata</i>)	Occurs in wetlands coast sage scrub, Meadows and sepes, alkaline valley and foothill grasslands and vernal pools.	No wetlands, vernal pools or riparian habitat occur within the project impact area. Additionally, the species was not observed during any of the surveys conducted for the project. The species has little to no potential to occur within the project area.
San Diego button-celery (<i>Eryngium aristulatum</i> var. <i>parishii</i>)	Typically occurs in wetlands or vernal-pools within coastal sage scrub, or valley grasslands	The habitat in the project impact area is classified as disturbed habitat characterized by regular human activities such as mowing, disking and introduction of ornamental species. The species has little to no potential to occur within the project area.
San Jacinto Valley crownscale (<i>Atriplex coronata</i> var. <i>notatior</i>)	Occurs in saline wetlands, playas, alkali vernal-pools habitats.	No saline wetlands, vernal pools or riparian habitat occur within the project impact area. Additionally, the species was not observed during any of the surveys conducted for the project. The species has no potential to occur within the project area.
Santa Ana River woollystar (<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>)	Occurs within coastal sage scrub with sandy substrate, typically inhabiting the Santa Ana River drainage system.	The habitat in the project impact area is classified as disturbed invasive grasslands. The species has little to no potential to occur within the project area.
Smooth tarplant (<i>Centromadia pungens</i> ssp. <i>laevis</i>)	Found in alkali playa; chenopod scrub; meadow and seep; riparian woodland; valley and foothill grassland; wetlands; and disturbed habitats at 5 to 1,170	The habitat in the project impact area is classified as disturbed habitat characterized by regular human activities such as mowing, disking and introduction of ornamental species. The species has

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	meters (~ 16-3,839 feet) in elevation.	little to no potential to occur within the project area.
Thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	Found in chaparral (openings); cismontane woodland; coastal scrub; playas; valley and foothill grassland; vernal pool; and wetland habitats but is typically associated with annual grassland and vernal pools. Often surrounded by shrubland habitats in openings on clay soils at 15-1,030 meters (~49-3,379 feet) in elevation.	The habitat in the project impact area is classified as disturbed habitat characterized by regular human activities such as mowing, disking and introduction of ornamental species. The species has little to no potential to occur within the project area.
Vernal barley (<i>Hordeum intercedens</i>)	Occurs in coastal dunes, coastal scrub wetland or non-wetland, vernal pools, valley or foothill grasslands.	The habitat in the project impact area is classified as disturbed habitat characterized by regular human activities such as mowing, disking and introduction of ornamental species. The species has little to no potential to occur within the project area.
Amphibians		
Arroyo toad (<i>Anaxyrus californicus</i>)	Occurs in sandy riparian habitats with braided streams, gentle slopes and slow-moving water.	No wetlands, vernal pools or riparian habitat occur within the project impact area. Additionally, the species was not observed during any of the surveys conducted for the project.
Southern mountain yellow-legged frog (<i>Rana muscosa</i>)	Occupies canyons of the Transverse Ranges in southern California. Typically requires a perennial water body like a lake, river or stream. Also, can occur in wetlands.	No perennial wetlands or riparian habitat capable of supporting the life history of this species occur within the project impact area. Additionally, the species was not observed during

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		any of the surveys conducted for the project. There is little to no potential for this species to occur onsite.
California red-legged frog (<i>Rana draytonii</i>)	Occurs near water bodies such as ponds, rivers, and lakes throughout California.	No perennial wetlands, riparian habitat capable of supporting the life history of this species occur within the project impact area. Additionally, the species was not observed during any of the surveys conducted for the project. There is little to no potential for this species to occur onsite.
Fish		
Santa Ana sucker (<i>Catostomus santaanae</i>)	Requires perennial water source with riparian habitat	No wetlands, vernal pools or riparian habitat with perennial water occur within the project impact area. Additionally, the species was not observed during any of the surveys conducted for the project. There is no potential for this species to occur onsite.
Birds		
Bald eagle (<i>Haliaeetus leucocephalus</i>)	Typically nests in forested areas near water bodies for foraging.	No forests or large bodies of water occur within the project site or surround BSA. There is no potential for this species to utilize the site.
American peregrine falcon (<i>Falco peregrinus anatum</i>)	Occurs in wetlands, deserts, forests throughout California. They utilize cliffs or human structures to nest.	While the species may utilize the project site for foraging, there is no potential nesting site for the species within the project impact area. Therefore, there is little to no potential for the species to occur onsite.

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6 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3)

The proposed Project site is not within the WRMSHCP mapped survey area. Therefore, this section does not apply to the project site.

7 ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)

All projects located within a mapped survey area described in Section 6.3.2 Additional Survey Needs and Procedures should follow the guidance below. If the proposed project is not located within a Section 6.3.2 survey area, include a statement to this effect.

7.1 Criteria Area Plant Species

The Proposed project does not fall within a mapped survey area for Criteria Area plant species.

7.2 Amphibians

The project does not fall with WRMSHCP mapped amphibian survey areas.

7.3 Burrowing Owl

The Project site is within a mapped survey area for burrowing owl (BUOW). Figure 1 and 2 above shows the most recent RCA MSHCP information GIS map.

The western burrowing owl (*Athene cunicularia hypugaea*) has been named a candidate for potential listing under the California Endangered Species Act (CESA) and such are afforded the same protection as a state-listed endangered or threatened species.

Burrowing owl typically occupies open areas with bare ground, grasslands, and shrublands in arid or semi-arid habitats. They typically utilize burrows abandoned from mammals such as California ground squirrels (*Otospermophilus beecheyi*), and American Badger (*Taxidea taxus*). However, they have been observed to occupy manmade objects such as culverts and rubble piles as nesting sites.

7.3.1 Methods

Surveys were conducted with the MSHCP Burrowing Owl Survey Instructions (RCA 2006). The instructions have a two-step approach to determining presence of burrowing owl onsite. Step I, completed on March 14, 2025 was an initial habitat assessment for all protected species including the burrowing owl. A meandering transect was completed throughout the project site in addition to a 500 ft buffer surrounding the site where publicly accessible. Areas not publicly accessible were scanned using binoculars.

The habitat assessment yielded positive results for habitats suitable for burrowing owl including open disturbed habitat. The habitat had low lying vegetation with soil which supports mammal burrows. Therefore, Step II-A, which was a focused burrow survey, was completed on April 12th, 2025 from 6 am to 8 am where the entirety of the project site was surveyed including an additional 500-foot buffer of the site and portions of the site that were accessible. Areas that were not accessible were surveyed using binoculars as feasible. Transects were completed every 30m and 100% visual coverage of the project site was surveyed. An additional 500-foot buffer was surveyed

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where publicly accessible. If suitable burrows were found, they were mapped and recorded through photographs.

7.3.2 Existing Conditions and Results

Surveys conducted by Biologist Darian Wong found the PIA is invaded by nonnative plant species such as common fiddleneck (*Amsinkia intermedia*), Prickly Russian thistle (*Kali Tragus*), Black mustard (*Brassica nigra*), Shortpod mustard, and (*Hirschfeldia incana*). The presence of many of these ruderal species typically indicates that the habitat is largely disturbed. The Project site appeared to be dominated by the invasive species listed above and to be regularly trimmed back, disked or mowed in an attempt as fire suppression. Ornamental species such as Italian cypress (*Cupressus sempervirens*), Torch Cactus (*Trichocereus grandifloras*), Chinese pistachio (*Pistacia chinensis*) and California juniper (*Juniperus californica*) were found onsite adjacent to the abandoned structures and the dirt road/driveway leading up the building. Additional plant species observed outside the PIA and within the 500ft BSA include nonnative ornamental species such as blue gum, Peruvian pepper tree, Mexican fan palm, and the same ruderal vegetation as listed for the PIA.

Existing habitat with the project impact area (PIA) can be characterized as Disturbed Habitat (11300) which is characterized by the presence of Invasive non -native forb species such as the Russian prickly thistle (*Salsola tragus*), or London rocket (*Sisymbrium irio*). Although the presence of native species that can be associated with non-native grasslands, the Project site and surrounding fields were observed to be actively disturbed by human activities related to weed abatement such as disking and mowing. (Holland 1986).

BUOW are known to nest in preexisting mammal burrows that occur in prairies, grasslands, shrub steppe, deserts and some agricultural areas (Haug et al. 1993). They typically require low lying vegetation that allows them to observe the surrounding areas for predators. They are sometimes known to nest in manmade cavities such as culverts, pipes, debris piles, or rock piles. They occupy arid habitats or semi-arid habitats. The study area contains suitable habitat in the form of disturbed habitat, but suitable burrows as defined by WRMSHCP Burrowing Owl Survey Instructions (RCA 2006) were not identified during the surveys. No signs of BUOW were present during the focused surveys.

7.3.3 Impacts

BUOW would be impacted if they were to nest onsite during ground disturbance activities. Since burrowing owls were not found during the focused surveys, there is no expected impact on nesting BUOW utilizing the site. However, since there is suitable habitat for the species onsite, if BUOW were to occupy the site prior to construction, impacts may occur, and the following mitigation will be adhered to prevent impacts to BUOW.

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7.3.4 Mitigation

MM-BIO-2 Preconstruction burrowing owl survey: A CDFW protocol burrowing owl survey will be completed by a qualified biologist within 30 days of construction start. If it is determined that burrowing owls are nesting or utilizing the site, work must cease and a burrowing owl plan consistent with CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFW 2012) will be prepared. The plan will identify burrowing owl habitat that is being disturbed, avoidance measures including construction buffer. Consultation with CDFW will be required if relocation of any burrowing owl is necessary.

7.4 Mammals

The proposed project does not fall within a mapped survey area for mammal species.

8 INFORMATION ON OTHER SPECIES

8.1 Delhi Sands Flower-Loving Fly

The proposed project does not fall within an area with Delhi soils mapped using the MSHCP baseline data.

8.2 Coastal California Gnatcatcher

Surveys conducted on March 14th 2025 did not note any Coastal or Riversidean sage scrub habitat suitable for Coastal California Gnatcatcher (*Polioptila californica californica*). Additionally, no signs or visual observations of the species were noted during the surveys. Therefore, no additional action is required.

8.3 Species Not Adequately Conserved

None of the MSCHP Table 9-3 species were observed onsite. None of the species have been mapped within the vicinity of the site. Therefore, no further action is required.

9 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (SECTION 6.1.4)

The proposed project is not on or adjacent to any mapped conservation area. Therefore, no further action is required.

10 CONSTRUCTION GUIDELINES (SECTION 7.5.3)

The proposed project does not fall within the Criteria Area and PQP Lands. Therefore, no further action is required.

11 BEST MANAGEMENT PRACTICES (MSHCP VOLUME I, APPENDIX C)

Volume 1- Appendix C of the MSCHP outlines best management practices (BMPs) that all applicants who develop within the WRMSHCP must follow to avoid take or impacts to conserved species.

1. A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated

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with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.

2. Water pollution and erosion control plans should be developed and implemented in accordance with RWQCB requirements.
3. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
4. The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.
5. Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.
6. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.
7. When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.
8. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS, and CDFG, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
9. Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
10. The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.
11. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.

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13. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).
14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screens. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.
15. The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.

12 JPR DOCUMENT – SUPPORTING APPENDICES

The following appendices will be attached to this document.

- Burrowing Owl Survey Report

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REFERENCES

- Baldwin, Bruce G, et al. *The Jepson Manual : Vascular Plants of California*. Berkeley, Calif., University Of California Press, 2012.
- Bauder, E. 1996. Exotics in the Southern California Vernal Pool Ecosystem. 1996 Symposium Proceedings, California Exotic Pest Plant Council.
- California Invasive Plant Council), Cal-IPC . “California Invasive Plant Council.” *California Invasive Plant Council*, www.cal-ipc.org.
- CDFW (California Department of Fish and Wildlife). 2012. *Staff Report on Burrowing Owl Mitigation*. March 7, 2012.
- CDFW. 2018. “Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.” March 20, 2018. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959>.
- City of San Diego. 2015. Draft Vernal Pool Habitat Conservation Plan. City of San Diego Planning Department, San Diego, California.
- CNPS (California Native Plant Society). 2001. “CNPS Botanical Survey Guidelines.” Published December 9, 1983; revised June 2, 2001. http://www.cnps.org/cnps/rareplants/pdf/cnps_survey_guidelines.pdf.
- Cypher, E.A. 2002. “General Rare Plant Survey Guidelines.” Bakersfield: California State University, Stanislaus, Endangered Species Recovery Program. Revised July 2002. https://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/Documents/rare_plant_protocol.pdf.
- ebird. “Online Bird Guide, Bird ID Help, Life History, Bird Sounds from Cornell.” *All about Birds*, 2019, www.allaboutbirds.org.
- Everett Williams Jameson, and Hans J Peeters. *Mammals of California*. Univ of California Press, 2004.
- Haug, E. A., et al. “Burrowing owl (*Speotyto cunicularia*).” *Birds of North America (Print)*, 1993, <https://doi.org/10.2173/tbna.61.p>.
- Holland, Robert F. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. 1986.
- iNaturalist. “iNaturalist a Community for Naturalists.” *iNaturalist*, 2023, www.inaturalist.org.
- NRCS. “Web Soil Survey.” *Usda.gov*, 2019, websoilsurvey.nrcs.usda.gov/app/.
- RCA (Regional Conservation Authority). 2006. “Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area.” March 29,

MSHCP Consistency Analysis

2006. https://www.wrc-rca.org/species/survey_protocols/burrowing_owl_survey_instructions.pdf.
- RCA. 2020. "Status of Covered Species Not Adequately Conserved (Table 9-3 Species)." December 1, 2020. https://www.wrc-rca.org/annual_reports/Current_Status_of_Covered_Species_Not_Adequately_Conserved-REV2020.pdf.
- Sawyer, John Orvel, et al. *A Manual of California Vegetation*. California Native Plant Society, 2009.
- Sogge, M.K, D. Ahlers, and S.J. Sferra. 2010. *A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher*. U.S Geological Survey Techniques and Methods 2A-10. <https://www.fws.gov/ventura/endangered/species/surveys-protocol.html>.
- Stebbins, Robert C, and Samuel M McGinnis. *Field Guide to Amphibians and Reptiles of California*. Univ of California Press, 4 Sept. 2012.
- USFWS (United States Fish and Wildlife Service). 1999. "Survey Protocol for the Arroyo Toad. May 19, 1999." <https://www.fws.gov/sites/default/files/documents/survey-protocol-for-arroyo-toad.pdf>.
- USFWS. 2001. "Least Bell's Vireo Survey Guidelines." January 19, 2001. Sacramento, California: USFWS. https://www.fws.gov/cno/es/Recovery_Permitting/birds/least_bells_vireo/LeastBellsVireo_SurveyGuidelines_20010119.pdf.
- USFWS. 2004. "Guidelines for Conducting Presence/Absence Surveys for the Delhi Sands Flower-Loving Fly." June 30, 2004. Carlsbad, California: USFWS. <https://www.fws.gov/carlsbad/TEspecies/Recovery/SurveyMontInfo/DSFLF/Changes%20to%20Survey%20Guidelines%202004.pdf>.
- USFWS. 2005. Revised Guidance on Site Assessments and Field Surveys for the California Red-Legged Frog. August 2005. https://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/Documents/crf_survey_guidance_aug2005.pdf.
- USFWS. 2016. *A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-Billed Cuckoo*. Prepared by M. Halterman, M.J. Johnson, J.A. Holmes, and S.A. Laymon. Sacramento, California: USFWS. May 2016. https://www.fws.gov/southwest/es/arizona/Documents/SpeciesDocs/YellowBilledCuckoo/YBCU%20Survey%20Protocol_%20DRAFT_2016.pdf.
- USFWS. 2017. Survey Guidelines for the Listed Large Branchiopods. November 13, 2017. Sacramento, California: USFWS. <https://www.fws.gov/ventura/docs/species/protocols/vpshrimp/shrimp2017.pdf>.

MSHCP Consistency Analysis

Western Riverside County. 2006. *Mountain Yellow-Legged Frog (Rana muscosa) Survey Report 2005*. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Biological Monitoring Program. As revised September 19, 2006.

WRCC (Western Regional Climate Center). 2025. Precipitation Maps: PRISM Precipitation Maps 1981-2010. https://wrcc.dri.edu/Climate/prism_precip_maps.php

WRCC 2025. Monthly Summary Time Series Precipitation Data for the Clark and Lake Mathews Remote Automated Weather Stations. <https://wrcc.dri.edu>

Attachment A

Burrowing Owl Report



Burrowing Owl Focused Survey Report
APNs: 47-080-003, -004, -005, and 47-070-013,
-014, -015
Moreno Valley, CA



Prepared For: Warmington Residential
3090 Pullman St.
Costa Mesa, CA 92626

Prepared By: Marsh and Mallow Land Resources Consulting LLC
978 W Arrow Hwy Unit B
Upland, CA 91786



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1.0 Introduction

The purpose of this Burrowing Owl Focused Survey Report is to summarize the results of the focused biological surveys for burrowing owls (*Athene cunicularia*) for the proposed Warmington Residential Brodiaea Project. The survey is required since the project location falls within the Western Riverside Multi-Species Habitat Conservation Plan (WRMSHCP) mapped Burrowing Owl Survey Area. The proposed Project consists of 134 single family homes to be built on approximately 14.4 acres of land. The floor plans range from approximately 1700 sf to 2120 sf for each single-family home. Private open spaces will be included in the development and will consist of 34 open parking spaces. Proposed construction is anticipated to impact the entire Project area through grading, excavation, best management practices (BMP) installation, paving, construction of structures and landscaping.

1.2 Project Location

The Project is located north of Brodiaea Ave, south of Alessandro Blvd., east of Moreno Beach Dr with Wilmont St. along the southwestern portion of the parcels within the City of Moreno Valley, Riverside County. The parcels lie within the U.S. Geological Survey (USGS) 7.5-minute *Sunnymead, California* topographic quadrangle, section 14 of Township 3 south, and range 3 west. The elevation of the Project site is approximately 1,587 ft above mean sea level (msl).

The project lies within the Santa Jacinto Habitat Management Unit and is not within any mapped criteria cell, Cell group or linkage area.

2.0 Methods and Results

Surveys were conducted with the MSHCP Burrowing Owl Survey Instructions (RCA 2006). The instructions have a two-step approach to determining presence of burrowing owl onsite. Step I, completed on March 14, 2025, was an initial habitat assessment for all protected species including the burrowing owl. A meandering transect was completed throughout the project site in addition to a 500 ft buffer surrounding the site where publicly accessible. Inaccessible areas were surveyed using binoculars to achieve approximately 100% visual coverage.

The habitat assessment yielded positive results for habitats suitable for burrowing owls including open disturbed habitats with low lying invasive grasses and herbaceous species. The habitat had low lying vegetation with soil which supports mammal burrows. Therefore, Step II-A, which was a focused burrow survey, was completed on April 12th, 2025, from 6 am to 8 am where the entirety of the project site was surveyed including an additional 500-foot buffer of the site. Transects were completed every 30m and 100%



visual coverage of the project site was surveyed. An additional 500-foot buffer was surveyed where publicly accessible. No suitable burrows (characterized by a 4in or higher diameter opening, whitewash, owl pellets or feathers) were observed during this focused burrow survey. Therefore, no additional assessments were necessary.

2.1 Step 1 Habitat Assessment

Burrowing Owl (BUOW) are habitat generalists with adaptations that allow them to utilize a broad range of habitats including open grasslands, prairies, deserts and agricultural fields (USFWS). Their range extends from South America to Canada and

Surveys conducted by Biologist Darian Wong on March 14th 2025 found the PIA is invaded by nonnative plant species such as common fiddleneck (*Amsinckia intermedia*), Prickly Russian thistle (*Kali Tragus*), Black mustard (*Brassica nigra*), Shortpod mustard, and (*Hirschfeldia incana*). The presence of many of these ruderal species typically indicates that the habitat is largely disturbed. The Project site appeared to be dominated by the invasive species listed above and to be regularly trimmed back, disked or mowed in an attempt at fire suppression. Ornamental species such as Italian cypress (*Cupressus sempervirens*), Torch Cactus (*Trichocereus grandifloras*), Chinese pistachio (*Pistacia chinensis*) and California juniper (*Juniperus californica*) were found onsite adjacent to the abandoned structures and the dirt road/driveway leading up the building. Additional plant species observed outside the PIA and within the 500ft BSA include nonnative ornamental species such as blue gum, Peruvian pepper tree, Mexican fan palm, and the same ruderal vegetation as listed for the PIA.

Since the proposed project site can be classified as disturbed habitat, habitat exists for BUOW. Therefore, additional surveys will be required in accordance with MSHCP Burrowing Owl Survey Instructions (RCA 2006).

2.2 Step 2a Focused Burrow Assessment

On April 12th 2025, Biologist Darian Wong conducted a focused burrow assessment where transects were walked to survey the site with 100% visual coverage of the project site and surrounding 500-foot buffer where accessible shown in figure 1 below. Surveys were conducted to locate suitable burrows, generally preexisting mammal burrows or debris piles that have openings with diameters of 4 inches or larger were mapped in figure 2 below and listed in table 3 below. Additionally, determinations of burrowing owl usage were recorded after assessing each burrow for signs of owl activity. These signs include owl pellets, whitewash, remains of prey and feathers.

The focused burrow survey was negative for suitable burrows within the 500-foot BSA. Therefore, Step 2b from the Burrowing Owl Survey was not required according to the instructions.



Table 1: Focused Burrow Assessment conditions

Date	Biologist	Weather Conditions
4/12/2025 6:00am – 8:00 am	Darian Wong	52 Deg. F., 2mph wind, 60% Cloud Cover

3.0 Conclusions and Mitigation Recommendations

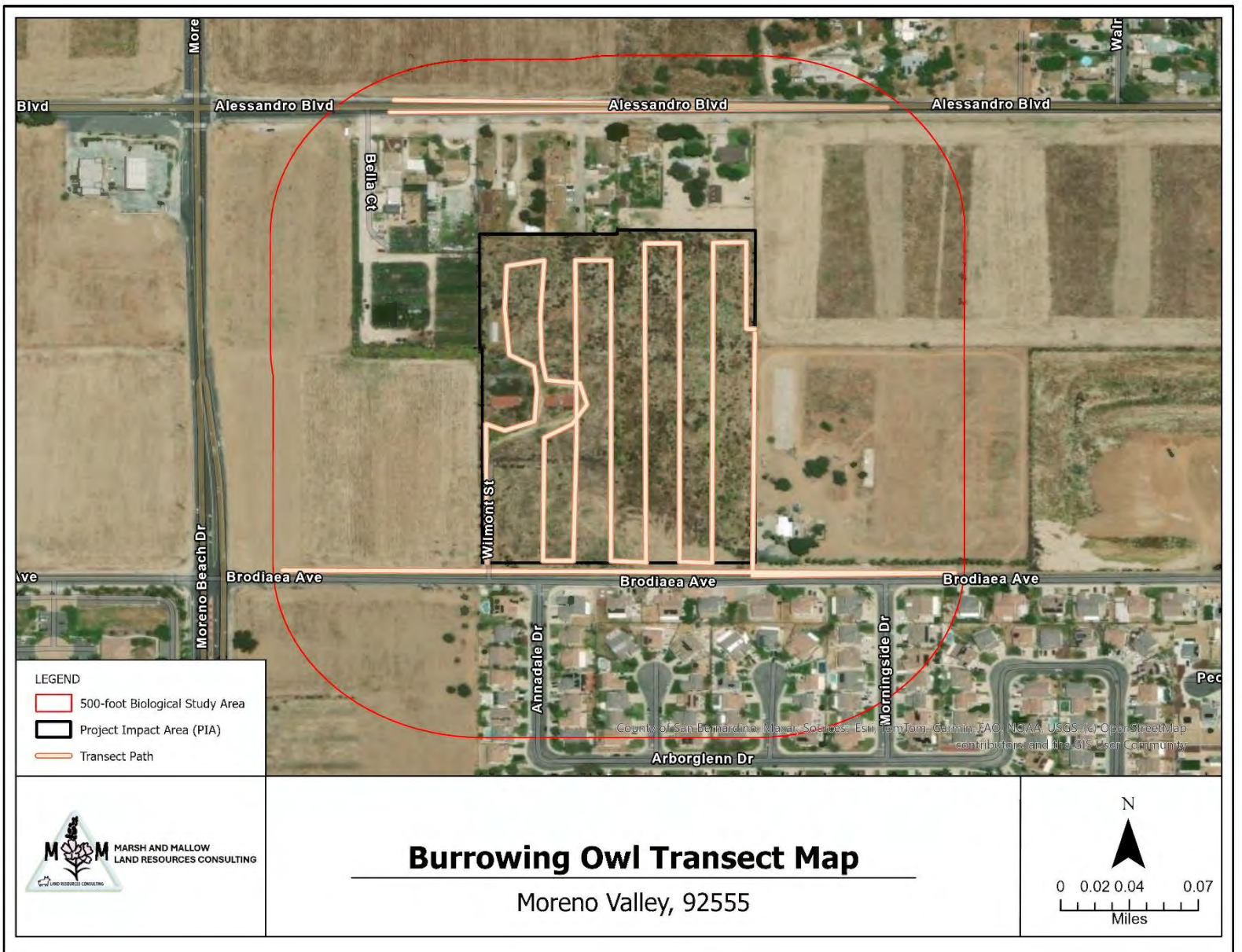
The project site contains habitat for Burrowing Owl (*Athene cunicularia*) but focused surveys completed in accordance with the Western Riverside Multi-Species Habitat Conservation Plan resulted in negative findings for the species. Additionally, no suitable burrows were found onsite and within the 500-foot biological study area.

Since no burrowing owls occupy the site and the surrounding 500-foot study area, there is no expected impact to burrowing owls and their population. However, the presence of suitable habitat for the species can suggest that they may nest within the site further into their breeding season generally February 1st through August 31th. (Thomsen 1971; Poulin et al. 2011). Therefore, to avoid and minimize impacts to the species, the following mitigation measure is recommended.

MM-BIO-2 Preconstruction burrowing owl survey: A CDFW protocol burrowing owl survey will be completed by a qualified biologist within 30 days of construction start. If it is determined that burrowing owls are nesting or utilizing the site, work must cease and a burrowing owl plan consistent with CDFW’s *Staff Report on Burrowing Owl Mitigation* (CDFW 2012) will be prepared. The plan will identify burrowing owl habitat that is being disturbed, avoidance measures including construction buffer. Consultation with CDFW and RCA will be required if relocation of any burrowing owl is necessary.

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Figure 1: Burrowing Owl Burrow Survey Transects





Appendix 6: USFWS IPAC List



IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Riverside County, California



Local office

Carlsbad Fish And Wildlife Office

☎ (760) 431-9440

📅 (760) 431-5901

**2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385**

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are not shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. **NOAA Fisheries**, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
<p>San Bernardino Merriam's Kangaroo Rat <i>Dipodomys merriami parvus</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>https://ecos.fws.gov/ecp/species/2060</p>	Endangered
<p>Stephens' Kangaroo Rat <i>Dipodomys stephensi</i> (incl. <i>D. cascus</i>)</p> <p>Wherever found</p> <p>No critical habitat has been designated for this species.</p> <p>https://ecos.fws.gov/ecp/species/3495</p>	Threatened

Birds

NAME	STATUS
<p>Coastal California Gnatcatcher <i>Polioptila californica californica</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>https://ecos.fws.gov/ecp/species/8178</p>	Threatened
<p>Least Bell's Vireo <i>Vireo bellii pusillus</i></p> <p>Wherever found</p> <p>There is final critical habitat for this species. Your location does not overlap the critical habitat.</p> <p>https://ecos.fws.gov/ecp/species/5945</p>	Endangered

Reptiles

NAME	STATUS
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Southwestern Pond Turtle *Actinemys pallida***Proposed Threatened**

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/4768>

Amphibians

NAME

STATUS

Western Spadefoot *Spea hammondi***Proposed Threatened**

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/5425>

Insects

NAME

STATUS

Monarch Butterfly *Danaus plexippus***Proposed Threatened**

Wherever found

There is proposed critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/6743>

Crustaceans

NAME

STATUS

Riverside Fairy Shrimp *Streptocephalus woottoni***Endangered**

Wherever found

There is final critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/8140>**Vernal Pool Fairy Shrimp** *Branchinecta lynchi***Threatened**

Wherever found

There is final critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/498>

Flowering Plants

NAME

STATUS

Nevin's Barberrry *Berberis nevinii***Endangered**

Wherever found

There is final critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/9025>

San Diego Ambrosia *Ambrosia pumila***Endangered**

Wherever found

There is final critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/9287>

San Jacinto Valley Crownscale *Atriplex coronata* var. notation**Endangered**

Wherever found

There is final critical habitat for this species. However, no actual acres or miles were designated due to exemptions or exclusions. See Federal Register publication for details.

<https://ecos.fws.gov/ecp/species/9353>

Slender-horned Spineflower *Dodecahema leptoceras***Endangered**

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/4001>

Spreading Navarretia *Navarretia fossalis***Threatened**

Wherever found

There is final critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/1394>

Thread-leaved Brodiaea *Brodiaea filifolia***Threatened**

Wherever found

There is final critical habitat for this species. Your location does not overlap the critical habitat.

<https://ecos.fws.gov/ecp/species/6087>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act² and the Migratory Bird Treaty Act (MBTA)¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-impacts-to-migratory-birds>
- Nationwide avoidance and minimization measures for birds
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).



Appendix 7: CNPS Rare Plant List






CALIFORNIA
NATIVE PLANT SOCIETY

CNPS Rare Plant Inventory

Search Results

11 matches found. Click on scientific name for details

Search Criteria: , Quad is one of [3311782]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
<i>Artemisia palmeri</i>	San Diego sagewort	Asteraceae	perennial deciduous shrub	(Feb)May-Sep	None	None	G3?	S3?	4.2		1974-01-01	No Photo Available
<i>Calochortus plummerae</i>	Plummer's mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G4	S4	4.2	Yes	1994-01-01	No Photo Available
<i>Caulanthus simulans</i>	Payson's jewelflower	Brassicaceae	annual herb	(Feb)Mar-May(Jun)	None	None	G4	S4	4.2	Yes	1974-01-01	No Photo Available
<i>Centromadia pungens</i> ssp. <i>laevis</i>	smooth tarplant	Asteraceae	annual herb	Apr-Sep	None	None	G3G4T2	S2	1B.1	Yes	1994-01-01	No Photo Available
<i>Chorizanthe leptotheca</i>	Peninsular spineflower	Polygonaceae	annual herb	May-Aug	None	None	G3	S3	4.2		1994-01-01	No Photo Available
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	Polygonaceae	annual herb	Apr-Jun	None	None	G3T2	S2	1B.1	Yes	1994-01-01	 © 2012 Keir Morse

<i>Deinandra paniculata</i>	paniculate tarplant	Asteraceae	annual herb	(Mar)Apr-Nov	None	None	G4	S4	4.2		2001-01-01	No Photo Available
<i>Juglans californica</i>	Southern California black walnut	Juglandaceae	perennial deciduous tree	Mar-Aug	None	None	G4	S4	4.2	Yes	1994-01-01	 © 2020 Zoya Akulova
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1		1994-01-01	 © 2013 Keir Morse
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's peppergrass	Brassicaceae	annual herb	Jan-Jul	None	None	G5T3	S3	4.3		1994-01-01	 © 2015 Keir Morse
<i>Symphotrichum defoliatum</i>	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov	None	None	G2	S2	1B.2	Yes	2004-01-01	No Photo Available

Showing 1 to 11 of 11 entries

[Go to top](#)**Suggested Citation:**

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