RAMONA GATEWAY
SOUTHWEST CORNER OF THE INTERSECTION OF RAMONA EXPRESSWAY AND WEBSTER AVENUE

CITY OF PERRIS, RIVERSIDE COUNTY, CALIFORNIA

PERRIS USGS 7.5-MINUTE TOPOGRAPHIC QUADRANGLE
SECTION 12, TOWNSHIP 4 SOUTH, RANGE 4 WEST
APNS: 317-120-021; 317-130-017, -21, -25, AND -48

Habitat Assessment and Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis

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July 2022

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The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.

Travis J. McGill
Director/Biologist

Thomas J. McGill, Ph.D.
Managing Director

July 2022

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EXHIBITS

APPENDIX

Section 1 Introduction

This report contains the findings of ELMT Consulting's (ELMT) Habitat Assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis for the proposed Ramona Gateway project located at the southwest corner of the intersection of Ramona Expressway and Webster Avenue in the City of Perris, Riverside County, California, and off-site improvement areas, which consist of roadway improvement areas (along Nevada Avenue, Webster Avenue and Ramona Expressway), and the installation of natural gas line along Ramona Expressway between Webster Avenue and Brennan Avenue. The report was prepared to document baseline conditions and assess the potential for special-status[1] plant and wildlife species to occur within the proposed project site and off-site improvement areas that could pose a constraint to implementation of the proposed project. Special attention was given to the suitability of the on-site habitat to support burrowing owl (*Athene cunicularia*) and special-status species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) and other electronic databases as potentially occurring in the general vicinity of the project. Additionally, the report also addresses resources protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (FGC), federal Clean Water Act (CWA) regulated by the United States Army Corps of Engineers (Corps) and Regional Water Quality Control Board (Regional Board) respectively, and Section 1602 of the FGC administered by CDFW.

The City of Perris is a signatory to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Since the City of Perris will be the lead agency for the proposed project, the project will need to be consistent with the rules and regulations set forth in the MSHCP. The Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map was queried to determine if the MSHCP identifies any potential survey requirements for the project. Further, the project site was reviewed against the MSHCP to determine if the site is located within any MSHCP areas including Criteria Cells (core habitat and wildlife movement corridors) or areas proposed for conservation. Based on the RCA MSHCP Information Map query and review of the MSHCP, it was determined that the project site is located within the Mead Valley Area Plan of the MSHCP but is not located within any Criteria Cells, MSHCP Conservation Areas, or species specific designated survey areas.

Further, the proposed project site is located within the boundaries of the Perris Valley Commerce Center Specific Plan (PVCCSP) planning area of the City of Perris. The PVCCSP includes both developed and undeveloped land encompassing a patchwork of residential, commercial, and industrial development interspersed with agricultural fields and vacant land. Section 4.3, Biological Resources, of the PVCCSP Environmental Impact Report (EIR, adopted January 2012) includes an assessment of potential impacts to biological resources resulting from development of land uses allowed under the PVCCSP, including the proposed project. Section 4.3 of the PVCCSP Environmental Impact Report (EIR) includes a discussion of

[1] As used in this report, "special-status" refers to plant and wildlife species that are federally, State, and MSHCP listed, proposed, or candidates; plant species that have been designated with a California Native Plant Society Rare Plant Rank; wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species; and specially protected natural vegetation communities as designated by the CDFW.

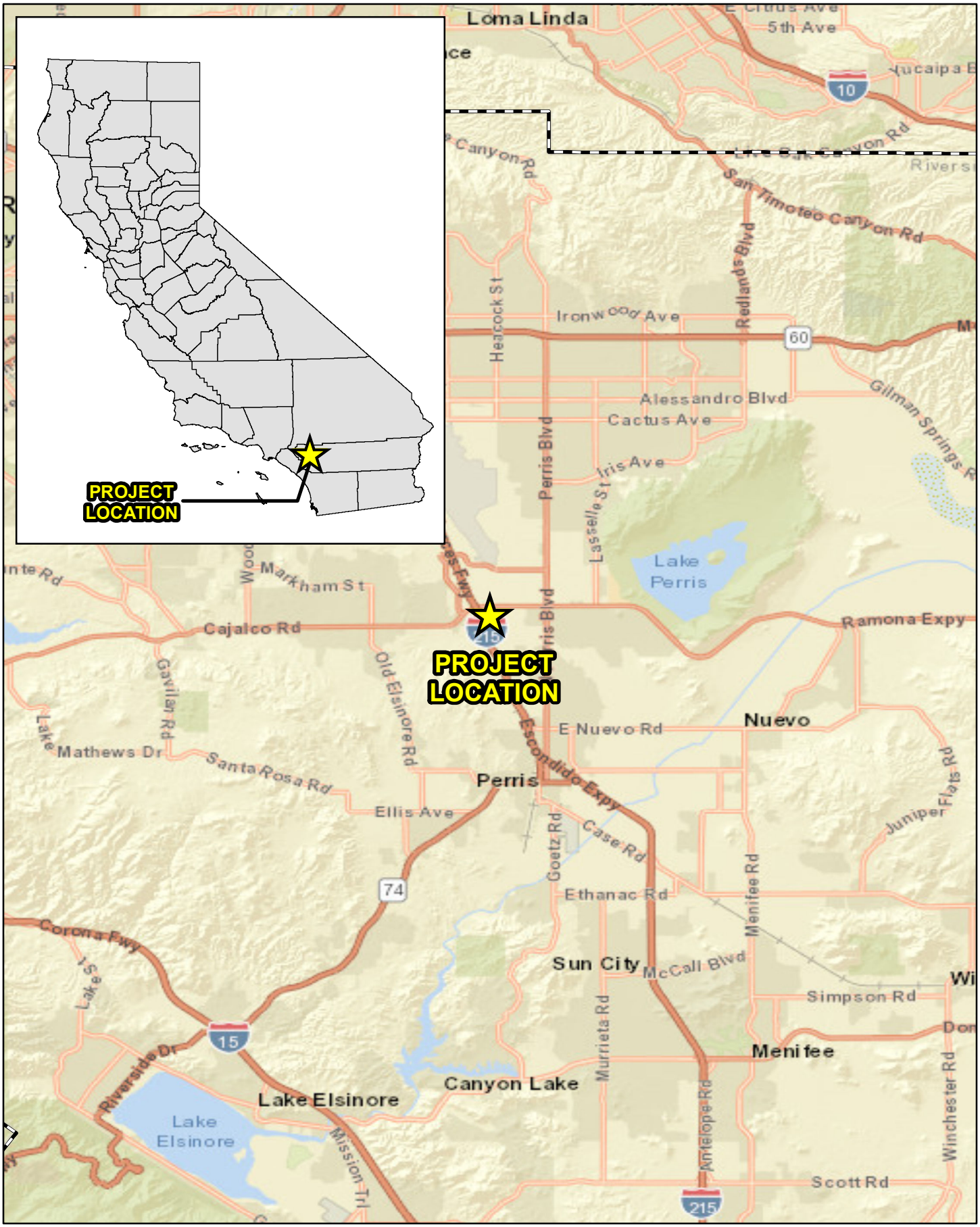
the setting (existing biological resources) and related regulations that remain applicable to this project and are discussed in detail in this report.

1.1 PROJECT LOCATION

The approximately 50-gross acre project site is generally located east of Interstate 215, south of State Route 60, north of State Route 74, and west of Lake Perris in the City of Perris, Riverside County, California (Exhibit 1, *Regional Vicinity*). The project site is depicted on the Perris quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map within Section 12 of Township 4 South, Range 4 West (Exhibit 2, *Site Vicinity*). Specifically, the project site is located at the southwest corner of the intersection of Ramona Expressway and Webster Avenue within Assessor Parcel Numbers (APNs) 317-120-021 and 317-130-017, -021, -025, and -048, and street improvements will occur along Nevada Street, Webster Avenue and Ramona Expressway, and a gas line installation along Ramona Expressway between the project site and Brennan Avenue to the east. (Exhibit 3, *Project Site*)

1.2 PROJECT DESCRIPTION

The proposed project consists of an industrial warehouse use in the southern portion of the site, with commercial/retail uses in the northern portion of the site along Ramona Expressway. The proposed project would also include roadway and access improvements, and utility infrastructure connections along the roadways adjacent to the project site.



SWC RAMONA EXPRESSWAY AND WEBSTER
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

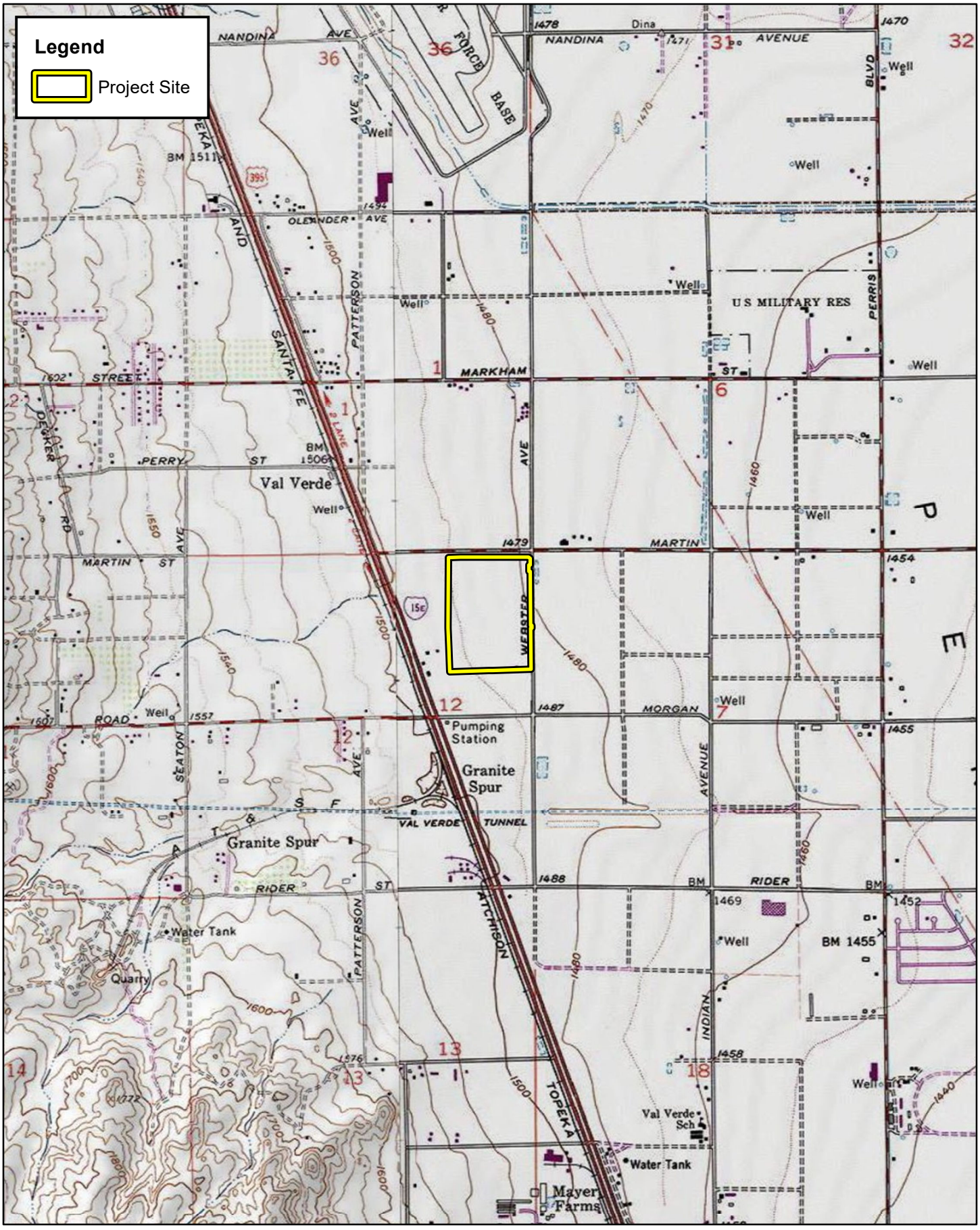
Regional Vicinity

ELMT CONSULTING

0 1.25 2.5 5 Miles

Source: World Street Map, Riverside County

Exhibit 1



NEC ETHANAC ROAD AND TRUMBLE ROAD
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

ELMT CONSULTING

0 1,000 2,000 4,000 Feet

Source: USA Topographic Map, Riverside County

Site Vicinity

Exhibit 2

SWC RAMONA EXPRESSWAY AND WEBSTER
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

ELMT CONSULTING

0 125 250 500 Feet

Source: ESRI Aerial Imagery, Riverside County

Project Site

Exhibit 3

Section 2 Methodology

A literature review and records search were conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site and adjacent roadway improvement areas. In addition to the literature review, a general habitat assessment or field investigation was conducted. The field investigation was conducted to document existing conditions within the project site and adjacent roadway improvement areas to assess the potential for special-status biological resources to occur.

2.1 LITERATURE REVIEW

Prior to conducting the field investigation, species and habitat information was gathered from the reports related to the specific project and relevant databases for the *Steele Peak, Riverside East, Sunnymead, and Perris* USGS quadrangle to determine which species and/or habitats would be expected to occur onsite. These sources include:

- California Native Plant Society Electronic Inventory (CNPSEI) database;
- California Natural Diversity Database (CNDDB) *Rarefind 5*;
- CNDDB Biogeographic Information and Observation System (BIOS);
- Environmental Protection Agency (EPA) Water Program "My Waters" data layers
- Google Earth Pro historic aerial imagery (1994-2018);
- Stephen's Kangaroo Rat Habitat Conservation Plan
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey[2];
- United States Fish and Wildlife Service (USFWS) Critical Habitat designations for Threatened and Endangered Species;
- USFWS National Wetlands Inventory (NWI);
- Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map; and
- 2006 Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area.

The literature review provided a baseline from which to inventory the biological resources potentially occurring on the project site. The CNDDB database was used, in conjunction with ArcGIS software, to locate the nearest recorded occurrences of special-status species and determine the distance from the project site.

[2] A soil series is defined as a group of soils with similar profiles developed from similar parent materials under comparable climatic and vegetation conditions. These profiles include major horizons with similar thickness, arrangement, and other important characteristics, which may promote favorable conditions for certain biological resources.

2.2 FIELD INVESTIGATION

Following the literature review, biologist Jacob H. Lloyd Davies inventoried and evaluated the condition of the habitat within the project site and adjacent roadway improvement areas on April 20, 2021. Plant communities identified on aerial photographs during the literature review were verified by walking meandering transects through the plant communities and along boundaries between plant communities.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. Plant species observed during the field survey were identified by visual characteristics and morphology in the field. Unusual and less familiar plant species were photographed during the field survey and identified in the laboratory using taxonomical guides. Wildlife detections were made through observation of scat, trails, tracks, burrows, nests, and/or visual and aural observation. In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of onsite plant communities, and presence of potential jurisdictional drainage and/or wetland features were noted.

Special attention was given to special-status habitats and/or undeveloped areas, which have higher potentials to support special-status plant and wildlife species. Areas providing suitable habitat for burrowing owl were closely surveyed for signs of presence during the field survey. Methods to detect the presence of burrowing owls included direct observation, aural detection, and signs of presence including pellets, whitewash, feathers, or prey remains.

No limitations significantly affected the results and conclusions given herein. Surveys were conducted during the appropriate season to observe the target species, in good weather conditions, by a qualified biologist who followed all pertinent protocols.

2.3 SOILS SERIES ASSESSMENT

On-site and adjoining soils were researched prior to the field survey using the USDA NRCS Soil Survey for Western Riverside Area, California. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes that the project site has undergone.

2.4 PLANT COMMUNITIES

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were delineated on an aerial photograph, classified in accordance with those described in the MSHCP, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community in acres

2.5 PLANTS

Common plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less-familiar plants were

photographed in the field and identified in the laboratory using taxonomic guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

2.6 WILDLIFE

Wildlife species detected during field surveys by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides were used to assist with identification of wildlife species during the survey included The Sibley Field Guide to the Birds of Western North America (Sibley 2003), A Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species are fairly well standardized, scientific names are provided immediately following common names in this report (first reference only).

2.7 JURISDICTIONAL DRAINAGES AND WETLANDS

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may fall under the jurisdiction of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory jurisdiction. In addition, ELMT reviewed jurisdictional waters information through examining historical aerial photographs to gain an understanding of the impact of land-use on natural drainage patterns in the area. The USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program "My Waters" data layers were also reviewed to determine whether any hydrologic features and wetland areas have been documented on or within the vicinity of the project site.

Section 3 Existing Conditions

3.1 LOCAL CLIMATE

The City of Perris features a somewhat cooler version of a Mediterranean climate, or semi-arid climate, with warm, sunny, dry summers and cool, rainy, mild winters. Relative to other areas in Southern California, winters are colder with frost and with chilly to cold morning temperatures common. Climatological data obtained for the City of Riverside indicates the annual precipitation averages 10.4 inches per year. Almost all of the precipitation in the form of rain occurs in the months between November and April, with hardly any occurring between the months of May and October. The wettest months are February and November, with monthly average totals precipitation of 1.93 and 1.97 inches, respectively, and the driest months are June and August, both with monthly average total precipitation of 0.06 inches. The average maximum and minimum temperatures are 78.7 and 45.3 degrees Fahrenheit (° F), respectively, with August (monthly average high 96.9° F) being the hottest month and January (monthly average low 34.7° F) being the coldest. The temperature during the site visit was in the low-70s ° F with clear skies and calm winds.

3.2 TOPOGRAPHY AND SOILS

The project site and adjacent roadway improvement areas are relatively flat and located at elevation of approximately 1,479 to 1,495 feet above mean sea level. Based on the NRCS USDA Web Soil Survey, the project site is underlain by the following soil units: Ramona sandy loam (0 to 2 percent slopes, MLRA 19) and Ramona sandy loam (0 to 2 percent slopes, severely eroded). Refer to Exhibit 4, *Soils*. Soils on-site have been mechanically disturbed and heavily compacted from historic land uses (i.e., agricultural activities, grading activities, weed abatement, and surrounding development).

3.3 SURROUNDING LAND USES

The project site occurs in a primarily developed area that supports some undeveloped parcels. Historically, the area was dominated by agricultural land uses. The project site is bound by Ramona Expressway to the north, Webster Avenue to the east, Val Verde High School, Val Verde Academy, and Val Verde Regional Learning Center to the south, and Nevada Avenue to the west. Beyond these immediate land uses, the site is further surrounded by undeveloped, vacant land and industrial and commercial development to the north, east, and south, and undeveloped, vacant land and Interstate 215 to the west.

SWC RAMONA EXPRESSWAY AND WEBSTER
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

ELMT CONSULTING

0 125 250 500 Feet

Soils

Source: ESRI Aerial Imagery, NRCS Soil Survey Geographic Database, Riverside County

Exhibit 4

Section 4 Discussion

4.1 SITE CONDITIONS

The project site consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances associated with historic agricultural activities, surrounding development, and routine weed abatement/disking activities. Historic aerials show these activities have been ongoing since at least 1966. Prior to conducting the field investigation, aerial photography was reviewed to document existing site conditions and document the changes to the project site and surrounding area.

1966 - 1967: The project site and surrounding areas support agricultural fields. The site is bounded to the north and east by Ramona Expressway and Webster Avenue, respectively, and by farmland to the south and west. A rural farmhouse is present at the southeast corner of the site with associated ornamental trees. Ornamental trees are also present along the eastern boundary. No drainages are present on-site. Ramona Expressway runs exclusively east-to-west in proximity to the site and terminates at Interstate 215.

1967 - 1978: Some ornamental trees in the southeast corner have been removed to establish a driveway to the farmhouse from Webster Avenue. No drainages are present on-site.

1978 - 1994: Improvements are made to Ramona Expressway and Interstate 215 in proximity to the site. Such improvements include: a redirection and continuation of Ramona Expressway to the southwest, the installation of dedicated on-ramps and off-ramps, the installation of culverts beneath Interstate 215, and the installation of a roadside ditch adjacent to the northern boundary of the site. In addition to these improvements, Nevada Avenue is established along the western boundary of the site, formally separating the site from adjacent land. A roadside ditch is fed from the west by a culvert beneath Nevada Avenue, conveying storm flows from beyond Interstate 215, and does not bear a connection to on-site features. A swale feature appears on-site and within the adjacent farmland to the west, originating at a culvert beneath Interstate 215 until it is transected by Nevada Avenue. Off-site portions of the feature are more pronounced than on-site portions. No features are present to suggest water exits the site.

1994 - 1997: The on-site swale feature that entered the site from the adjacent farmland to the west has bifurcated at Nevada Avenue into northern and southern features. The northern feature traverses the site eastward before exhibiting sheet flow to the northwest and the southern feature traverses the site to the southeast before exhibiting sheet flow towards the southeast corner. In addition, a new swale was observed along the eastern boundary of the site along Webster Avenue. The feature along Webster Avenue collects flows from on-site features and infiltrates/dissipates onsite. On-site agricultural activities cease.

1997 - 2002: Routine weed abatement activities (i.e., disking) begin. The on-site farmhouse is removed; associated ornamental trees remain.

2002 - 2003: Development on the adjacent parcel to the south has begun. A culvert is installed beneath Nevada Drive at the off-site drainage to the south, which has been trenched in association with adjacent development.

2003 - 2005: Development on the adjacent parcel to the south is complete. The southern limits of the drainage along Webster Avenue move northwards and the southern Nevada Avenue drainage no longer reaches the southeast corner of the site, but instead moves eastward towards Webster Avenue.

2005 - 2009: Utility infrastructure (i.e., electrical boxes and utility vaults) is installed along the eastern boundary near the northeast corner. Storm drains are installed within the paved sidewalk between Webster Avenue, the eastern boundary of the site. Ornamental trees along the eastern boundary of the site are removed in association with improvements made to Webster Avenue. Infrastructure improvements along Webster Avenue to not occur within the boundaries of the site.

2009 - present: No changes.

The disturbances outlined above have eliminated the natural plant communities that historically occurred on the project site and surrounding area. As a result, no native plant communities occur on-site, nor will any native plant communities be impacted from implementation of the proposed project. Refer to Appendix A, *Site Photographs*, for representative site photographs of the project site.

4.2 VEGETATION

No native plant communities occur within the boundary of the project site or adjacent roadway improvement areas. The project site supports one (1) plant community: non-native grassland. In addition, the site supports two (2) land cover types that would be classified as disturbed and developed. Refer to Exhibit 5, *Vegetation*. The vegetation community and land cover type are described in further detail below.

4.2.1 Non-Native Grassland

The majority of the project site supports a non-native grassland that occurs in varying densities throughout the site, except the southwest and southeast corners and portions of the site perimeter. This plant community is dominated by non-native grasses such as oats (*Avena* spp.) and bromes (*Bromus* spp.) and supports primarily weedy/early successional species. Common plant species observed in the non-native grassland plant community include red-stemmed filaree (*Erodium cicutarum*), common mustard (*Brassica rapa*), Mediterranean mustard (*Hirschfeldia incana*), stinknet (*Oncosiphon pilulifer*), wild radish (*Raphanus sativa*), fiddleneck (*Amsinckia* sp.), annual lupine (*Lupinus bicolor*), and Mexican palo verde (*Parkinsonia aculeata*). Non-native grasses occur in the highest densities in the southern portion of the site, where they are nearly exclusive along a swale.

4.2.2 Disturbed

Disturbed portions of the project site occur primarily in the southeast and southwest corners of the site and along portions of the site perimeter. These areas support the same species as the non-native grassland plant community, but dominance is shared among species such as Mediterranean mustard and red-stemmed filaree. In addition, the disturbed area in the southeast corner of the site supports a small grove of trees made up of Peruvian pepper (*Schinus molle*) and Mexican palo verde.

4.2.3 Disturbed

Disturbed areas primarily include paved site-adjacent roadways, where improvements and utility installation will occur along Ramona Expressway. Disturbed areas include paved, impervious surfaces.

4.3 WILDLIFE

Plant communities provide foraging habitat, nesting and denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed during the field survey or that are expected to occur within the project site. The discussion is to be used as a general reference and is limited by the season, time of day, and weather condition in which the field survey was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation.

4.3.1 Fish

No fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on the project site or off-site improvement areas. Therefore, no fish are expected to occur and are presumed absent from the project site.

4.3.2 Amphibians

No amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species were observed on or within the vicinity of the project site or off-site improvement areas. Therefore, no amphibians are expected to occur and are presumed absent from the project site or in the off-site improvement areas.

4.3.3 Reptiles

The project site and off-site improvement areas provide a limited amount of habitat for a few reptile species adapted to a high degree of human disturbance associated with the on-site weed abatement activities. The only reptilian species observed during the field investigation was Great Basin fence lizard (*Sceloporus occidentalis longipes*). Other common reptilian species expected to occur on-site include common side-blotched lizard (*Uta stansburiana elegans*) and southern alligator lizard (*Elgaria multicarinata*). Due to the high level of anthropogenic disturbances onsite, and surrounding development, no special-status reptilian species are expected to occur on-site.

4.3.4 Birds

The project site and off-site improvement areas provide minimal foraging habitat for bird species adapted to a high degree of human disturbance. Bird species detected during the field survey include lark sparrow (*Chondestes grammacus*), red-tailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), and bushtit (*Psaltriparus minimus*).

4.3.5 Mammals

The project site and off-site improvement areas provide minimal foraging and denning potential for mammalian species adapted to a high degree of human disturbance. The only mammalian species observed during the field investigation were gopher (*Thomomys* sp.) and desert cottontail (*Sylvilagus audubonii*). Other common mammalian species expected to occur include coyote (*Canis latrans*), opossum (*Didelphis virginiana*), and raccoon (*Procyon lotor*). No bat species are expected to occur due to a lack of suitable roosting habitat (i.e., suitable trees, crevices, abandoned structures) within and surrounding the project site.

4.4 NESTING BIRDS

No active nests or birds displaying nesting behavior were observed during the field survey, which was conducted during breeding season. Although heavily disturbed, the project site has the potential to provide minimal foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that are adapted to urban environments. Additionally, the disturbed habitats have to potential to support birds that nest on the open ground such as killdeer (*Charadrius vociferus*).

A pre-construction nesting bird clearance survey shall be conducted for active avian nests of species protected by the MBTA and FGC per PVCCSP EIR mitigation measure MM BIO 1. With implementation of PVCCSP EIR mitigation measure MM BIO 1 presented in Section 7, impacts would be less than significant, and no additional mitigation is required.

4.5 WILDLIFE CORRIDORS AND LINKAGES

Habitat linkages provide links between larger undeveloped habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The project site and off-site improvement areas have not been identified as occurring in a wildlife corridor or linkage. The proposed project will be confined to existing areas that have been heavily disturbed and are isolated from regional wildlife corridors and linkages as there are no riparian corridors, creeks, or useful patches of steppingstone habitat (natural areas) within or connecting the site to a recognized wildlife

corridor or linkage. As such, implementation of the proposed project is not expected to impact wildlife movement opportunities and no impacts to wildlife corridors or linkages are expected to occur.

4.6 STATE AND FEDERAL JURISDICTIONAL AREAS

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge and/or fill materials into "waters of the United States" pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act and the CDFW regulates alterations to streambed and associated plant communities pursuant to Section 1602 of the California Fish and Game Code.

As noted above in the historic aerial review, between 1978 and 1994, improvements were made to Ramona Expressway and Interstate 215. Culverts were installed under Interstate 215 which diverted water runoff from the area west of Interstate 215 and from Interstate 215 and created a swale on the Project site. All of the water that reached the Project site infiltrated/dissipated onsite. No features are present to suggest water exited the site. Then between 1994 and 1997 the onsite swale that entered the Project site from the adjacent farmland to the west bifurcateded at Nevada Avenue into two features (northern and southern). The northern feature traverses the site eastward before exhibiting sheet flow to the northeast; and the southern feature traverses the site to the southeast before exhibiting sheet flow towards the southeast corner. In addition, a new swale was observed along the eastern boundary of the Project site along Webster Avenue. The feature along Webster Avenue collects flows from on-site features and infiltrates/dissipates onsite. From 2003 to 2005, the southern limits of the drainage along Webster Avenue move northwards and the southern Nevada Avenue drainage no longer reaches the southeast corner of the Project site, but instead moves eastward towards Webster Avenue. Then between 2005 and 2009 storm drains are installed along the eastern boundary of the Project site adjacent to Webster Avenue, connecting into the storm drain system.

Based on the results of the Delineation of State and Federal Jurisdictional Waters Report (ELMT 2021), one (1) unnamed ephemeral water feature was observed on the project site during the field investigation that historically bifurcated into two channels (northern and southern). This feature originates at Nevada Road in the middle of the western boundary of the site. West of Nevada Road, outside of the project footprint an off-site feature conveys flows from a culvert beneath Interstate 215 that was created when Interstate 215 was installed. Culverts were installed under Interstate 215 which diverted water runoff from the area west of Interstate 215 and from Interstate 215 and created a swale on the project site. Once onsite, this feature traverses the site from west to east towards the eastern boundary of the project site, where the water infiltrates/dissipates onsite. This feature only conveys flows from direct precipitation during storm events. No surface water was present during the field investigation, and no riparian vegetation was observed onsite during the field investigation. A review of historic aerial imagery and topographic maps show that the culverts under Interstate 215 and the resulting drainage feature offsite are manmade features.

This ephemeral swale historically bifurcated, creating two features (a northern feature and a southern feature). The southern feature (the aforementioned swale) continues to persist onsite, while the northern feature has been heavily impacted from mowing activities and weed abatement and water no longer flows into the northern feature.

It was preliminarily determined that water dissipation on the eastern boundary of the project site has an insubstantial or speculative effect on the chemical, physical or biological significant nexus to the downstream waters. Storm flows are not expected to flow across the project site during most storm events. There are no existing blueline streams traversing the project site, and the majority of the water flows from the offsite feature do not leave the project site. Plant species associated with this area is consistent with the vegetation found on the majority of the project site.

It is ELMT's professional opinion that the onsite feature would not qualify as jurisdictional by the Corps, Regional Board, or CDFW since it is a manmade feature, does not provide any habitat for wildlife, and is isolated. Even though the onsite feature dissipates/infiltrates onsite, does not present a surface hydrologic connection to any downstream waters, does not provide fish and wildlife resources, or beneficial uses, after initial discussions with the Regional Board, the Regional Board is likely to assert jurisdiction over the onsite feature. As a result, CDFW will also assert jurisdiction over the feature and impacts will likely require a Regional Board Report of Waste Discharge and CDFW Section 1602 Lake or Streambed Alteration Agreement.

4.7 SPECIAL-STATUS BIOLOGICAL RESOURCES

A records search was conducted reported locations of special-status plant and wildlife species as well as natural communities of special concern in the *Steele Peak*, *Riverside East*, *Sunnymead*, and *Perris* USGS 7.5-minute quadrangles. These four quadrangles were used due to the proximity of the site to quadrangle boundaries and regional topography. Special-status plant and wildlife species were evaluated for their potential to occur within the project site and adjacent roadway improvement areas based on habitat requirements, availability, and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity are provided in Appendix B, *Potentially Occurring Special-Status Biological Resources*.

4.7.1 Special-Status Plants

According to the CNDDB and CNPS, thirty-five (35) special-status plant species have been recorded in the *Steele Peak*, *Riverside East*, *Sunnymead*, and *Perris* quadrangles (refer to Appendix B). No special-status plant species were observed on the project site or off-site improvements areas during the field investigation. The project site and surrounding area have been subject to decades of anthropogenic disturbances which have removed native plant communities that historically occurred. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that site does not have potential to support any of the special-status plant species known to occur in the vicinity of the site and all are presumed absent due to the lack of native habitats and routine on-site disturbances.

4.7.2 Special-Status Wildlife

According to the CNDDB, eighty-seven (87) special-status wildlife species have been reported in the *Steele Peak*, *Riverside East*, *Sunnymead*, and *Perris* quadrangles (refer to Appendix B). No-special-status wildlife species were observed on the project site or off-site improvements areas during the field investigation. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the project site and off-site improvement areas have a moderate potential to support

foraging habitat for Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), and California horned lark (*Eremophila alpestris actia*); and a low potential to support foraging habitat for great egret (*Ardea alba*), great blue heron (*Arden herodias*), burrowing owl, and northern harrier (*Circus hudsonius*). All remaining special-status wildlife species were presumed to be absent from the project site and off-site improvement areas due to the lack of native habitat, routine on-site disturbances, and isolation of the site from suitable habitats.

To ensure no impacts to the aforementioned species do not occur from implementation of the proposed project, a pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance. With implementation of the pre-construction nesting bird clearance survey, impacts to the aforementioned species will be less than significant and no mitigation will be required.

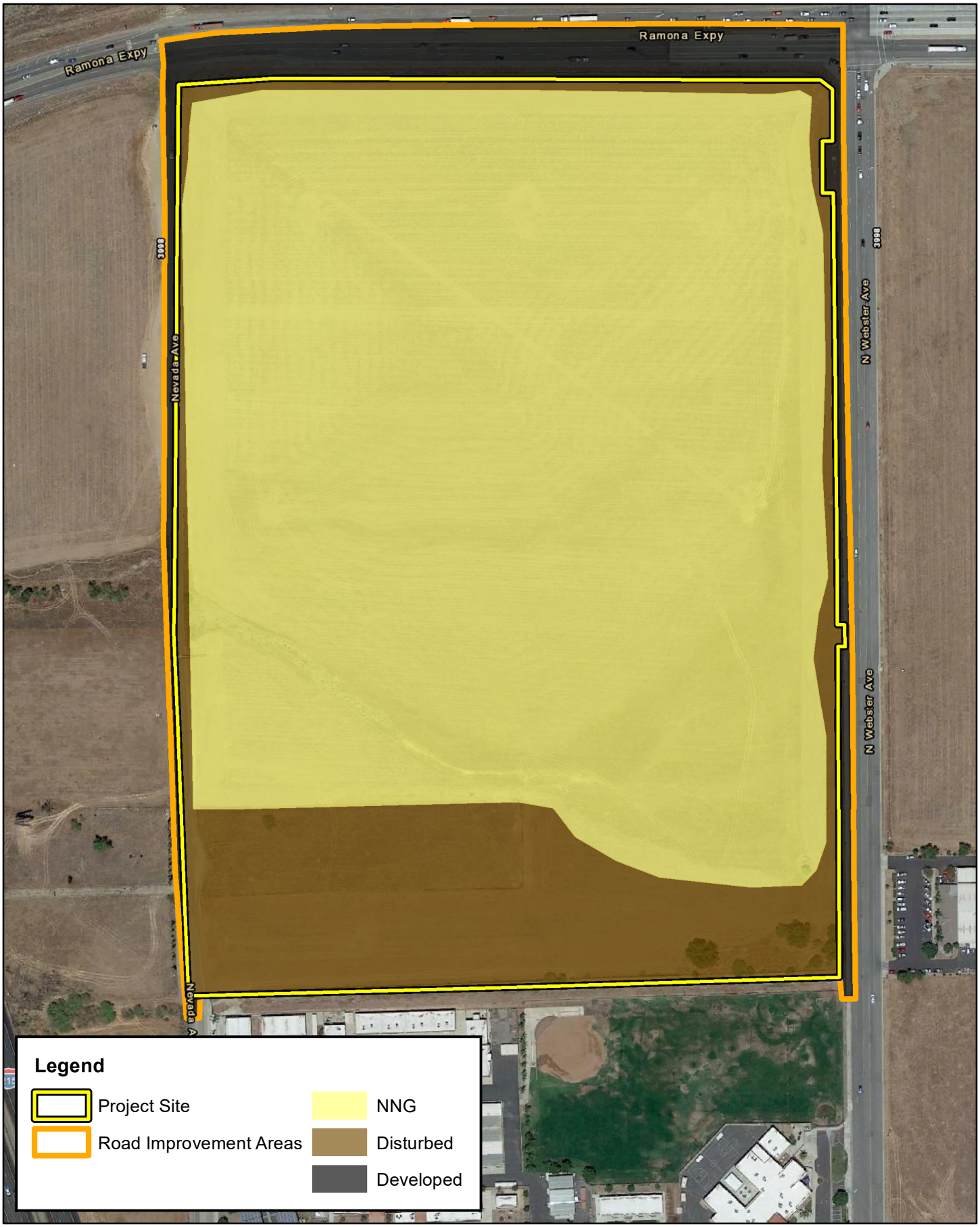
4.7.3 Special-Status Plant Communities

The CNDDB lists three (3) special-status habitats as being identified within the *Steele Peak*, *Riverside East*, *Sunnymead*, and *Perris* quadrangles: Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, and Southern Sycamore Alder Riparian Woodland, which do not occur on the project site or off-site improvement areas. No CDFW special-status plant communities occur within the boundaries of the project site or off-site improvement areas.

4.8 CRITICAL HABITAT

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the USFWS regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site and off-site improvement areas are not located with federally designated Critical Habitat (Exhibit 6, *Critical Habitat*). The closest designated Critical Habitat is located approximately 4.62 miles southeast of the site for spreading navarretia (*Navarretia fossallis*) and approximately 4.95 miles east of the site for thread-leaved brodiaea (*Brodiaea filifolia*) along the San Jacinto River. Therefore, the loss or adverse modification of Critical Habitat will not occur as a result of the proposed project and consultation with the USFWS will not be required for impacts to Critical Habitat.



SWC RAMONA EXPRESSWAY AND WEBSTER
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

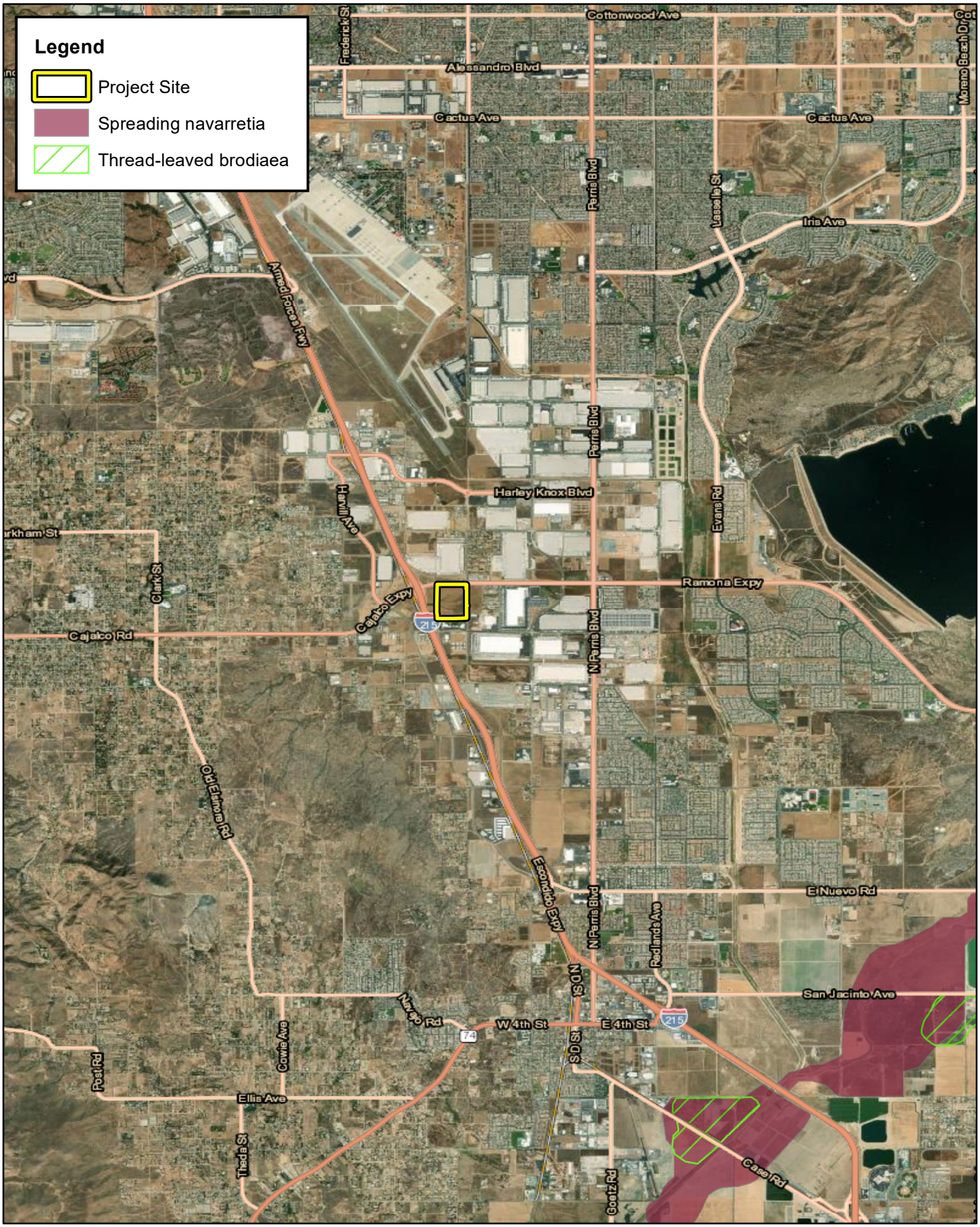
Vegetation

ELMT CONSULTING

0 125 250 500 Feet

Source: ESRI Aerial Imagery, Riverside County

Exhibit 5



SWC RAMONA EXPRESSWAY AND WEBSTER
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

Criitcal Habitat

ELMT CONSULTING

Source:ESRI Aerial Imagery, USFWS Critical Habitat, Riverside County

Exhibit 6

Section 5 MSHCP Consistency Analysis

The project site is located in the Mead Valley Area Plan of the MSHCP but is not located within any Criteria Cells or designated conservation areas (Exhibit 7, *MSHCP Conservation Areas*). Additionally, the project site is not located within any of the designated species survey areas as identified by the MSHCP:

- Amphibian — Not in an amphibian survey area
- Owls — Not in a Burrowing Owl survey area
- Criteria Area Species — Not in a criteria area species survey area
- Mammals — Not in a mammal survey area
- Narrow Endemic Plants — Not in a narrow endemic plant survey area

Since the City of Perris is a permittee under the MSHCP and, while the project is not specifically identified as a Covered Activity under Section 7.1, *Covered Activities Outside Criteria Area and PQP Lands*, of the MSHCP, public and private development that are outside of Criteria Areas and Public/Quasi-Public (PQP)[3] Lands are permitted under the MSHCP, subject to consistency with MSHCP policies that apply to area outside of Criteria Areas. As such, to achieve coverage, the project must be consistent with the following policies of the MSHCP:

- The policies for the protection of species associated with Riparian/Riverine areas and vernal pools as set forth in Section 6.1.2 of the MSHCP;
- The policies for the protection of Narrow Endemic Plant Species as set forth in Section 6.1.3;
- The Urban/Wildlands Interface Guidelines as set forth in Section 6.1.4; and
- The requirements for conducting additional surveys as set forth in Section 6.3.2

5.1 RIPARIAN/RIVERINE AREAS AND VERNAL POOLS

5.1.1 Riparian/Riverine Areas

As defined under Section 6.1.2 of the MSHCP, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools,* riparian/riverine areas are areas dominated by trees, shrubs, persistent emergent plants, or emergent mosses and lichens which occur close to or are dependent upon nearby freshwater, or areas with freshwater flowing during all or a portion of the year. Conservation of these areas is intended to protect habitat that is essential to a number of listed or special-status water-dependent fish, amphibian, avian, and plant species. Any alteration or loss of riparian/riverine habitat from development of a project will require the preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) analysis to ensure the replacement of any lost functions and values of habitats in regards to the listed species. This assessment is independent from considerations given to waters of the United States and

[3] PQP Lands are a subset of MSHCP Conservation Area lands totaling approximately 347,000 acres of lands known to be in public/private ownership and expected to be managed for open space value and/or in a manner that contributes to the Conservation of Covered Species (including lands contained in existing reserves). The acreage of PQP Lands has been accounted for in the MSHCP tracking process for assembling the Conservation Area.

waters of the State under the CWA, the California Porter-Cologne Water Quality Control Act, and CDFW jurisdictional streambed under the California Fish and Game Code.

Since the onsite water feature was artificially created/manmade, did not replace an existing blueline stream or other water feature, and is not dominated by trees, shrubs, persistent emergent plants, or emergent mosses and lichens it does not meet the definition of riparian/riverine habitat under Section 6.1.2 of the MSHCP. However, since the Regional Board stated they would assert jurisdiction over the onsite feature during initial conversations, it is expected that the RCA will also assert jurisdiction over the feature under Section 6.1.2 of the MSHCP. A DBESP has been prepared under separate cover to address the loss of riparian/riverine habitat.

5.1.2 Vernal Pools

Vernal pools are seasonally inundated, ponded areas that only form in regions where specialized soil and climatic conditions exist. During fall and winter rains typical of Mediterranean climates, water collects in shallow depressions where downward percolation of water is prevented by the presence of a hard pan or clay pan layer (duripan) below the soil surface. Later in the spring when rains decrease and the weather warms, the water evaporates and the pools generally disappear by May. The shallow depressions remain relatively dry until late fall and early winter with the advent of greater precipitation and cooler temperatures. Vernal pools provide unusual "flood and drought" habitat conditions to which certain plant and wildlife species have specifically adapted as well as invertebrate species such as fairy shrimp.

One of the factors for determining the suitability of the habitat for fairy shrimp would be demonstrable evidence of seasonal ponding in an area of topographic depression that is not subject to flowing waters. These astatic pools are typically characterized as vernal pools. More specifically, vernal pools are seasonal wetlands that occur in depression areas without a continual source of water. They have wetland indicators of all 3 parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetland indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season. The determination that an area exhibits vernal pool characteristics and the definition of the watershed supporting vernal pool hydrology is made on a case-by-case basis. Such determinations should consider the length of time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. The seasonal hydrology of vernal pools provides for a unique environment, which supports plants and invertebrates specifically adapted to a regime of winter inundation, followed by an extended period when the pool soils are dry.

The MSHCP lists two general classes of soils known to be associated with special-status plant species; clay soils and Traver-Domino Willow association soils. The specific clay soils known to be associated with special-status species within the MSHCP plan area include Bosanko, Auld, Altamont, and Porterville series soils, whereas Traver-Domino Willows association includes saline-alkali soils largely located along floodplain areas of the San Jacinto River and Salt Creek. Without the appropriate soils to create the impermeable restrictive layer, none of the special-status species associated with vernal pools can occur on the project site. None of these soils occur on the project site.

A review of recent and historic aerial photographs (1966-2018) of the project site did not provide visual evidence of an astatic or vernal pool conditions within the project site or off-site improvement areas. No ponding was observed during the field investigation, further supporting the fact that the drainage patterns currently occurring on the project site do not follow hydrologic regime needed for vernal pools. From this review of historic aerial photographs and observations during the field investigations, it can be concluded that there is no indication of vernal pools or suitable fairy shrimp habitat occurring within the proposed project site or off-site improvements areas.

Below is a summary of the fairy shrimp known to occur in Western Riverside County and their potential to occur onsite.

Riverside fairy shrimp (*Streptocephalus woottoni*)

Riverside fairy shrimp are restricted to deep seasonal vernal pools, vernal pool like ephemeral ponds, and stock ponds and other human modified depressions The prefer warm-water pools that have low to moderate dissolved solids, are less predictable, and remained filled for extended periods of time. Basins that support Riverside fairy shrimp are typically dry a portion of the year, but usually are filled by late fall, winter or spring rains, and may persist through May. Know habitat occur within annual grasslands, which may be interspersed through chaparral or coastal sage scrub vegetation. In Riverside County, Riverside fairy shrimp have been found in pools formed over the following soils: Murrieta stony clay loams, Las Posas series, Wyman clay loam, and Willows soils.

The project site is underlain by Ramona sandy loam (0 to 2 percent slopes, MLRA 19) and Ramona sandy loam (0 to 2 percent slopes, severely eroded). The aforementioned soils that Riverside fairy shrimp are typically associated within Riverside County do not occur onsite. Soils onsite have been mechanically disturbed and heavily compacted from historic land uses (i.e., agricultural, grading activities, and weed abatement activities). Due to the lack of soils associated with Riverside fairy shrimp, onsite anthropogenic disturbances, and no indicators of water ponding or astatic water conditions, the site was determined not to provide suitable habitat for Riverside fairy shrimp.

Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*)

Santa Rosa Plateau fairy shrimp are restricted to seasonal southern basalt flow vernal pools with cool clear to milky waters that are moderately predictable and remain filled for extended periods of time and are known only from vernal pool on the Santa Rosa Plateau. Since the project site is not located within the known area where Santa Rosa Plateau fairy shrimp have been documented, and no indicators of water ponding or astatic water conditions, the site was determined not to provide suitable habitat for Santa Rosa Plateau fairy shrimp.

Vernal pool fairy shrimp (*Branchinecta lynchi*)

Vernal pool fairy shrimp are restricted to seasonal vernal pools (vernal pools and alkali vernal pools) and prefer cool-water pools that have low to moderate dissolved solids, are unpredictable, and often short lived. The vernal pool fairy shrimp is known from four locations in Western Riverside County MSHCP Plan Area: Skunk Hollow, the Santa Rosa Plateau, Salt Creek, and the vicinity of the Pechanga Indian Reservation. Since the project site is not located within or adjacent to the four know populations, and no indicators of

water ponding or astatic water conditions, the site was determined not to provide suitable habitat for vernal pool fairy shrimp.

5.2 NARROW ENDEMIC PLANT SPECIES

Section 6.1.3 of the MSHCP, *Protection of Narrow Endemic Plant Species*, states that the MSHCP database does not provide sufficient detail to determine the extent of the presence/distribution of Narrow Endemic Plant Species within the MSHCP Plan Area. Additional surveys may be needed to gather information to determine the presence/absence of these species to ensure that appropriate conservation of these species occurs. Based on the RCA MSHCP Information Map query and review of the MSHCP, it was determined that the project site is not located within the designated survey area for Narrow Endemic Plant Species as depicted in Figure 6-1 within Section 6.1.3 of the MSHCP. Further, based on the results of the field investigation, the project site does not provide suitable habitat for MSHCP listed Narrow Endemic Plant Species.

5.3 URBAN/WILDLANDS INTERFACE GUIDELINES

Section 6.1.4 of the MSHCP, *Guidelines Pertaining to Urban/Wildlands Interface,* is intended to address indirect effects associated with development in proximity to MSHCP Conservation Areas. The Urban/Wildlife Interface Guidelines are intended to ensure that indirect project-related impacts to the MSHCP Conservation Area, including drainage, toxics, lighting, noise, invasive plant species, barriers, and grading/land development, are avoided or minimized. The project site is not located within or in close proximity of any Criteria Cells or designated conservation areas. Therefore, the proposed project will not need to comply with the Urban/Wildlands Interface Guidelines.

5.4 ADDITIONAL MSHCP CONSIDERATIONS

Section 6.3.2 of the MSHCP, *Additional Survey Needs and Procedures*, states that additional surveys may be needed for certain species in order to achieve coverage for these species. Based on the RCA MSHCP Information Map query and review of the MSHCP, it was determined that the project site is not located within any designated survey area areas (i.e., burrowing owl or Criteria Area Plant Species) as depicted in Figure 6-4 within Section 6.3.2 of the MSHCP.

Even though the site is not located within a designated burrowing owl survey area, ELMT conducted a survey for burrowing owls based on regional significance.

Burrowing Owl

Burrowing owl is currently designated as a California Species of Special Concern. The burrowing owl is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with level to gently-sloping areas characterized by open vegetation and bare ground. The western burrowing owl (*A.c. hypugaea*), which occurs throughout the western United States including California, rarely digs its own burrows and is instead dependent upon the presence of burrowing mammals (i.e., California ground squirrels, coyotes, and badgers) whose burrows

are often used for roosting and nesting. The presence or absence of colonial mammal burrows is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. They also require low growth or open vegetation allowing line-of-sight observation of the surrounding habitat to forage and watch for predators. In California, the burrowing owl breeding season extends from the beginning of February through the end of August.

Under the MSHCP burrowing owl is considered an adequately conserved covered species that may still require focused surveys in certain areas as designated in Figure 6-4 of the MSHCP. The project site is not located within a MSHCP designated burrowing owl survey area. However, a habitat suitability assessment was conducted. In accordance with the MSHCP Burrowing Owl Survey Instructions (2006), survey protocol consists of two steps, Step I – Habitat Assessment and Step II – Locating Burrows and Burrowing Owls. The following section describes the methodology followed during the burrowing owl habitat assessment conducted for this project.

- Step I – Habitat Assessment: Step 1 of the MSHCP habitat assessment for burrowing owl consists of a walking survey to determine if suitable habitat is present onsite. The habitat assessment was conducted on April 20, 2021. Upon arrival at the project site, and prior to initiating the assessment survey, binoculars were used to scan all suitable habitats on and adjacent to the property, including perch locations, to establish owl presence.

  All suitable areas of the project site were surveyed on foot by walking slowly and methodically while recording/mapping areas that may represent suitable owl habitat onsite. Primary indicators of suitable burrowing owl habitat in western Riverside County include, but are not limited to, native and non-native grassland, interstitial grassland within shrub lands, shrub lands with low density shrub cover, golf courses, drainage ditches, earthen berms, unpaved airfields, pastureland, dairies, fallow fields, and agricultural use areas. Burrowing owls typically use burrows made by fossorial mammals, but they often utilize man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, wood debris piles, openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or in close proximity to man-made structures.

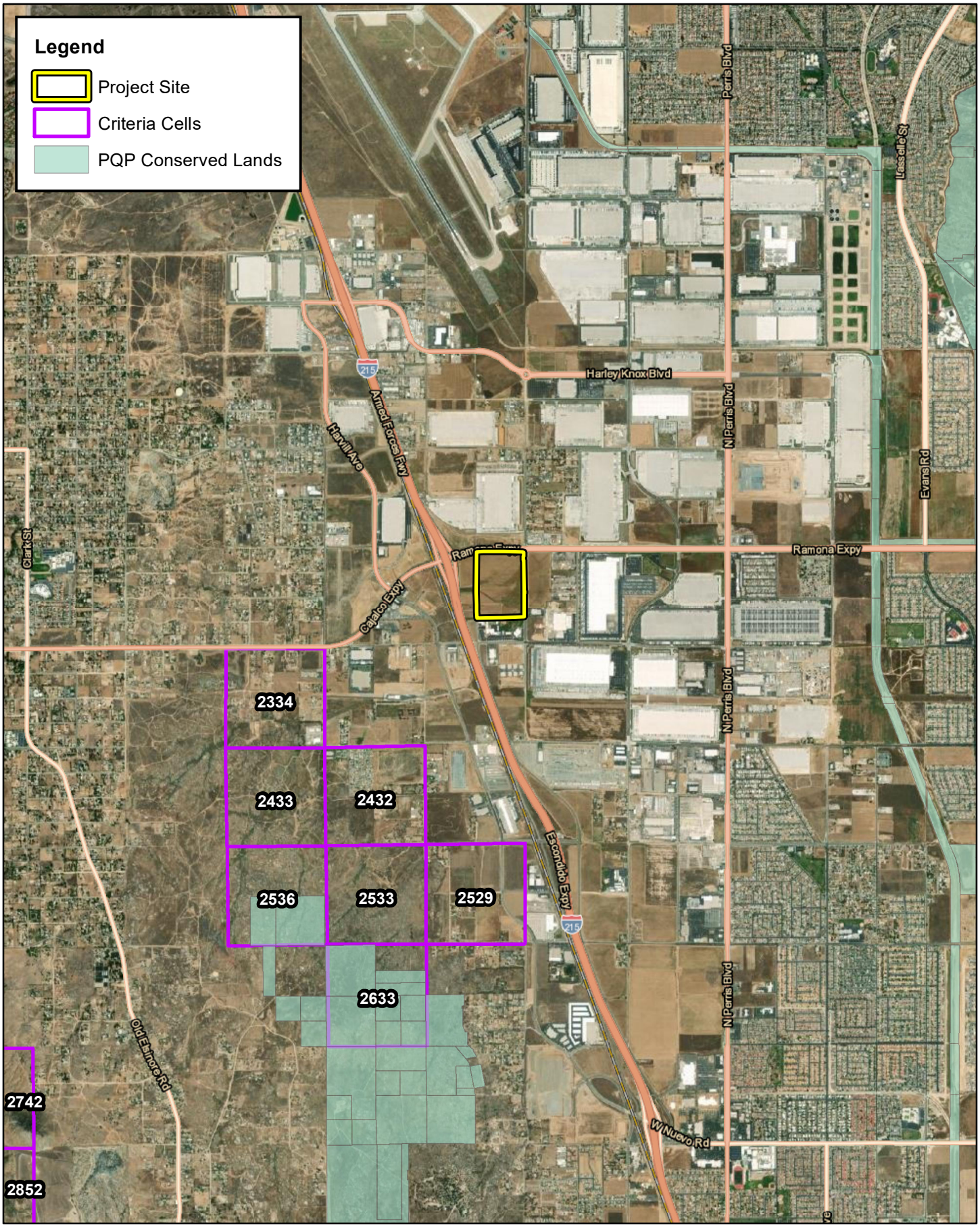
  According to the MSHCP guidelines, if suitable habitat is present, the biologist should also walk the perimeter of the property, which consists of a 150-meter (approximately 500 feet) buffer zone around the project site boundary. If permission to access the buffer area cannot be obtained, the biologist shall not trespass, but visually inspect adjacent habitats with binoculars. In addition to surveying the entire Project Site all bordering natural habitats located immediately adjacent to the Project Site were assessed. Results from the habitat assessment indicate that suitable resources (i.e., low growing vegetation that provides line of site opportunities) for burrowing owl are present throughout the project site. Accordingly, if suitable habitat is documented onsite or within adjacent habitats, both Step II, focused burrow surveys and the 30-day preconstruction surveys are required in order to comply with the MSHCP guidelines.

- Step II – Locating Burrows and Burrowing Owls: Concurrent with the initial habitat assessment, a detailed focused burrow survey was conducted and included documentation of appropriately sized

natural burrows or suitable man-made structures that may be utilized by burrowing owl - as part of the MSHCP protocol, which is described below under Part A, Focused Burrow Survey. The MSHCP protocol indicates that no more than 100 acres should be surveyed per day/per biologist.

- Part A – Focused Burrow Survey: A systematic survey for burrows, including burrowing owl sign, was conducted by walking across all suitable habitats mapped within the project site on April 20, 2021. Pedestrian survey transects were spaced to allow 100% visual coverage of the ground surface. The distances between transect centerlines were no more than 30 meters (approximately 100 feet) apart, and owing to the terrain, often much smaller. Transect routes were also adjusted to account for topography and in general ground surface visibility. Areas providing potential habitat for burrowing owls were surveyed for suitable burrows, consisting of natural and non-natural substrates in areas with low, open vegetation. All burrows encountered were examined for shape, scat, pellets, white-wash, feathers, tracks, and prey remains. Suitable burrows/sites, including rock piles and non-natural substrates, were thoroughly examined for signs of presence.

Despite a systematic search of the project site, no burrowing owls or sign (i.e., pellets, feathers, castings, or whitewash) were observed during the field investigation. Portions of the project site are vegetated with a variety of low-growing plant species that allow for minimal line-of-sight observation favored by burrowing owls. However, no small mammal burrows that have the potential to provide suitable burrowing owl nesting habitat (>4 inches in diameter) were observed within the boundaries of the project site or off-site improvement areas. Additionally, the site supports and is surrounded by tall trees and buildings that provide perching opportunities for large raptors (i.e., red-tailed hawk) that can prey on burrowing owls. Being that no appropriate burrows or burrowing owl habitat was found, Part B-Focused Burrowing Owl surveys are not required. Therefore, the project would be consistent with Section 6.3.2 of the MSHCP.



SWC RAMONA EXPRESSWAY AND WEBSTER
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

MSHCP Criteria Area

ELMT CONSULTING

0 1,250 2,500 5,000 Feet

Source: ESRI Aerial Imagery, Riverside County

Exhibit 7

Section 6 Stephen's Kangaroo Rat Habitat Conservation Plan

Separate from the consistency review against the policies of the MSHCP, Riverside County established a boundary in 1996 for protecting the Stephens' kangaroo rat (*Dipodomys stephensi*), a federally endangered and state threatened species. The Stephens' kangaroo rat is protected under the Stephens' Kangaroo Rat Habitat Conservation Plan (County Ordinance No. 663.10; SKR HCP). As described in the MSHCP Implementation Agreement, a Section 10(a) Permit, and California Fish and Game Code Section 2081 Management Authorization were issued to the Riverside County Habitat Conservation Agency (RCHCA) for the Long-Term SKR HCP and was approved by the USFWS and CDFW in August 1990 (RCHCA 1996). Relevant terms of the SKR HCP have been incorporated into the MSHCP and its Implementation Agreement. The SKR HCP will continue to be implemented as a separate HCP; however, to provide the greatest conservation for the largest number of Covered Species, the Core Reserves established by the SKR HCP are managed as part of the MSHCP Conservation Area consistent with the SKR HCP. Actions shall not be taken as part of the implementation of the SKR HCP that will significantly affect other Covered Species. Take of Stephens' kangaroo rat outside of the boundaries but within the MSHCP area is authorized under the MSHCP and the associated permits.

The project site is located within the Mitigation Fee Area of the SKR HCP, but is not located within or adjacent to any of the Core Reserve Areas. Since the project site is not located within or adjacent to any of the Core Reserve Areas, no focused SKR surveys or on-site mitigation would be required. On-site mitigation is only recommended in Ordinance 663.10 when a site is located within or adjacent to a Core Reserve Area. As a result, the applicant will only be required to pay the SKR HCP Mitigation Fee prior to development of the project site.

Section 7 Specific Plan Compliance

The proposed project is located within the boundaries of the PVCCSP. Section 4.3, Biological Resources, of the PVCCSP EIR (adopted January 2012) included an assessment of potential impacts to biological resources resulting from development of land uses allowed under the PVCCSP, including the proposed project. Since the proposed project site is located within the PVCCSP, development of the proposed project will need to comply with BIO Mitigation Measures 1-5 detailed in the PVCC EIR as summarized below:

> *MM Bio 1: In order to avoid violation of the MBTA and the California Fish and Game Code, site preparation activities (removal of trees and vegetation) for all PVCC implementing development and infrastructure projects shall be avoided, to the greatest extent possible, during the nesting season (generally February 1 to August 31) of potentially occurring native and migratory bird species.*
>
> *If site preparation activities for an implementing project are proposed during the nesting/breeding season (February 1 to August 31), a pre-activity field survey shall be conducted by a qualified biologist prior to the issuance of grading permits for such project, to determine if active nests or species protected by the MBTA or the California Fish and Game Code are present in the construction zone. If active nests are not located within the implementing project site and an appropriate buffer of 500 feet of an active listed species or raptor nest, 300 feet of other sensitive or protected bird nests (non-listed), or 100 feet of sensitive or protected songbird nests, construction may be conducted during the nesting season/breeding season. However, if active nests are located during the pre-activity field survey, no grading or heavy equipment activity shall take place within at least 500 feet of a active listed species or raptor nests, 300 feet of other sensitive or protected (under MBTA or California Fish and Game Code) bird nests (non-listed), or within 100 feet of sensitive or protected songbird nets until the nest is no longer active.*

The project site has the potential to provide avian nesting opportunities. Prior to ground disturbing activities, a pre-activity field survey (pre-construction nesting bird clearance survey) shall be conducted in accordance with PVCCSP EIR MM Bio 1.

> *MM Bio 2: Project specific habitat assessments and focused surveys for burrowing owls will be conducted for implementing development or infrastructure projects within burrowing owl survey areas. A pre-construction survey for resident burrowing owls will also be conducted by qualified biologist within 30 days prior to commencement of grading and construction activities within those portions of implementing project sites containing suitable burrowing owl habitat and for those properties within an implementing project site where the biologist could not gain access. If ground disturbing activities in these areas are delayed or suspended from more than 30 days after the pre-construction survey, the area shall be resurveyed for owls. The pre-construction survey and relocation activity will be conducted in accordance with eh current Burrowing Owl Instruction for the Western Riverside MSHCP.*

> *If active nests are identified on an implementing project site during the pre-construction survey, the nests shall be avoided, or the owls actively or passively relocated. To adequately avoid active nests, no grading or heavy equipment activity shall take place within at least 250 feet of an active nest during the breeding season (February 1 through August 31), and 160 feet during the non-breeding season.*

The project site was determined to have a low potential to support burrowing owl. Prior to the commencement of ground disturbing activities, a 30-day burrowing owl pre-construction clearance survey will need to be conducted to ensure burrowing owl remain absent from the project site, shall be conducted in accordance with PVCCSP EIR MM Bio 2.

> *MM Bio 3: Project specific delineations will be required to determine the limits of Corps, Regional Board, and CDFW jurisdiction for implementing projects that may contain jurisdictional features. Impacts to jurisdictional waters will require authorization by the corresponding regulatory agency. If impacts are indicated in an implementing project specific delineation, prior to the issuance of a grading permit, such implementing projects will obtain the necessary authorizations from the regulatory agencies for proposed impacts to jurisdictional waters. Authorizations may include, but are not limited to, a Section 404 permit from the Corps, a Section 401 Water Quality Certification from the Regional Board, and a Section 1602 Streambed Alteration Agreement from CDFW.*

One unnamed ephemeral water feature was observed on the project site during the field delineation. There are no existing blueline streams traversing the project site, and the majority of the water flows do not leave the project site, only during high volume storm event does water have the potential to reach the storm drains on the eastern boundary of the site. The onsite feature dissipates/infiltrates onsite and does not present a surface hydrologic connection to any downstream waters. Therefore, the on-site feature would not qualify as jurisdictional by the Corps, Regional Board, or CDFW, and regulatory approvals will not be required.

> *MM Bio 4: Project specific mapping of riparian and unvegetated riverine features will be required for implementing projects pursuant to Section 6.1.2 of the MSHCP. For areas not excluded as artificially created, the MSHCP requires 100 percent avoidance of riparian/riverine areas. If for any implementing project avoidance is not feasible, then such implementing projects will require the approval of a DBESP including appropriate mitigation to offset the loss of functions and values as they pertain to the MSHCP covered species. Riparian vegetation will also need to be evaluated for the least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo.*

A DBESP has been prepared under separate cover in accordance with MM Bio-4 to address the loss of riparian/riverine habitat.

Additionally, the habitats onsite do not provide suitable habitat for any of the amphibian, bird, fish, invertebrates, or plant species listed in Section 6.1.2 of the MSHCP. In particular, the swale onsite does not support riparian vegetation or suitable habitat for least Bell's vireo, southwestern willow flycatcher, or western yellow-billed cuckoo.

> *MM Bio 5: Project specific mapping of vernal pools for implementing projects will be required pursuant to Section 6.1.2 of the MSHCP. For areas not excluded as artificially created, the MSHCP*

> *requires 100 percent avoidance of vernal pools. If for any implementing project avoidance is not feasible, then such implementing projects will require the approval of a DBESP including appropriate mitigation to offset the loss of functions and values as they pertain to the MSHCP and covered species. Vernal pools and other seasonal ponding depressions will also need to be evaluated for listed fairy shrimp.*

None of the clay soils known to support vernal pools or be associated with listed and special-status species within the MSHCP have been documented within the project site. Further, a review of aerial photographs of the project site and its immediate vicinity did not provide visual evidence of an astatic or vernal pool conditions within the project site. Therefore, it was concluded that there is no indication of vernal pools or suitable fairy shrimp habitat occurring within the proposed project site. Therefore, compliance with PVCCSP EIR MM Bio 5 is not applicable.

> *MM Bio 6: Within areas of suitable habitat associated with Narrow Endemic Plant Species Survey Areas (NEPSSA) and Criteria Area Plant Species Survey Area (CAPSSA), focused plant surveys will be required for implementing projects. The MSHCP requires at least 90 percent avoidance of areas providing long-term conservation value for the NEPSSA and CAPSSA target species. If avoidance is not feasible, then such implementing projects will require approval of a DBESP including appropriate mitigation.*

The project site is not located within a NEPSSA or CAPSSA designated survey area. Further, on-site disturbances have resulted in a majority of the project site being dominated by early successional and non-native vegetation, which has reduced, if not eliminated, the ability of the project site to provide suitable habitat for special-status plant species. Based on habitat requirements for specific species and the availability and quality of on-site habitat, it was determined that the project site does not provide suitable habitat for NEPSSA or CAPSSA plant species. Therefore, compliance with PVCCSP EIR MM Bio 6 is not applicable.

Section 8 Conclusion and Recommendations

The project site and off-site improvement areas consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances associated with historic agricultural activities, surrounding development, and routine weed abatement/disking activities. Historic aerials show these activities have been ongoing since at least 1966. Prior to conducting the field investigation, aerial photography was reviewed to document existing site conditions and document the changes to the project site and surrounding area. No native plant communities occur within the boundary of the project site. The project site supports a non-native grassland plant community, and one land cover type that would be classified as disturbed.

No special-status plant species were observed on-site or in off-site improvement areas during the field survey. Previous disturbances have reduced, if not eliminated, the ability of the project site and off-site improvement areas to provide suitable habitat for special-status plant species. Based on habitat requirements for specific special-status plant species and the availability and quality of habitat needed by each species, it was determined that the project site and off-site improvement areas do not provide suitable habitat for special-status species and are presumed absent from the project site and off-site improvement areas.

No-special-status wildlife species were observed on the project site during the field investigation. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the project site has a moderate potential to support foraging habitat for Cooper's hawk, sharp-shinned hawk, and California horned lark; and a low potential to support foraging habitat for great egret, great blue heron, burrowing owl, and northern harrier. All remaining special-status wildlife species were presumed to be absent from the project site due to the lack of native habitat, routine on-site disturbances, and isolation of the site from suitable habitats.

One unnamed ephemeral water feature was observed on the project site during the field delineation. This feature only conveys flows from direct precipitation during storm events. It was preliminarily determined that water dissipation on the eastern boundary of the project site has an insubstantial or speculative effect on the chemical, physical or biological significant nexus to the downstream waters. Based on the information above, the onsite feature dissipates/infiltrates onsite and does not present a surface hydrologic connection to any downstream waters.

Based on the proposed project footprint, and with the implementation of a pre-construction nesting bird clearance survey, none of the special-status species known to occur in the general vicinity of the project site will be directly or indirectly impacted from implementation of the proposed project. Therefore, it was determined that this project will have "no effect" on federally, State, or MSHCP listed species known to occur in the general vicinity of the project site. Additionally, the project will have "no effect" on designated Critical Habitats.

The project is not listed as a planned "Covered Activity" under the MSHCP but is still considered to be a current Covered Activity under 7.1, *Covered Activities Outside Criteria Area and PQP Lands*, of the MSHCP. Pursuant to this section, public and private development, including the construction of buildings, structures, infrastructure and all alterations of the land, that are carried out by Permittees that are outside of

Criteria Areas are permitted under the MSHCP, subject to consistency with MSHCP policies. With completion of recommendations provided in this report and payment of the MSHCP Local Development Mitigation Fee, and Stephen's kangaroo rat mitigation fee, development of the project site is fully consistent with the MSHCP.

Section 9 References

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Appendix A Site Photographs

Photograph 1: From the northwest portion of the project site looking south.

Photograph 2: From the northwest portion of the project site looking east.

Photograph 3: From the northeast portion of the project site looking west.

Photograph 4: From the northeast portion of the project site looking west.

Photograph 5: From the middle of the western boundary of the project site looking southeast. The onsite ephemeral swale originate at this location at Nevada Road.

Photograph 6: From the middle of the western boundary of the project site looking northeast.

Photograph 7: From the middle of the eastern boundary of the project site looking north.

Photograph 8: From the middle of the eastern boundary of the project site looking southwest.

Photograph 9: From the middle of the southern portion of the project site looking west.

Photograph 10: Looking south towards the southeast corner of the project site.

Photograph 11: Dense non-native grassland along a swale in the southern portion of the project site.

Photograph 12: Disturbed land in the northeast portion of the project site near an off-site storm drain inlet.

Appendix B Potentially Occurring Special-Status Biological Resources

Table B-1: Potentially Occurring Special-Status Biological Resources

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
WILDLIFE SPECIES					
Accipiter cooperii Cooper's hawk	Fed: None CA: WL	Generally found in forested areas up to 3,000 feet in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.	Yes	No	**Moderate**. Marginal foraging habitat is present on-site. This species is adapted to urban environments and occurs commonly. The project site does not provide suitable nesting opportunities.
Accipiter striatus sharp-shinned hawk	Fed: None CA: WL	Found in pine, fir and aspen forests. They can be found hunting in forest interior and edges from sea level to near alpine areas. Can also be found in rural, suburban and agricultural areas, where they often hunt at bird feeders. Typically found in southern California in the winter months.	Yes	No	**Moderate**. Marginal foraging habitat is present on-site. This species does not nest in southern California. This species is adapted to urban environments and occurs commonly.
Agelaius tricolor tricolored blackbird	Fed: None CA: **THR**	Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate (freshwater marsh dominated by cattails, willows, and bulrushes [*Schoenoplectus* sp.]), and either flooded or thorny or spiny vegetation and suitable foraging space providing adequate insect prey.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	Fed: None CA: WL	Typically found between 3,000 and 6,000 feet in elevation. Breed in sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (*Artemisia californica*), but they can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Ammodramus savannarum grasshopper sparrow	Fed: None CA: SSC	Occurs in grassland, upland meadow, pasture, hayfield, and old field habitats. Optimal habitat contains short- to medium-height bunch grasses interspersed with patches of bare ground, a shallow litter layer, scattered forbs, and few shrubs. May inhabit thickets, weedy lawns, vegetated landfills, fence rows, open fields, or grasslands.	Yes (e)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Anniella pulchra northern California legless lizard	Fed: None CA: SSC	Occurs primarily in areas with sandy or loose loamy soils under sparse vegetation of beaches, chaparral, or pine-oak woodland; or near sycamores, oaks, or cottonwoods that grow on stream terraces. Often found under or in the close vicinity of logs, rocks, old boards, and the compacted debris of woodrat nests.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Anniella stebbinsi southern California legless lizard	Fed: None CA: SSC	Occurs in sparsely vegetated habitat types including coastal sand dunes, chaparral, pine-oak woodland, desert scrub, open grassland, and riparian areas. Requires sandy or loose loamy substrates conducive to burrowing.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Aquila chrysaetos golden eagle	Fed: None CA: FP; WL	Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Ardea alba great egret	Fed: None CA: None	Yearlong resident throughout California, except for the high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures.	No	No	**Low.** Minimal foraging/stop over habitat. No suitable nesting habitat is present within or adjacent to the project site.
Ardea herodias great blue heron	Fed: None CA: None	Forages along streams, marshes, lakes, and meadows. Nests colonially in tall trees (typically Eucalyptus sp.), on cliffsides, or in isolated spots in marshes.	Yes	No	**Low.** Minimal foraging/stop over habitat. No suitable nesting habitat is present within or adjacent to the project site.
Arizona elegans occidentalis California glossy snake	Fed: None CA: SSC	Inhabits arid scrub, rocky washes, grasslands, and chaparral habitats.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Artemisiospiza belli belli Bell's sparrow	Fed: None CA: WL	Generally prefers semi-open habitats with evenly spaced shrubs 1 – 2 meters in height. Dry chaparral and coastal sage scrub. Less common in tall dense, old chaparral.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Asio flammeus short-eared owl	Fed: None CA: SSC	Suitable habitats include salt- and freshwater marshes, irrigated alfalfa or grain fields, and ungrazed grasslands and old pastures. Tule marsh or tall grasslands with cover 30 to 50 cm in height can support nesting pairs.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Asio otus long-eared owl	Fed: None CA: SSC	Hunts mostly at night over grasslands and other open habitats. Nesting occurs in dense trees such as oaks and willows where it occupies stick nests of other species, particularly raptors or corvids.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Aspidoscelis hyperythra orangethroat whiptail	Fed: None CA: WL	Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: None CA: SCC	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Athene cunicularia burrowing owl	Fed: None CA: SSC	Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Dependent upon fossorial mammals for burrows, most notable ground squirrels.	Yes (c)	No	**Low.** Although heavily disturbed, the site provides line-of-sight opportunities favored by burrowing owls. No suitable burrows were observed onsite.
Aythya americana redhead	Fed: None CA: SSC	Typically found in shallow freshwater lakes, ponds, and marshes.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Aythya valisineria canvasback	Fed: None CA: None	Breeds in small lakes, deep-water marshes, bays, and ponds. Occurs more commonly in waters with a border of dense vegetation, which they use to construct their nests.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Bombus crotchii Crotch bumblebee	Fed: None CA: CE	Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Buteo regalis ferruginous hawk	Fed: None CA: WL	Occurs primarily in open grasslands and fields, but may be found in sagebrush flats, desert scrub, low foothills, or along the edges of pinyon-juniper woodland. Feeds primarily on small mammals and typically found in agricultural or open fields.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Buteo swainsoni Swainson's hawk	Fed: None CA: **THR**	Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grassland or suitable grain or alfalfa fields or livestock pastures.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Calypte costae Costa's hummingbird	Fed: None CA: None	Desert and semi-desert, arid brushy foothills and chaparral. A desert hummingbird that breeds in the Sonoran and Mojave Deserts. Departs desert heat moving into chaparral, scrub, and woodland habitats.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Ceratochrysis longimala desert cuckoo wasp	Fed: None CA: None	Occurs in arid soils and uses flowers for sustenance. Lays eggs in the nests of bees, wasps, and other host insects.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Chaetodipus californicus femoralis Dulzura pocket mouse	Fed: None CA: SSC	Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or rocky outcroppings, as well as sandy soils for burrowing.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Chaetodipus fallax fallax northwestern San Diego pocket mouse	Fed: None CA: SSC	Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or rocky outcroppings, as well as sandy soils for burrowing.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Chaetura vauxi Vaux's swift	Fed: None CA: SSC	Prefers redwood and Douglas-fir habitats with nest-sites in large hollow trees and snags, especially tall, burned-out snags. Fairly common migrant throughout most of the state in April and May, and August and September.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Charadrius montanus mountain plover	Fed: None CA: SSC	Found in short grasslands, freshly-plowed fields, newly-sprouting grain fields, and sometimes in sod farms. Prefers short vegetation or bare ground with flat topography, particularly grazed areas or areas with fossorial rodents.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Circus hudsonius northern harrier	Fed: None CA: SSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	Yes	No	**Low.** Minimal foraging/stop over habitat. No suitable nesting habitat is present within or adjacent to the project site.
Coccyzus americanus occidentalis western yellow-billed cuckoo	Fed: **THR** CA: **END**	Obligate riparian species with a primary habitat association of willow-cottonwood riparian forest. Nests are typically placed (72% of the time) in willows (*Salix* spp.), particularly in black willow (*S. gooddingii*), red willow (*S. laevigata*), and sandbar willow (*S. exigua*). This species typically requires large blocks of intact riparian habitat, with anything less than 37 acres in size and 328 feet wide generally considered unsuitable. Breeding season home ranges can be as much as 100 acres per individual bird. Yellow-billed cuckoos are considered rare anywhere in southern California outside of the Colorado River.	Yes (a)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Coleonyx variegatus abbotti San Diego banded gecko	Fed: None CA: SCC	Occurs in coastal and cismontane southern California from interior Ventura County south, although it is absent from the extreme outer coast. It is uncommon in coastal scrub and chaparral, most often occurring in granite or rocky outcrops in these habitats.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Crotalus ruber red-diamond rattlesnake	Fed: None CA: SSC	It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Diadophis punctatus modestus San Bernardino ringneck snake	Fed: None CA: None	Common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Diadophis punctatus similis San Diego ringneck snake	Fed: None CA: None	Prefers moist habitats, including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, and woodlands.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Dipodomys merriami parvus San Bernardino kangaroo rat	Fed: **END** CA: CE	Primarily found in Riversidian alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May occur at lower densities in Riversidian upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to Riversidian alluvial fan sage scrub habitats. Tend to avoid rocky substrates and prefer sandy loam substrates for digging of shallow burrows.	Yes (c)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Dipodomys simulans Dulzura kangaroo rat	Fed: None CA: None	Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grassland or suitable grain or alfalfa fields or livestock pastures.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Dipodomys stephensi Stephens' kangaroo rat	Fed: **END** CA: **THR**	Occur in arid and semi-arid habitats with some grass or brush. Prefer open habitats with less than 50% protective cover. Require soft, well-drained substrate for building burrows and are typically found in areas with sandy soil.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Egretta thula snowy egret	Fed: None CA: None	Widespread in California along shores of coastal estuaries, fresh and saline emergent wetlands, ponds, slow-moving rivers, irrigation ditches, and wet fields. In southern California, common yearlong in the Imperial Valley and along the Colorado River.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Elanus leucurus white-tailed kite	Fed: None CA: FP	Occurs in low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Uses trees with dense canopies for cover.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Empidonax traillii willow flycatcher	Fed: None CA: **END**	A rare to locally uncommon, summer resident in wet meadow and montane riparian habitats (2,000 to 8,000 ft) in the Sierra Nevada and Cascade Range. Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Empidonax traillii extimus southwestern willow flycatcher	Fed: **END** CA: **END**	Occurs in riparian woodlands in southern California. Typically requires large areas of willow thickets in broad valleys, canyon bottoms, or around ponds and lakes. These areas typically have standing or running water, or are at least moist.	Yes (a)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Emys marmorata western pond turtle	Fed: None CA: SSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, 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. May enter brackish water and even seawater. Found at elevations from sea level to over 5,900 feet (1,800 m).	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Eremophila alpestris actia California horned lark	Fed: None CA: WL	Generally found in shortgrass prairies, grasslands, disturbed fields, or similar habitat types along the coast or in deserts. Trees are shrubs are usually scarce or absent. Generally rare in montane, coniferous, or chaparral habitats. Forms large flocks outside of the breeding season.	Yes	No	**Moderate.** Marginal foraging habitat is present on-site. Minimal nesting habitat.
Eumops perotis californicus western mastiff bat	Fed: None CA: SSC	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Euphydryas editha quino Quino checkerspot butterfly	Fed: **END** CA: None	Range is now limited to a few populations in Riverside and San Diego counties. Common in meadows and upland sage scrub/chapparal habitat.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Falco columbarius merlin	Fed: None CA: WL	Nest in forested openings, edges, and along rivers across northern North America. Found in open forests, grasslands, and especially coastal areas with flocks of small songbirds or shorebirds.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Falco mexicanus prairie falcon	Fed: None CA: WL	Commonly occur in arid and semiarid shrubland and grassland community types. Also occasionally found in open parklands within coniferous forests. During the breeding season, they are found commonly in foothills and mountains which provide cliffs and escarpments suitable for nest sites.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Falco peregrinus anatum American peregrine falcon	Fed: DL CA: DL; FP	Uncommon winter resident of the inland region of southern California. Active nesting sites are known along the coast north of Santa Barbara, in the Sierra Nevada, and in other mountains of northern California. Breeds mostly in woodland, forest, and coastal habitats. Riparian areas and coastal and inland wetlands are important habitats yearlong, especially in nonbreeding seasons.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Gila orcuttii arroyo chub	Fed: None CA: SSC	Warm streams of the Los Angeles Plain, which are typically muddy torrents during the winter, and clear quiet brooks in the summer, possibly drying up in places. They are found both in slow-moving and fast-moving sections, but generally deeper than 40 cm.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Haliaeetus leucocephalus bald eagle	Fed: DL CA: **END**; FP	Occur primarily at or near seacoasts, rivers, swamps, and large lakes. Need ample foraging opportunities, typically near a large water source.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Hydroprogne caspia Caspian tern	Fed: None CA: None	Occurs near large lakes, coastal waters, beaches, and bays. Found on both fresh and salt water, favoring protected waters such as bays and lagoons, rivers, not usually foraging over open sea. Nests on open ground on islands, coasts.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Icteria virens yellow-breasted chat	Fed: None CA: SSC	Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Breeding habitat must be dense to provide shade and concealment. It winters south the Central America.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Lanius ludovicianus loggerhead shrike	Fed: None CA: SSC	Often found in broken woodlands, shrublands, and other habitats. Prefers open country with scattered perches for hunting and fairly dense brush for nesting.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Larus californicus California gull	Fed: None CA: WL	Require isolated islands in rivers, reservoirs and natural lakes for nesting, where predations pressures from terrestrial mammals are diminished. Uses both fresh and saline aquatic habitats at variable elevations and degrees of aridity for nesting and for opportunistic foraging.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Lasiurus xanthinus western yellow bat	Fed: None CA: SSC	Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Laterallus jamaicensis coturniculus California black rail	Fed: None CA: **THR;** FP	Shallow marshes, and wet meadows; in winter, drier fresh-water and brackish marshes, as well as dense, deep grass.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Lepus californicus bennettii San Diego black-tailed jackrabbit	Fed: None CA: SSC	Occurs in diverse habitats, but primarily is found in arid regions supporting shortgrass habitats. Openness of open scrub habitat is preferred over dense chaparral.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Lynx rufus pallescens pallid bobcat	Fed: None CA: None	Found on the western edge of the great basin habitat in extreme northeast California. Live in a variety of habitats including forests, deserts, mountains, swamps and farmland.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Myotis ciliolabrum western small-footed myotis	Fed: None CA: None	Occurs in a wide range of habitats, mostly arid wooded and brushy uplands near water. Prefers open stands in forests and woodlands. Roosts in caves, buildings, mines, and crevices.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Myotis yumanensis Yuma myotis	Fed: None CA: None	Found in forests and woodlands near water. Roosts in caves, buildings, mines, and crevices.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Neolarra alba white cuckoo bee	Fed: None CA: None	Found in dry, sandy areas (particularly deserts) in the American southwest near the host plants for *Perdita* bee species, of which it is a nest parasite.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Neotoma lepida intermedia San Diego desert woodrat	Fed: None CA: SSC	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Prefers moderate to dense canopies, and especially rocky outcrops.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Numenius americanus long-billed curlew	Fed: None CA: WL	Preferred winter habitats include large coastal estuaries, upland herbaceous areas, and croplands. On estuaries, feeding occurs mostly on intertidal mudflats.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Nycticorax nycticorax black-crowned night heron	Fed: None CA: None	Fairly common, yearlong resident in lowlands and foothills throughout most of California, including the Salton Sea and Colorado River areas, and very common locally in large nesting colonies. Feeds along the margins of lacustrine, large riverine, and fresh and saline emergent habitats and rarely, on kelp beds in marine sub tidal habitats. Nests and roosts in dense-foliaged trees and dense emergent wetlands.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Nyctinomops femorosaccus pocketed free-tailed bat	Fed: None CA: SSC	Often found in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Onychomys torridus ramona southern grasshopper mouse	Fed: None CA: SSC	Inhabits alkali desert scrub and other desert scrub habitats, and to a lesser extent succulent shrubs, desert washes, desert riparian, coastal scrub, mixed chaparral, and sagebrush habitats. Generally rare in valley foothill and montane riparian habitats. Prefers low to moderate shrub cover and requires friable soils.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Pandion haliaetus osprey	Fed: None CA: WL	Remain close to still or slow-moving bodies of water including oceans, rivers, lakes, mangroves, coastal wetlands, lagoons, reefs, estuaries and marshes. Generally nest in high places, such as trees, power poles, or cliffs.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Pelecanus erythrorhynchos American white pelican	Fed: None CA: SSC	Locally common winter resident of southern California. Typically forage in shallow inland waters, such as open areas in marshes and along lake or river edges. Also occur in shallow coastal marine habitats.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Pelecanus occidentalis californicus California brown pelican	Fed: DL CA: DL; FP	Coastal areas, with nesting occurring on islands. Species found occasionally along Arizona's lakes and rivers. This species inhabits shallow inshore waters, estuaries and bays, avoiding the open sea. Its diet is comprised mostly of fish, causing great congregations in areas with abundant prey. Prey species include sardines and anchovies, but has been seen to take shrimps and carrion, and even nestling egrets. It regularly feeds by plunge-diving and is often the victim of kleptoparasites.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Perognathus longimembris brevinasus Los Angeles pocket mouse	Fed: None CA: SSC	Occurs in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows, but instead will seek refuge under weeds and dead leaves instead.	Yes (c)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Phalacrocorax auritus double-crested cormorant	Fed: None CA: WL	Common yearlong resident in southern California. Occurs widely in freshwater and marine habitats along coastlines. Require open water where they can forage for schooling fish.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Phrynosoma blainvillii coast horned lizard	Fed: None CA: SSC	Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (i.e. fire, floods, roads, grazing, fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Plegadis chihi white-faced ibis	Fed: None CA: WL	Prefers to feed in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded partures and croplands. Nests in dense, fresh emergent wetland.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Polioptila californica californica coastal California gnatcatcher	Fed: **THR** CA: SSC	Obligate resident of sage scrub habitats that are dominated by California sagebrush (*Artemisia californica*). This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. Ranges from the Ventura County, south to San Diego County and northern Baja California and it is less common in sage scrub with a high percentage of tall shrubs. Prefers habitat with more low-growing vegetation.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Polioptila melanura black-tailed gnatcatcher	Fed: None CA: WL	In Mojave, Great Basin, Colorado and Sonoran Desert communities, prefers nesting and foraging in densely lined arroyos and washes dominated by creosote bush and salt bush with scattered bursage, burrowed, ocotillo, saguaro, barrel cactus, nipple cactus, and prickly pear and cholla.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Pyrocephalus rubinus vermilion flycatcher	Fed: None CA: SSC	Occupies desert riparian habitat, particularly cottonwoods, willows, mesquite, and other large desert riparian trees, in habitat adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas where it can forage.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Rana draytonii California red-legged frog	Fed: **THR** CA: SSC	Inhabits quiet pools of streams, marshes, and occasionally ponds. Occurs along the coast ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges.	Yes (c)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Salvadora hexalepis virgultea coast patch-nosed snake	Fed: None CA: SSC	Found in brushy or shrubby vegetation along the coast and requires small mammal burrows for refuge and overwintering.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Setophaga petechia yellow warbler	Fed: None CA: SSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Spea hammondii western spadefoot	Fed: None CA: SSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washed, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rainpools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Sphyrapicus ruber red-breasted sapsucker	Fed: None CA: None	An uncommon to fairly common, yearlong or summer resident in openly wooded, mountainous parts of California. In southern California, an uncommon summer resident locally in the higher mountains. Preferred nesting habitats include montane riparian, aspen, montane hardwood-conifer, mixed conifer, and red fir, especially near meadows, clearings, lakes, and slow-moving streams.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Spinus lawrencei Lawrence's goldfinch	Fed: None CA: None	Open woodlands, chaparral, and weedy fields. Closely associated with oaks. Nests in open oak or other arid woodland and chaparral near water.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Streptocephalus woottoni Riverside fairy shrimp	Fed: **END** CA: None	Freshwater crustacean that is found in vernal pools in the coastal California area.	Yes (a)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Taxidea taxus American badger	Fed: None CA: SSC	Primarily occupy grasslands, parklands, farms, tallgrass and shortgrass prairies, meadows, shrub-steppe communities and other treeless areas with sandy loam soils where it can dig more easily for its prey. Occasionally found in open chaparral (with less than 50% plant cover) and riparian zones.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Thamnophis hammondii two-striped garter snake	Fed: None CA: SSC	Occurs in or near permanent fresh water, often along streams with rocky beds and riparian growth up to 7,000 feet in elevation.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Vireo bellii pusillus least Bell's vireo	Fed: **END** CA: **END**	Primarily occupy Riverine riparian habitat that typically feature dense cover within 1 -2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.	Yes (a)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Xanthocephalus xanthocephalus yellow-headed blackbird	Fed: None CA: SSC	Uncommon yearlong resident of southern California throughout freshwater emergent wetlands, and moist, open areas along agricultural areas, and mudflats of lacustrine habitats. Prefers to nest in dense wetland vegetation characterized by cattails, tules, or other similar plant species along the border of lakes and ponds.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
PLANT SPECIES					
Abronia villosa* var. *aurita chaparral sand-verbena	Fed: None CA: None CNPS: 1B.1	Grows in sandy soils in coastal sage scrub and in chaparral habitats. Grows in elevation from 262 to 5,249 feet. Blooming period ranges from January to September.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Allium munzii Munz's onion	Fed: **END** CA: **THR** CNPS: 1B.1	Found in chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland. Found at elevations ranging from 974 to 3,510 feet. Blooming period is from March to May.	Yes (b)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Arenaria paludicola marsh sandwort	Fed: **END** CA: **END** CNPS: 1B.1	Grows mainly in wetlands and freshwater marshes in arid climates. The plant can grow in saturated acidic bog soils and soils that are sandy with a high organic content. Found at elevations ranging from 33 to 558 feet. Blooming period is from May to August.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Artemisia palmeri San Diego sagewort	Fed: None CA: None CNPS: 4.2	Found in sandy and mesic soils within chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland. Found at elevations ranging from 49 to 3,002 feet. Blooming period is from February to September.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Atriplex coronata* var. *notatior San Jacinto Valley crownscale	Fed: None CA: None CNPS: 1B.1	Grows in alkaline conditions within playas, mesic valley and foothill grasslands, and vernal pools. Found at elevations ranging from 456 to 1,640 feet. Blooming period is from April to August.	Yes (d)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Atriplex pacifica South Coast saltscale	Fed: None CA: None CNPS: 1B.2	Found in coastal bluff scrub, coastal dunes, coastal scrub, and in playas. Found at elevations ranging from 0 to 459 feet. Blooming period is from March to October.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Atriplex parishii Parish's brittlescale	Fed: None CA: None CNPS: 1B.1	Habitat types include chenopod scrub, playas, and vernal pools. Found at elevations ranging from 82 to 6,234 feet. Blooming period is from June to October.	Yes (d)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Atriplex serenana* var. *davidsonii Davidson's saltscale	Fed: None CA: None CNPS: 1B.2	Grows in alkaline soils within coastal bluff scrub and coastal scrub. Found at elevations ranging from 33 to 656 feet. Blooming period is from April to October.	Yes (d)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Berberis nevinii Nevin's barberry	Fed: **END** CA: **END** CNPS: 1B.1	Occurs on steep, north-facing slopes or in low-grade sandy washes in chaparral, cismontane woodland, coastal scrub, and riparian scrub. Found at elevations ranging from 951 to 5,167 feet. Blooming period is from March to June.	Yes (d)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Brodiaea filifolia thread-leaved brodiaea	Fed: **THR** CA: **END** CNPS: 1B.1	Grows in chaparral openings, cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools, often in clay soils. Found at elevations ranging from 82 to 3,675 feet. Blooming period is from March to June.	Yes (d)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Calochortus plummerae Plummer's mariposa-lily	Fed: None CA: None CNPS: 4.2	Prefers openings in chaparral, foothill woodland, coastal sage scrub, valley foothill grasslands, cismontane woodland, lower montane coniferous forest and yellow pine forest. Often found on dry, rocky slopes and soils and brushy areas. Can be very common after a fire. Found at elevations ranging from 459 to 6,299 feet. Blooming period is from May to July.	Yes (e)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Caulanthus simulans Payson's jewelflower	Fed: None CA: None CNPS: 4.2	Occurs on granitic sandy soils in chaparral and coastal scrub habitats. Found at elevations ranging from 295 to 7,218 feet. Blooming period is from February to June.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Centromadia pungens ssp. laevis smooth tarplant	Fed: None CA: None CNPS: 1B.1	Found in alkaline soils within chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland habitats. Found at elevations ranging from 0 to 2,100 feet. Blooming period is from April to September.	Yes (d)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	Fed: **END** CA: **END** CNPS: 1B.2	Upper terraces and higher edges of coastal salt marshes where tidal inundation is periodic. Found at elevations ranging from 0 to 98 feet. Blooming period is from May to October.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site. The project site occurs outside of the known elevation range for this species.
Chorizanthe leptotheca Peninsular spineflower	Fed: None CA: None CNPS: 4.2	Found in granitic soils within chaparral, coast scrub, and lower montane coniferous forest habitats. Found at elevations ranging from 984 to 6,234 feet. Blooming period is from May to August.	Yes (e)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Chorizanthe parryi* var. *parryi Parry's spineflower	Fed: None CA: None CNPS: 1B.1	Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet. Blooming period is from April to June.	Yes (e)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Chorizanthe polygonoides var. longispina long-spined spineflower	Fed: None CA: None CNPS: 1B.2	Typically found on clay lenses which are largely devoid of shrubs. Can be found on the periphery of vernal pool habitat and even on the periphery of montane meadows near vernal seeps. Found at elevations ranging from 98 to 5,020 feet. Blooming period is from April to July.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Chorizanthe xanti* var. *leucotheca white-bracted spineflower	Fed: None CA: None CNPS: 1B.2	Grows on sandy or gravelly soils within coastal scrub (alluvial fans), Mojavean desert scrub, pinyon and juniper woodland habitats. Found at elevations ranging from 984 to 3,937 feet. Blooming period is from April to June.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Convolvulus simulans small-flowered morning-glory	Fed: None CA: None CNPS: 4.2	Grows in clay soils within serpentinite seeps, chaparral, coastal scrub, valley and foothill grassland habitats. Found at elevations ranging from 98 to 2,297 feet. Blooming period is from March to July.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Cylindropuntia californica var. californica snake cholla	Fed: None CA: None CNPS: 1B.1	Found in chaparral and coastal scrub. Found at elevations ranging from 98 to 492 feet. Blooming period is from April to May.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site. The project site occurs outside of the known elevation range for this species.
Deinandra paniculata paniculate tarplant	Fed: None CA: None CNPS: 4.2	Typically found in vernally mesic, sometimes sandy soils in coastal scrub, valley and foothill grasslands, and vernal pools. Found at elevations ranging from 82 to 3,084 feet. Blooming period is from April to November.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Harpagonella palmeri Palmer's grapplinghook	Fed: None CA: None CNPS: 4.2	Occurs on clay soils in chaparral, coastal scrub, and valley and foothill grasslands. Found at elevations ranging from 66 to 3,133 feet. Blooming period is from March to May.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Hordeum intercedens vernal barley	Fed: None CA: None CNPS: 3.2	Found in coastal dunes, coastal scrub, vernal pools, and valley and foothill grassland habitats. Found at elevations ranging from 16 to 3,281 feet. Blooming period is from March to June.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Juglans californica southern California black walnut	Fed: None CA: None CNPS: 4.2	Occurs in alluvial soils in chaparral, cismontane woodland, coastal scrub, and riparian woodlands. From 15 to 5,875 feet in elevation. Blooming period is from May to June.	Yes	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Lasthenia glabrata* ssp. *coulteri Coulter's goldfields	Fed: None CA: None CNPS: 1B.1	Prefers playas, vernal pools, and coastal salt marshes and swamps. Found at elevations ranging from 3 to 4,003 feet. Blooming period is from February to June.	Yes (d)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Lepidium virginicum var. robinsonii Robinson's pepper-grass	Fed: None CA: None CNPS: 4.3	Dry soils on chaparral and coastal sage scrub. Found at elevations ranging from 3 to 2,904 feet. Blooming period is from January to July.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Myosurus minimus ssp. apus little mousetail	Fed: None CA: None CNPS: 3.1	Occurs in alkaline soils in valley and foothill grassland and vernal pools. Found at elevations ranging from 66 to 2,100 feet. Blooming period is from March to June.	Yes (d)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Navarretia fossalis spreading navarretia	Fed: **THR** CA: None CNPS: 1B.1	Grows in chenopod scrub, assorted shallow freshwater marshes and swamps, playas, and vernal pools. Found at elevations ranging from 98 to 2,149 feet. Blooming period is from April to June.	Yes (b)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Phacelia stellaris Brand's star phacelia	Fed: None CA: None CNPS: 4.2	Occurs in coastal dunes and coastal sage scrub habitats. In western Riverside County this species is restricted to sandy benches along the Santa Ana River. Grows in elevations ranging from 3 to 1,312 feet. Blooming period is from March to June.	Yes (b)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site. The project site occurs outside of the known elevation range for this species.
Romneya coulteri Coulter's matilija poppy	Fed: None CA: None CNPS: 4.2	Found in recently burned areas within chaparral and coastal scrub habitats. Found at elevations ranging from 66 to 3,937 feet. Blooming period is from March to July.	Yes (e)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Senecio aphanactis chaparral ragwort	Fed: None CA: None CNPS: 1B.2	Found in sometimes alkaline soils in chaparral, cismontane woodland, and coastal scrub. Found at elevations ranging from 425 to 2,165 feet. Blooming period is from January to April.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Symphyotrichum defoliatum San Bernardino aster	Fed: None CA: None CNPS: 3	Grows in grasslands and disturbed areas in the San Gabriel and San Bernardino Mountains and Peninsular Range. Occurs in vernally wet sites including ditches, streams, and springs in many plant communities including meadows and seeps, marshes and swamps, coastal scrub, cismontane woodland, lower montane coniferous woodland, and grassland. Found at elevations ranging from 7 to 6,693 feet. Blooming period is from July to November.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Texosporium sancti-jacobi woven-spored lichen	Fed: None CA: None CNPS: 3	Found on soil, small mammal pellets, dead twigs, and on *Selaginella* sp. within openings in chaparral habitat. Found at elevations ranging from 951 to 2,165 feet.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.
Tortula californica California screw moss	Fed: None CA: None CNPS: 1B.1	Found in chenopod scrub and valley and foothill grassland. Grows on sandy soil. Found at elevations ranging from 33 to 4,790 feet.	No	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Trichocoronis wrightii* var. *wrightii Wright's trichocoronis	Fed: None CA: None CNPS: 2B.1	Grows in alkaline soils in meadows and seeps, marshes and swamps, riparian forest, and vernal pools. Found at elevations ranging from 16 to 1,427 feet. Blooming period is from May to September.	Yes (b)	No	**Presumed absent.** No suitable habitat is present within or adjacent to the project site. The project site occurs outside of the known elevation range for this species.
CDFW SENSITIVE HABITATS					
Southern Coast Live Oak Riparian Forest	CDFW Sensitive Habitat	Open to locally dense evergreen riparian woodlands dominated by *Quercus agrifolia*. This type appears to be richer in herbs and poorer in understory shrubs than other riparian communities. Bottomlands and outer floodplains along larger streams, on fine-grained, rich alluvium. Canyons and valleys of coastal southern California.	NA	No	**Absent**
Southern Cottonwood Willow Riparian Forest	CDFW Sensitive Habitat	Dominated by cottonwood (*Populus* sp.) and willow (*Salix* sp.) trees and shrubs. Considered to be an early successional stage as both species are known to germinate almost exclusively on recently deposited or exposed alluvial soils.	NA	No	**Absent**
Southern Sycamore Alder Riparian Woodland	CDFW Sensitive Habitat	Occurs below 2,000 meters in elevation, sycamore and alder often occur along seasonally-flooded banks; cottonwoods and willows are also often present. Poison oak, mugwort, elderberry and wild raspberry may be present in understory.	NA	No	**Absent**

U.S. Fish and Wildlife Service (Fed) - Federal
END- Federal Endangered
THR- Federal Threatened

California Department of Fish and Wildlife (CA) - California
END- California Endangered
THR- California Threatened
Candidate- Candidate for listing under the California Endangered Species Act
FP- California Fully Protected
SSC- Species of Special Concern
WL- Watch List

California Native Plant Society (CNPS)
California Rare Plant Rank
1B Plants Rare, Threatened, or Endangered in California and Elsewhere
2B Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3 Plants About Which More Information is Needed – A Review List
4 Plants of Limited Distribution – A Watch List

CNPS Threat Ranks
0.1- Seriously threatened in California
0.2- Moderately threatened in California
0.3- Not very threatened in California

Western Riverside County MSHCP
Yes- Fully covered
No- Not covered
Yes (a)- May require surveys under MSHCP Section 6.1.2
Yes (b)- May require surveys under MSHCP Section 6.1.3
Yes (c)- May require surveys under MSHCP Section 6.3.2
Yes (d)- May require surveys under MSHCP Section 6.3.2
Yes (e)- Conditionally covered pending the achievement of species-specific conservation measures

Appendix C Regulations

Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Regulations

Endangered Species Act of 1973

Federally listed threatened and endangered species and their habitats are protected under provisions of the Federal Endangered Species Act (ESA). Section 9 of the ESA prohibits "take" of threatened or endangered species. "Take" under the ESA is defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct." The presence of any federally threatened or endangered species that are in a project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the ESA, the United States Fish and Wildlife Service (USFWS) may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

Critical Habitat is designated for the survival and recovery of species listed as threatened or endangered under the ESA. Critical Habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an ESA listed species and which may require special management considerations or protection. Critical Habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the ESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the U.S. Army Corps of Engineers (Corps)).

If USFWS determines that Critical Habitat will be adversely modified or destroyed from a proposed action, the USFWS will develop reasonable and prudent alternatives in cooperation with the federal institution to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy Critical Habitat, USFWS will include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) makes it unlawful to pursue, capture, kill, possess, or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered "take." This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

State Regulations

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State lead agencies. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. Section 15380 of the CEQA Guidelines independently defines "endangered" and "rare" species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, "endangered" species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while "rare" species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

California Endangered Species Act (CESA)

In addition to federal laws, the state of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

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

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the

absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

Fish and Game Code

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Native Plant Protection Act

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California. The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

California Native Plant Society Rare and Endangered Plant Species

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under FESA or CESA are defined as follows:

California Rare Plant Rank

1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere

1B- Plants Rare, Threatened, or Endangered in California and Elsewhere

2A- Plants Presumed Extirpated in California, But More Common Elsewhere

2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3- Plants about Which More Information is Needed - A Review List

4- Plants of Limited Distribution - A Watch List

Threat Ranks

.1- Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3- Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

Local Policies

Western Riverside County MSHCP

The MSHCP is a comprehensive, multi-jurisdictional HCP focusing on conservation of species and their associated habitats in western Riverside County. The goal of the MSHCP is to maintain biological and ecological diversity within a rapidly urbanizing region.

The approval of the MSHCP and execution of the Implementing Agreement (IA) by the wildlife agencies allows signatories of the IA to issue "take" authorizations for all species covered by the MSHCP, including state- and federal-listed species as well as other identified sensitive species and/or their habitats. Each city or local jurisdiction will impose a Development Mitigation Fee for projects within their jurisdiction. With payment of the mitigation fee to the County and compliance with the survey requirements of the MSHCP where required, full mitigation in compliance with the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), CESA, and FESA will be granted. The Development Mitigation Fee varies according to project size and project description. The fee for industrial development is $7,382 per acre (County Ordinance 810.2). Payment of the mitigation fee and compliance with the requirements of Section 6.0 of the MSHCP are intended to provide full mitigation under CEQA, NEPA, CESA, and FESA for impacts to the species and habitats covered by the MSHCP pursuant to agreements with the USFWS, the CDFW, and/or any other appropriate participating regulatory agencies and as set forth in the IA for the MSHCP.

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

Federal Regulations

Section 404 of the Clean Water Act

Since 1972, the Corps and EPA have jointly regulated the filling of waters of the United States, including wetlands, pursuant to Section 404 of the CWA. The Corps has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the CWA. The Corps and EPA define "fill material" to include any "material placed in waters of the United States where the material has the effect of: (i) replacing any portion of a water of the United States with dry land; or (ii) changing the bottom elevation of any portion of the waters of the United States." Examples include, but are not limited to, the placement of sand, rock, clay, construction debris, wood chips, and "materials used to create any structure or infrastructure in the waters of the United States."

In April of 2020, the Corps and the EPA provided a new definition for *waters of the United States* [Federal Register, Vol. 85, No. 77 (April 21, 2020)] which encompass:

- The territorial seas and traditional navigable waters;
- Perennial and intermittent tributaries that contribute surface water flow to such waters;
- Certain lakes, ponds, and impoundments of jurisdictional waters; and
- Wetlands adjacent to other jurisdictional waters.

Additionally, the new definition identifies 12 categories of those waters and features that are excluded from the definition of ''waters of the United State, such as features that only contain water in direct response to rainfall (e.g., ephemeral features), groundwater, many ditches, prior converted cropland, and waste treatment systems. The final rule excludes from the definition of ''waters of the United States'' all waters or features not mentioned above. In addition to this general exclusion, the final rule specifically clarifies that waters of the United States do not include the following:

- Groundwater, including groundwater drained through subsurface drainage systems;
- Ephemeral features that flow only indirect response to precipitation, including ephemeral streams, swales, gullies, rills, and pools;
- Diffuse stormwater runoff and directional sheet flow over upland;
- Ditches that are not traditional navigable waters, tributaries, or that are not constructed in adjacent wetlands, subject to certain limitations;
- Prior converted cropland;
- Artificially irrigated areas that would revert to upland if artificial irrigation ceases;
- Artificial lakes and ponds that are not jurisdictional impoundments and that are constructed or excavated in upland or non-jurisdictional waters;

- Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
- Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff;
- Groundwater recharge, water reuse, and wastewater recycling structures constructed or excavated in upland or in non-jurisdictional waters; and
- Waste treatment systems.

Section 401 of the Clean Water Act

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits, and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Water Quality Control Boards (Regional Board) that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board assumed this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

State Regulations

Fish and Game Code

Fish and Game Code Sections 1600 et. seq. establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

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

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

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks

that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

Porter Cologne Act

The California *Porter-Cologne Water Quality Control Act* gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool in the post SWANCC and Rapanos regulatory environment, with respect to the state's authority over isolated and insignificant waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although "waste" is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include fill discharged into water bodies.