BARKER LOGISTICS EAST

RIVERSIDE COUNTY, CALIFORNIA

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

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October 2019

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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

October 2019

Executive Summary

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 Barker Logistics East project located on the northwest corner of the intersection of Harvill Avenue and Placentia Avenue (project or project site) in the Mead Valley Area of Riverside County, California. 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. However, the project site is located immediately adjacent to Criteria Cell 2529, which contributes to assembly of Proposed Non-Contiguous Habitat Block 4. Further, a review of the Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map determined that the project site is located within the designated survey area for burrowing owl (*Athene cunicularia*). No other special-status wildlife species surveys were identified.

Due to existing land uses, no native plant communities or natural communities of special concern were observed on or adjacent to the project site. The eastern portion of the project site primarily consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances, and four (4)) residential developments occur on the western boundary of the site. The project site has been subject to historic agricultural activities and on-going disking activities. These disturbances have eliminated the natural plant communities that historically occurred on and within the immediate vicinity of the project site. The project site contains a land cover types that would be classified as disturbed and developed. The undeveloped portions of the project site are dominated by early successional and non-native vegetation, which has reduced the ability of the project site to provide suitable habitat for special-status plant species.

Although the field investigation was not conducted during the blooming season for the majority of the special-status plant species known to occur in the general vicinity of the project site, based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the project site has a low potential to provide suitable habitat for smooth tarplant (*Centromadia pungens ssp. laevis*) and paniculate tarplant (*Deinandra paniculata*). All other special-status plant species are presumed absent from the project site.

No special-status wildlife species were observed on-site during the habitat assessment. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the proposed project site has a moderate potential to support Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), burrowing owl, and California horned lark (*Eremophila alpestris actia*); and a low potential to provide suitable habitat for great egret (*Ardea alba*), great blue heron (*Ardea herodias*), ferruginous hawk (*Buteo regalis*), white-tailed kite (*Elanus leucurus*), and San Diego black-tailed jackrabbit (*Leus californicus bennettii*). Further it was determined that the project site does not provide suitable habitat for any of the other special-status wildlife species known to occur in the area since the project site has been heavily disturbed from on-site disturbances and surrounding development.

The project site does not support any discernible drainage courses, inundated areas, or wetland obligate vegetation that would be considered jurisdictional by the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or the California Department of Fish and Wildlife

(CDFW), or qualify as riparian/riverine habitat under the MSHCP. Therefore, regulatory approvals from the Corps, Regional Board, and/or CDFW will not be required for implementation of the project. Further, site development will not result in impacts to riparian/riverine habitats and a Determination of Biologically Equivalent or Superior Preservation (DBESP) will not be required for the loss of riparian/riverine habitat under the MSHCP. Additionally, none of the clay soils needed to support vernal pools were observed on-site; therefore, special-status plant and wildlife species associated with vernal pools, including fairy shrimp, are presumed absent from the project site.

The eastern portion of the project site is vegetated with a variety of relatively low-growing plant species that allow for the line-of-sight observation opportunities favored by burrowing owl. In addition, several small mammal burrows that have the potential to provide suitable burrowing owl nesting habitat (>4 inches in diameter) were observed scattered throughout the project site. In order to comply with the conservation goals of the MSCHP, a focused survey for burrowing owl will need to be conducted during the breeding season prior to development. If burrowing owls are found to occupy the project site at the time of the focused survey, a relocation plan will need to be written, approved, and implemented prior to site development. However, if no burrowing owls or sign are found during the focused survey, a final pre-construction burrowing owl clearance survey would be required to ensure burrowing owl remain absent from the project site.

Nesting birds are protected pursuant to the Migratory Bird Treaty Act and California Fish and Game Code (Sections 3503, 3503.3, 3511, and 3513 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a 300-foot buffer around the active nest. For listed and raptor species, this buffer should be expanded to 500 feet. A biological monitor should be present to delineate the boundaries of the buffer area and monitor the active nest to ensure that nesting behavior is not adversely affected by construction activities. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

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.

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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 Barker Logistics East project located on the northwest corner of the intersection of Harvill Avenue and Placentia Avenue (project or project site) in the Mead Valley Area of Riverside County, California. The habitat assessment was conducted by ELMT biologist Jacob H. Lloyd Davies on October 10, 2019 to document baseline conditions and assess the potential for special-status[1] plant and wildlife species to occur on the project site that could pose a constraint to development of the proposed project. The report provides an in-depth assessment of the suitability of the on-site habitat to support burrowing owl (*Athene cunicularia*), as well as several other special-status plant and wildlife species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), MSHCP and other electronic databases as potentially occurring in the vicinity of the project site.

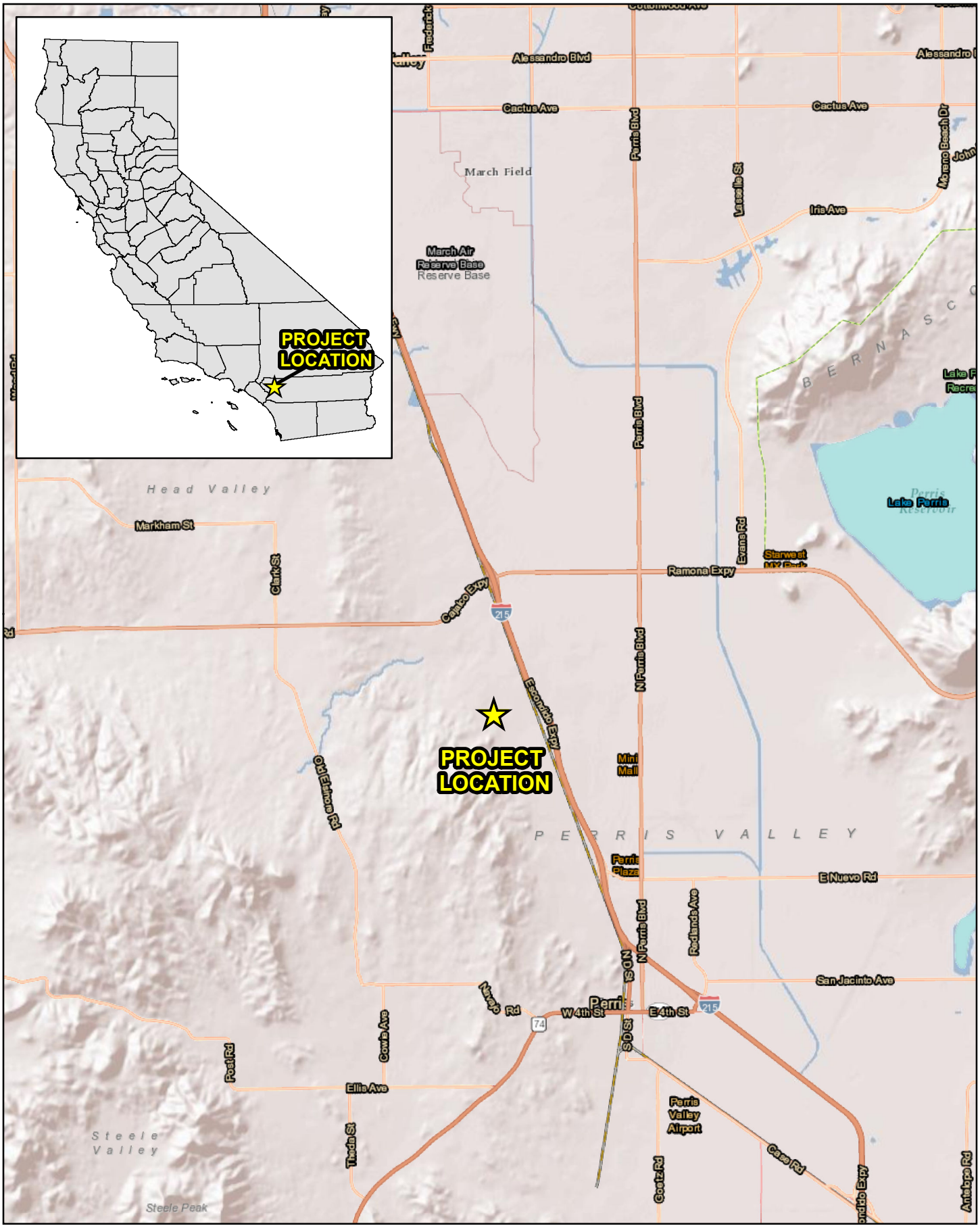
1.1 PROJECT LOCATION

The project site is generally located west of Interstate 215, east of Interstate 15, south of State Route 60, and north or State Route 74 in Riverside County, California (Exhibit 1, Regional Vicinity). The project site is depicted on the Steele Peak and Perris quadrangles of the United States Geological Survey's (USGS) 7.5-minute topographic map series in Section 13 of Township 4 South, Range 4 West (Exhibit 2, Site Vicinity). Specifically, the project site is located on the northwest corner of the intersection of Patterson Avenue and Placentia Avenue within Assessor Parcel Numbers (APN) 317-240-017, -019, -020, 021, -028, -029, -039, -041 (Exhibit 3, Project Site).

1.2 PROJECT DESCRIPTION

The proposed project consists of the grading for, and construction of a single warehouse, adjoining office spaces, associated trailer and auto parking, and landscaping encompassing 11.80 acres. The proposed building area will consist of approximately 274,190 square feet of depot and office space. Associated parking will include 51 trailer spaces and 173 standard automobile spaces. Total landscaping will encompass 52,689 square feet. Access will be provided by two proposed driveways on Harvill Avenue and two proposed driveways on Placentia Avenue. Refer to Exhibit 4, *Depiction of Proposed Project*.

[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.



BARKER LOGISTICS EAST
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

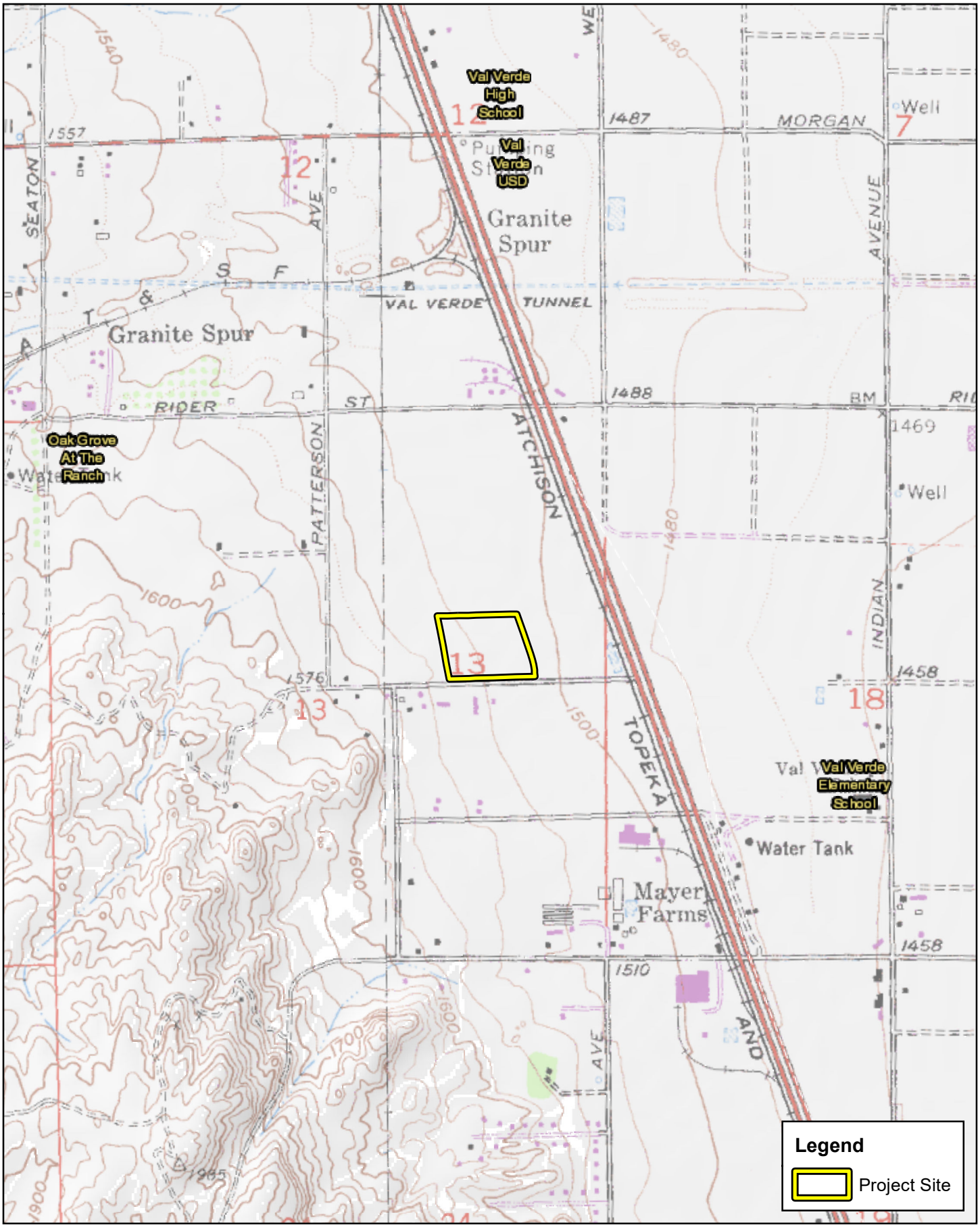
Regional Vicinity

ELMT CONSULTING

0 0.625 1.25 2.5 Miles

Source: World Transportation, World Shaded Relief, Riverside County

Exhibit 1



BARKER LOGISTICS EAST
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

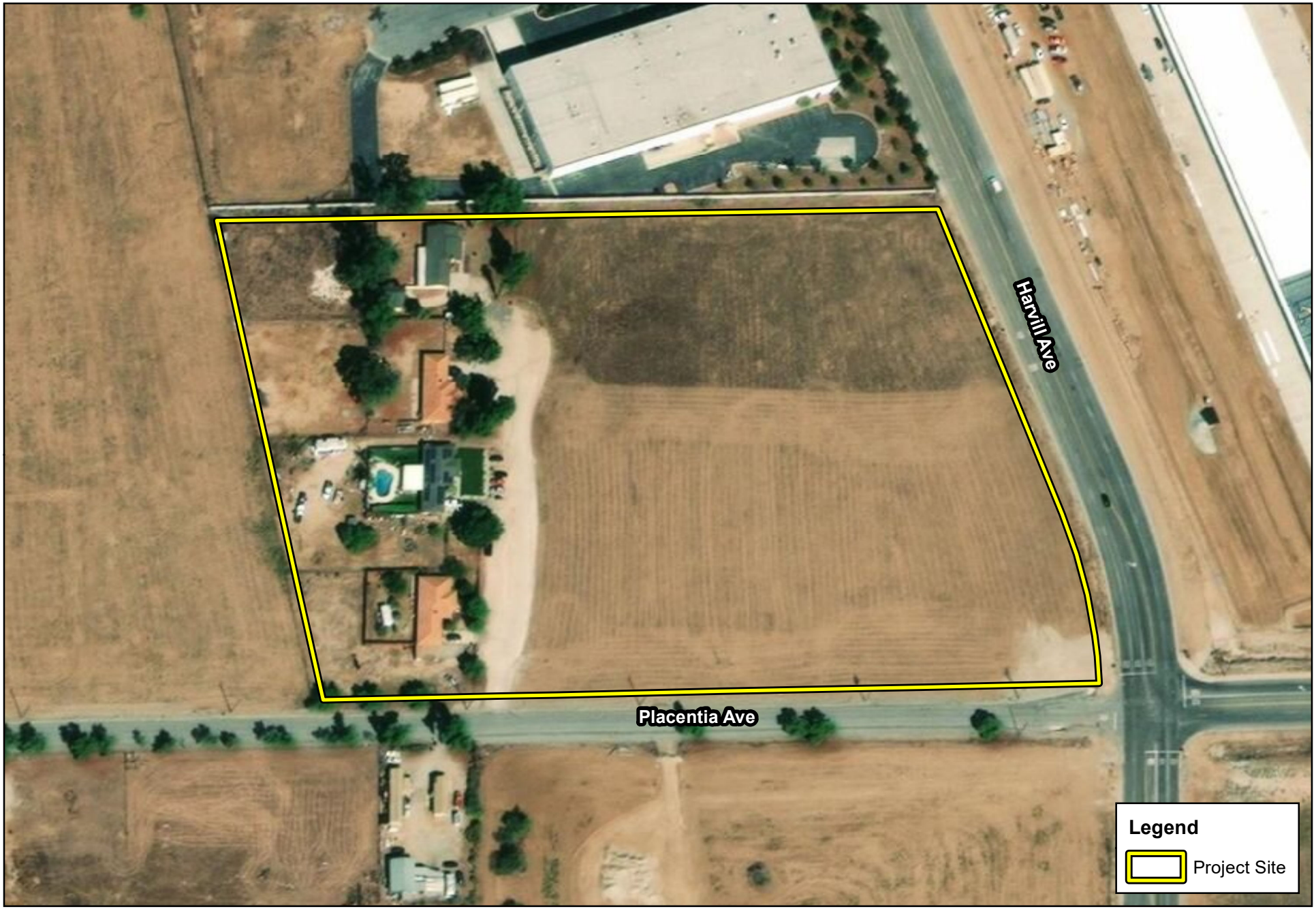
Site Vicinity

ELMT CONSULTING

0 500 1,000 2,000 Feet

Source: USA Topographic Map, Riverside County

Exhibit 2



ELMT CONSULTING

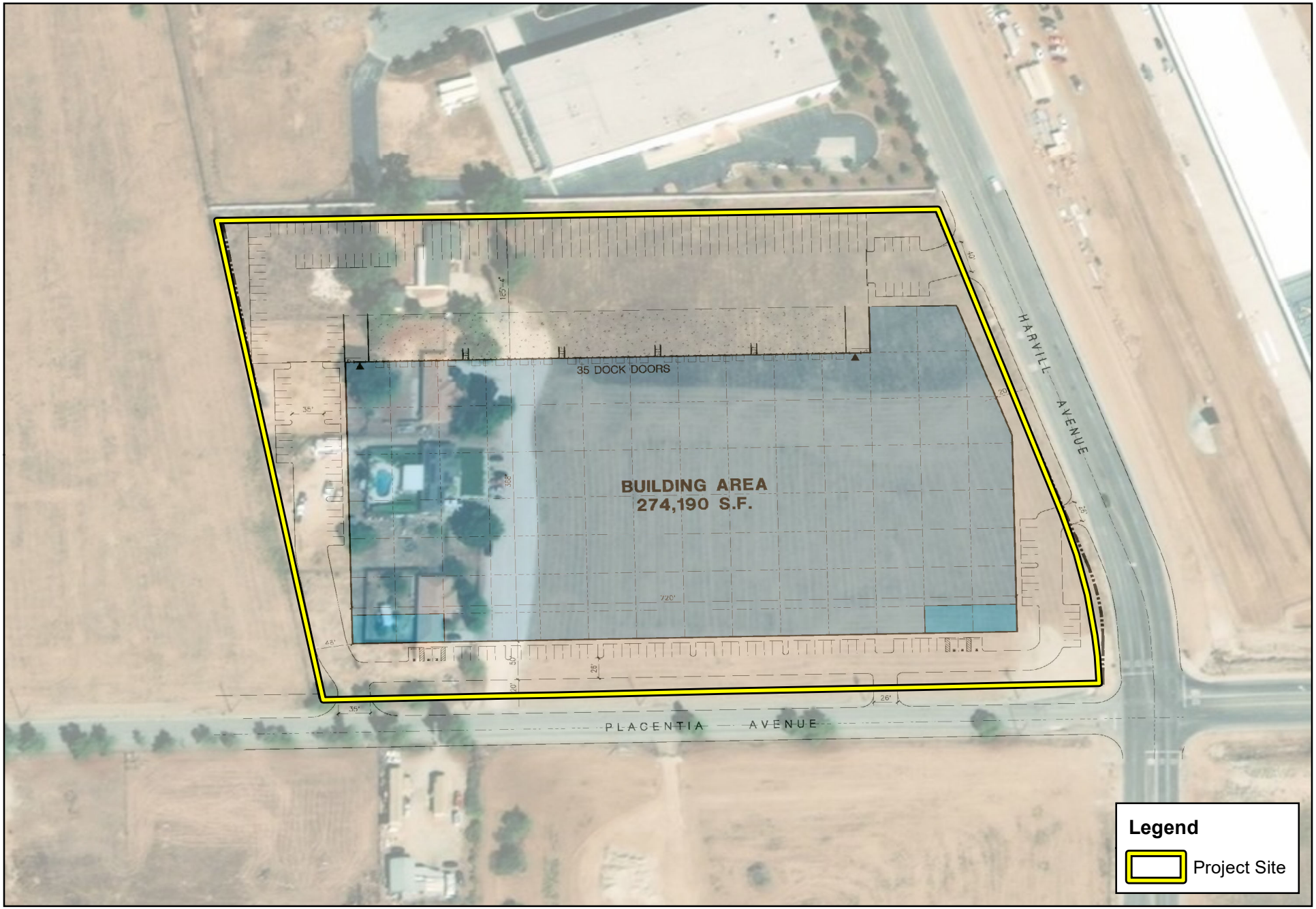
0 125 250 500 Feet

Source: Google Earth Aerial Imagery, Riverside County

BARKER LOGISTICS EAST
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

Project Site

Exhibit 3



ELMT CONSULTING

0 125 250 500 Feet

Source: Google Earth Aerial Imagery, Riverside County

BARKER LOGISTICS EAST
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

Depiction of Propsoed Project

Exhibit 4

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. In addition to the literature review, a general habitat assessment or field investigation of the project site was conducted. The field investigation was conducted to document existing conditions within the project site and assess the potential for special-status biological resources to occur.

2.1 WESTERN RIVERSIDE COUNTY MSHCP CONSISTENCY ANALYSIS

The project site is located in the Mead Valley Area Plan of the MSHCP. While the project is not specifically identified as a Covered Activity in the MSHCP, under Section 7.1, *Covered Activities Outside Criteria Ara and PQP Lands*, public and private development that are outside of Criteria Areas and Public/Quasi-Public (PQP)[2] 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;
- The requirements for conducting additional surveys as set forth in Section 6.3.2; and
- Fuels management guidelines as set forth in Section 6.4.

The project site was reviewed to determine consistency with the MSHCP. Geographic Information System (GIS) software was utilized to map the project site in relation to MSHCP areas including Criteria Cells (core habitat and wildlife movement corridors) and areas proposed for conservation.

2.1.1 Riparian/Riverine Areas and Vernal Pools

The MSHCP requires that an assessment be completed if impacts to riparian/riverine areas and vernal pools will occur as a result of implementation of the proposed project. According to the MSHCP, the documentation for the assessment shall include mapping and a description of the functions and values of the mapped areas with respect to the species listed in Section 6.1.2 of the MSHCP, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*.

[2] 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.

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. 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.

2.1.2 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 Western Riverside County Regional Conservation Authority (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.

2.1.3 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 any Criteria Cells or designated conservation areas; however, the project site is located immediately adjacent to Criteria Cells 2529 to the south, which contributes to assembly of Proposed Non-Contiguous Habitat Block 4. Therefore, due to the project sites adjacency to the MSHCP Criteria Cells, the proposed project will need to comply with the Urban/Wildlands Interface Guidelines.

2.1.4 Additional Survey Needs and Procedures

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 located within the designated survey area for burrowing owl as depicted in Figure 6-4 within Section 6.3.2 of the MSHCP. No other special-status wildlife species surveys were identified.

2.2 LITERATURE REVIEW

The first step in determining if a project is consistent with the above listed sections of the MSHCP is to conduct a literature review and records search for special-status biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project site were determined through a query of the CDFW's QuickView Tool in the Biogeographic Information and Observation System (BIOS), CNDDB Rarefind 5,

the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, the United States Fish and Wildlife Service (USFWS) species listings, and species covered within the MSHCP and associated technical documents.

Literature detailing biological resources previously observed in the vicinity of the project site and historical land uses were reviewed to understand the extent of disturbances to the habitats on-site. Standard field guides and texts on special-status and non-special-status biological resources were reviewed for habitat requirements, as well as the following resources:

- Google Earth Pro historic aerial imagery (1994-2018);
- 2006 Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area;
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soil Survey;
- USFWS Critical Habitat designations for Threatened and Endangered Species;
- Stephens' Kangaroo Rat Habitat Conservation Plan; and
- RCA MSHCP Information Map.

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.

2.3 FIELD INVESTIGATION

ELMT biologist Jacob H. Lloyd Davies evaluated the extent and conditions of the plant communities found within the boundaries of the project site on October 10, 2019. Plant communities identified on aerial photographs during the literature review were verified in the field by walking meandering transects through the on-site plant communities and along boundaries between plant communities. The plant communities were evaluated for their potential to support special-status plant and wildlife species. In addition, field staff identified any natural corridors and linkages that may support the movement of wildlife through the area.

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, white wash, feathers, or prey remains.

All plant and wildlife species observed, as well as dominant plant species within each plant community, were recorded. 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 on-site plant communities, and presence of potential jurisdictional drainage and/or wetland features were noted.

2.4 SOIL 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.

2.5 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.

2.6 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 office 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).

2.7 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).

2.8 RIPARIAN/RIVERINE HABITAT AND JURISDICTIONAL DRAINAGES AND WETLANDS

Aerial photography was reviewed prior to conducting the field investigation. The aerials were used to locate and inspect potential natural drainage features, ponded areas, or water bodies that may be considered riparian/riverine habitat and/or 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 authorities.

2.9 STEPHENS' 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. Therefore, the applicant will be required to pay the SKR HCP Mitigation Fee prior to development of the project site.

Section 3 Existing Conditions

3.1 LOCAL CLIMATE

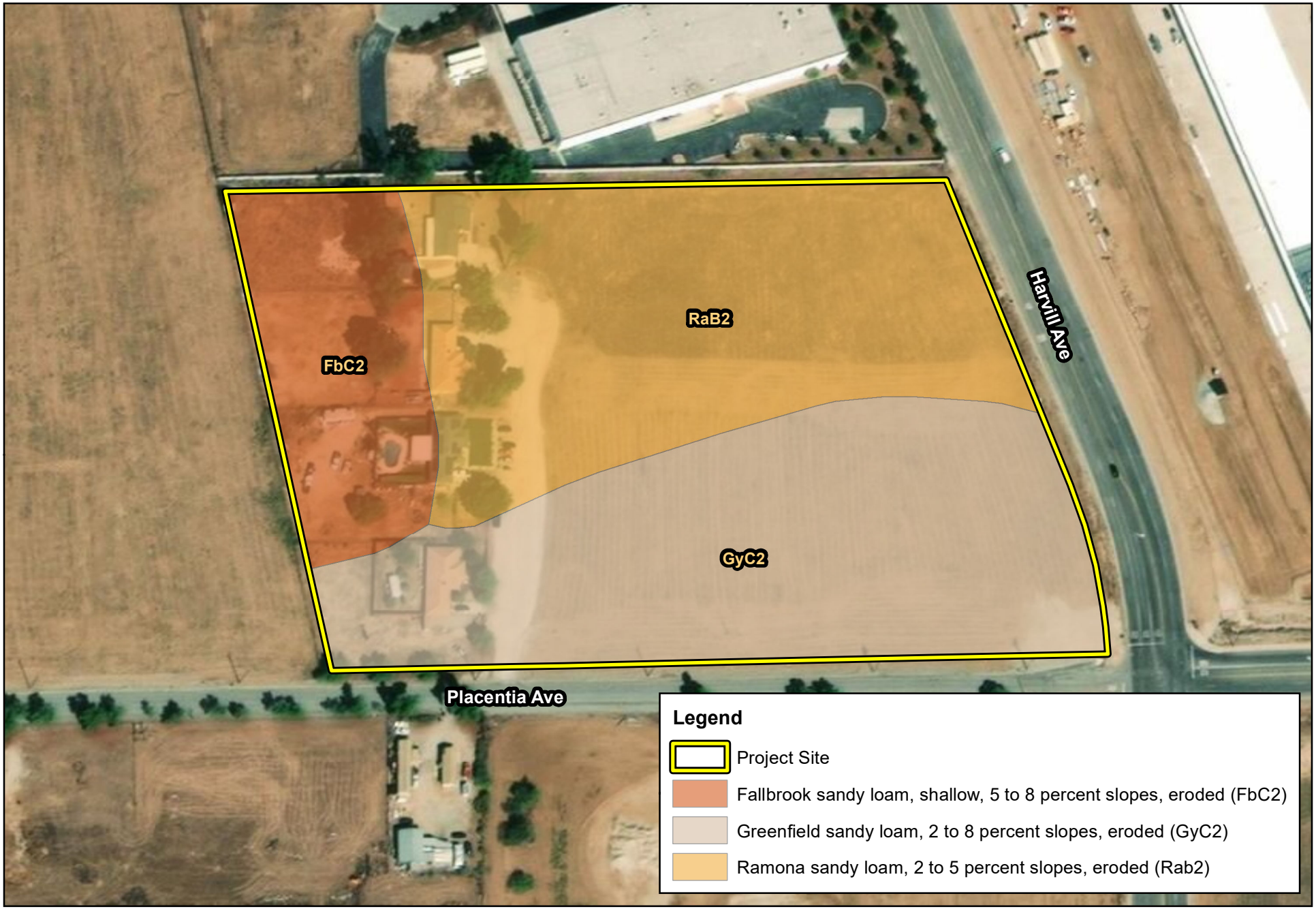
Riverside County features a somewhat cooler version of a Mediterranean climate, or semi-arid climate, with warm, sunny, dry summers and cool, rainy, mild winters. Relative to other areas in Southern California, winters are colder with frost and with chilly to cold morning temperatures common. Climatological data obtained for the City of Riverside indicates the annual precipitation averages 12.0 inches per year. Almost all of the precipitation in the form of rain occurs in the months between November and March, with hardly any occurring between the months of April and October. The wettest month is February, with a monthly average total precipitation of 2.88 inches, and the driest months are June and July, both with monthly average total precipitation of 0.02 inches. The average maximum and minimum temperatures are 93 and 40 degrees Fahrenheit (° F) respectively with August (monthly average high 93° F) being the hottest months and December (monthly average low 40° F) being the coldest. The temperature during the site visit was in the mid-80s ° F with cloudy skies and calm winds.

3.2 TOPOGRAPHY AND SOILS

The project site is relatively flat with no areas of significant topographic relief and ranges in elevation from 1,5010 to 1,538 feet above sea level and generally slopes from west to east. According to the Custom Soil Resource Report, the project site is underlain by the following soil units: Fallbrook sandy loam (5 to 8 percent slopes, eroded), Ramona sandy loam (2 to 5 percent slopes, eroded), and Greenfield sandy loam (2 to 8 percent slopes, eroded) (Exhibit 5, *Soils*). Soils on-site have been mechanically disturbed from historic land uses (i.e., grading/disking activities).

3.3 SURROUNDING LAND USES

Land uses in the vicinity of the project site primarily consists of residential and industrial developments, and undeveloped/vacant parcels. The project site is bordered by industrial developments to the north and east, and vacant, undeveloped land south and west. Placenta Avenue borders the southern boundary, and Harvill Avenue borders the eastern boundary of the project site.



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0 125 250 500 Feet

Source: Google Earth Aerial Imagery, Soil Survey Geographic Database, Riverside County

BARKER LOGISTICS EAST
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

Soils

Exhibit 5

Section 4 Discussion

4.1 SITE CONDITIONS

The eastern portion of the project site primarily consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances associated with historic agricultural activities and routine disking activities. Four (4) residential developments are located on the western boundary of the project site. Historic aerials show these activities have been ongoing since at least 1966, with grading for the residential developments occurring as early as 1978. These disturbances have eliminated the natural plant communities that historically occurred on the project site. Refer to Attachment A, *Site Photographs*, for representative site photographs. No native plant communities will be impacted from implementation of the proposed project.

4.2 VEGETATION

Due to existing land uses, no native plant communities or natural communities of special concern were observed on or adjacent to the project site. As a result, the project site contains two land cover types that would be classified as disturbed and developed (Exhibit 6, *Vegetation*).

4.1.1 Disturbed

The disturbed areas on the project site no longer comprise a native plant community, but rather consist of areas that have been subject to historic agricultural activities, and routine/on-going disking activities. Portions of the disturbed area contain areas of bare ground due extensive disturbance from anthropogenic disturbance, and areas that support early successional and ruderal/weedy plant species. Common plant species observed during the filed investigation include Russian thistle (*Salsola tragus*), flax-leaved horseweed (*Erigeron bonariensis*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), black mustard (*Brassica nigra*), doveweed (*Croton setigerus*), common sunflower (*Helianthus annuus*), stinknet (*Oncosiphon piluliferum*), Mexican fan palm (*Washingtonia robusta*), western ragweed (*Ambrosia psilostachya*), telegraph weed (*Heterotheca grandiflora*), and red-stemmed filaree (*Erodium cicutarium*).

4.1.2 Developed

Developed areas generally encompass all building/structures, and paved/impervious surfaces. The developed areas occur on the western boundary of the project site associated with the residential developments.

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

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0 125 250 500 Feet

Source: Google Earth Aerial Imagery, Riverside County

BARKER LOGISTICS EAST
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

Vegetation

Exhibit 6

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

The MSHCP does not identify any covered or special-status fish species as potentially occurring on the project site. Further, 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. Therefore, no fish are expected to occur and are presumed absent from the project site.

4.3.2 Amphibians

The MSHCP does not identify any covered or special-status amphibian species as potentially occurring within the project site. Further, 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. Therefore, no amphibians are expected to occur.

4.3.3 Reptiles

The MSHCP does not identify any covered or special-status reptilian species as potentially occurring on the project site. The project site provides a limited amount of habitat for a few reptile species adapted to a high degree of human disturbance associated with the on-site grading/disking activities and surrounding development. Common side-blotched lizard (*Uta stansburiana elegans*) was the only reptilian species observed during the field investigation. No reptiles were obseved on-site. Common reptilian species expected to occur on-site include Great Basin fence lizard (*Sceloporus occidentalis longipes*), gopher snake (*Pituophis catenifer*), and southern alligator lizard (*Elgaria multicarinata*). Due to the high level of anthropogenic disturbances on-site, and surrounding development, no special-status reptilian species are expected to occur on-site.

4.3.4 Birds

The project site provides minimal foraging habitat for bird species adapted to a high degree of human disturbance. Bird species detected during the field survey included northern mockingbird (*Mimus polyglottos*), Anna's hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), and house finch (*Haemorhous mexicanus*).

The MSHCP identifies the project site as being located within the designated survey area for burrowing owl, requiring a burrowing owl suitability assessment to be conducted. Based on the field investigation it was determined that the eastern portion of the project site is vegetated with a variety of relatively low-growing plant species that allow for the line-of-sight observation opportunities favored by burrowing owl. In addition, several small mammal burrows that have the potential to provide suitable burrowing owl nesting habitat (>4 inches in diameter) were observed scattered throughout the eastenr poriton of the project site. Based on this information, it was determined that burrowing owls were determined to have a moderate potential to occur, and a focused survey is recommended to be conducting during the breeding season.

4.3.5 Mammals

The MSHCP does not identify any covered or special-status mammalian species as potentially occurring on the project site. The project site and surrounding areas have the potential to support mammalian species adapted to human presence and disturbance. The only mammalian species observed during the field survey was domestic cat (*Felis catus*) and California ground squirrel (*Otospermophilus beecheyi*). Other common mammalian species expected to occur include Audubon's cottontail (*Sylvilagus audubonii*), 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 outside of the nesting season. The project site and surrounding area provide foraging and minimal nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that area adapted to urban environments. The project site has the potential to provide minimal suitable nesting opportunities for birds, primarily those that nest on the open ground such as killdeer (*Charadrius vociferus*). A pre-construction nesting bird clearance survey shall be conducted within three (3) days prior to ground disturbance to ensure no nesting birds will be impacted from site development.

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 has not been identified as occurring in a wildlife corridor or linkage. However, the project site is located east of MSHCP Proposed Noncontiguous Habitat Block 4 which is comprised of the Motte Rimrock Reserve, and provides habitat for MSHCP listed species Quino checkerspot butterfly (*Euphydryas editha quino*), coastal California gnatcatcher (*Polioptila californica*), and Stephens' kangaroo rat.

The proposed project will be confined to existing areas that have been heavily disturbed by anthropogenic disturbances from grading/disking activities, historic agricultural uses, and residential development. The project site will not directly impact, prevent or restrict the use of Motte Rimrock Reserve by MSHCP listed species associated with Proposed Noncontiguous Habitat Block 4. The MSHCP Urban Wildlands Guidelines described below will be implemented for this project to reduce potential indirect impacts to Proposed Noncontiguous Habitat Block 4 adjacent to the project site. With implementation of the MSHCP urban/wildlife interface guidelines (described in Section 5.3), potential indirect impacts to wildlife corridors or linkages are expected to be less than significant.

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.

The project site does not support any discernible drainage courses, inundated areas, or wetland obligate vegetation that would be considered jurisdictional by the Corps, Regional Board, or CDFW. Further no blueline streams have been recorded on the project site. Therefore, regulatory approvals from the Corps, Regional Board, and/or CDFW will not be required for implementation of the project.

4.7 SPECIAL-STATUS BIOLOGICAL RESOURCES

CDFW's QuickView Tool in BIOS, the CNDDB Rarefind 5 and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Steele Peak and Perris USGS 7.5-minute quadrangles. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified twenty-four (24) special-status plant species, seventy-four (72) special-status wildlife species, and three (3) special-status plant communities as having potential to occur within the Steele Peak and Perris quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the project boundaries 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 presented in *Table B-1: Potentially Occurring Special-Status Biological Resources*, provided in Appendix B. Refer to Table B-1 for a determination regarding the potential occurrence of special-status plant and wildlife species within the project site.

4.7.1 Special-Status Plants

According to the CNDDB and CNPS, twenty-four (24) special-status plant species have been recorded in the Steele Peak and Perris quadrangles (refer to Appendix B). The project site consists of vacant, undeveloped land and four residential developments that have been subject to a variety of anthropogenic disturbances from grading/disking activities, historic agricultural uses, and residential activities. These 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.

Although the field investigation was not conducted during the blooming season for the majority of the special-status plant species known to occur in the general vicinity of the project site, based on habitat

requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the project site has a low potential to provide suitable habitat for smooth tarplant (*Centromadia pungens ssp. laevis*) and paniculate tarplant (*Deinandra paniculata*). All other special-status plant species are presumed absent from the project site.

4.7.2 Special-Status Wildlife

According to the CNDDB, seventy-two (72) special-status wildlife species have been reported in the Steele Peak and Perris quadrangles (refer to Appendix B). No special-status wildlife species were observed on-site during the habitat assessment. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the proposed project site has a moderate potential to support Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), burrowing owl, and California horned lark (*Eremophila alpestris actia*); and a low potential to provide suitable habitat for great egret (*Ardea alba*), great blue heron (*Ardea herodias*), ferruginous hawk (*Buteo regalis*), white-tailed kite (*Elanus leucurus*), and San Diego black-tailed jackrabbit (*Leus californicus bennettii*). Further it was determined that the project site does not provide suitable habitat for any of the other special-status wildlife species known to occur in the area since the project site has been heavily disturbed from on-site disturbances and surrounding development.

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

4.7.3 Special-Status Plant Communities

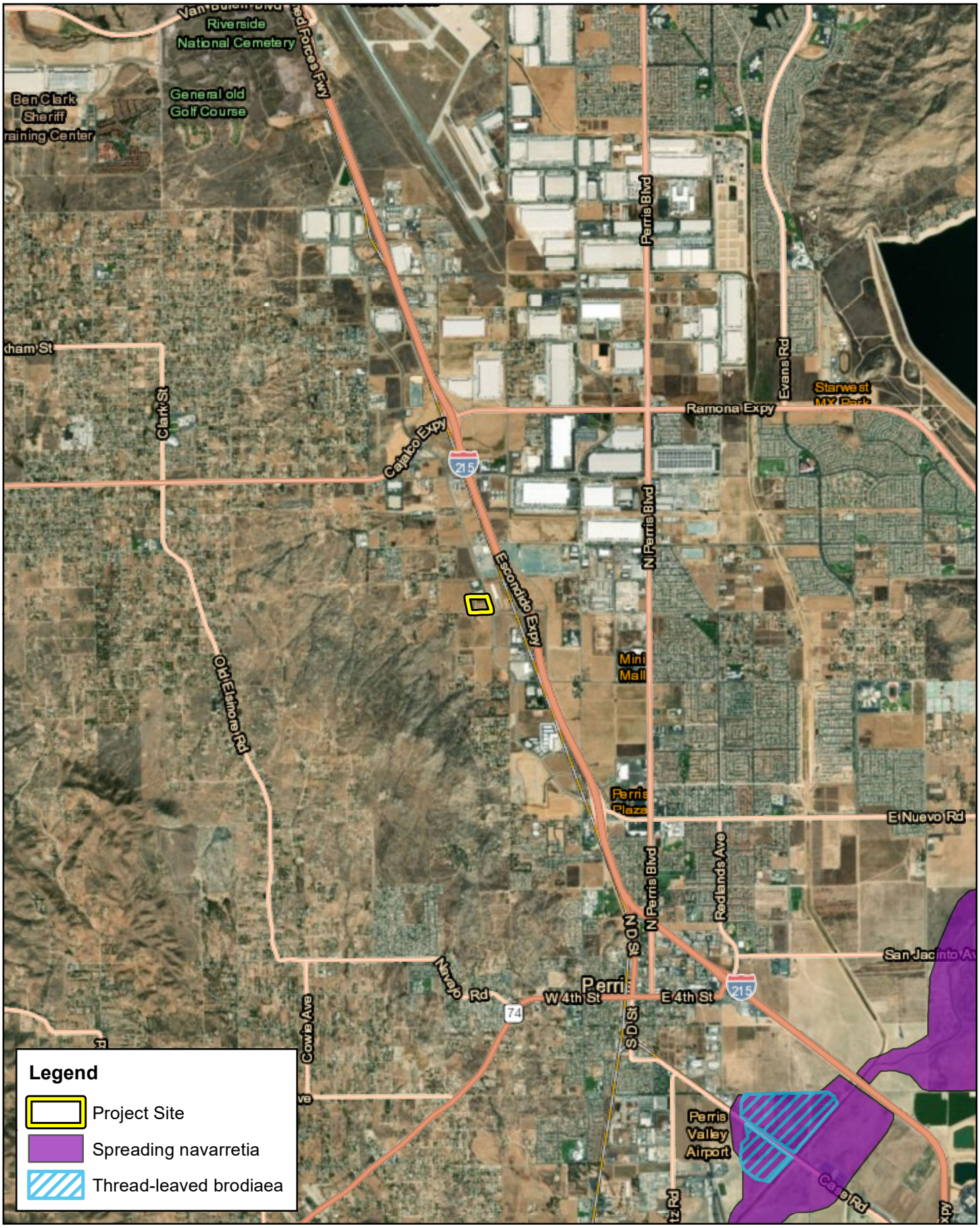
The CNDDB lists three (3) special-status plant communities as being identified within the Steele Peak and Perris USGS 7.5-minute quadrangles: Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, and Southern Sycamore Alder Riparian Woodland. None of these special-status plant communities were observed within the boundaries of the project site.

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 is not located with federally designated Critical Habitat (refer to Exhibit 7, *Critical Habitat*). The closest designated Critical Habitat is located approximately 4.2 miles southeast of the project for spreading navarretia (*Navarretia fossallis*) and 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.



BARKER LOGISTICS EAST
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

Critical Habitat

ELMT CONSULTING

0 1,250 2,500 5,000 Feet

Source: ESRI Aerial Imagery, USFWS, Riverside County

Exhibit 7

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 8, *MSHCP Conservation Areas*). However, the project site is located immediately adjacent to Criteria Cell 2529, which contributes to assembly of Proposed Non-Contiguous Habitat Block 4. The project site is located within the designated survey area for burrowing owl as depicted in Figure 6-4 within Section 6.3.2 of the MSHCP. Refer to the following sections for an analysis of the suitability of the on-site habitat and potential for burrowing owl to occur on the project site. No other special-status wildlife species surveys were identified.

5.1 RIPARIAN/RIVERINE AREAS AND VERNAL POOLS

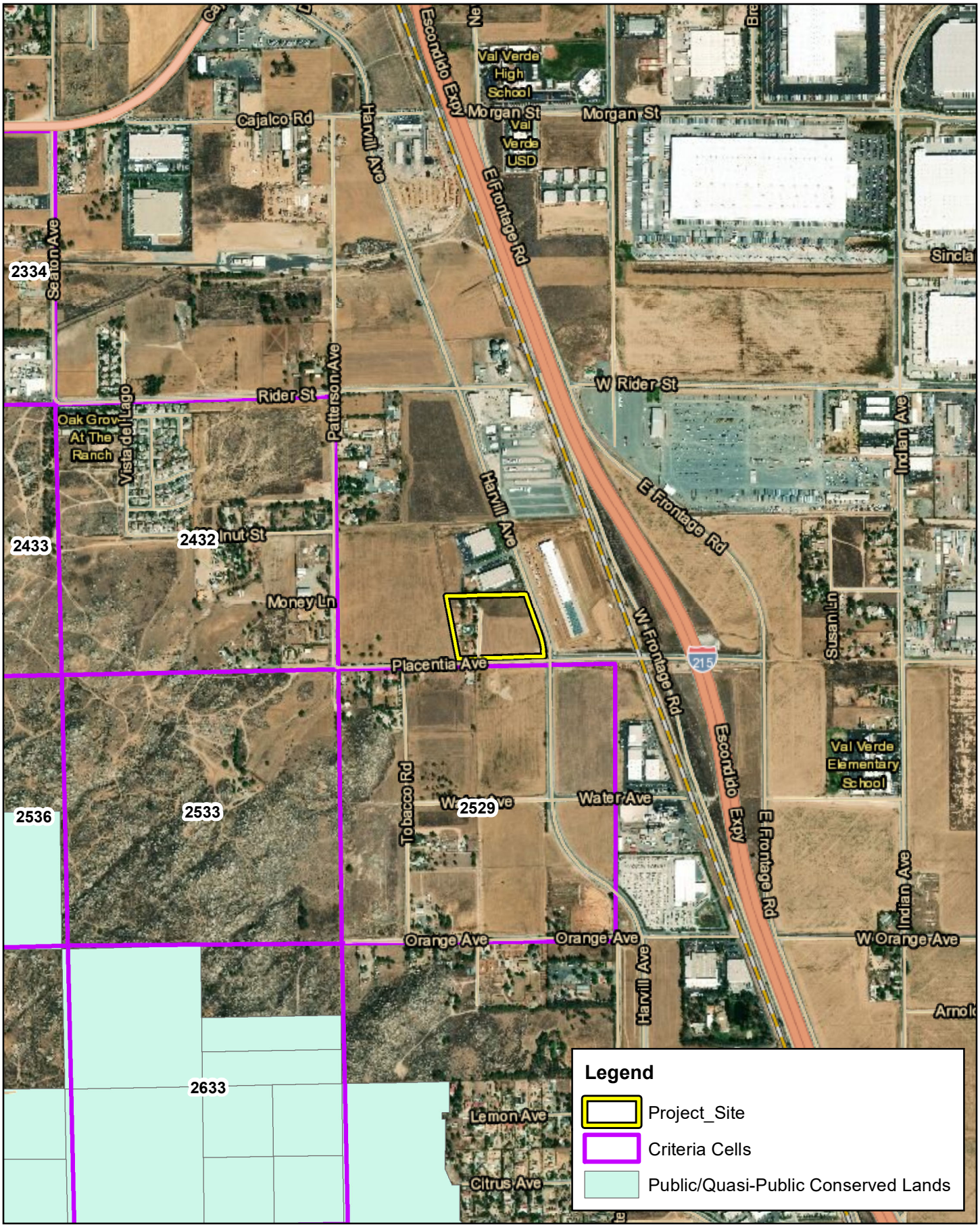
5.1.1 Riparian/Riverine Areas

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 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.

The project site does not support any discernible drainage courses, inundated areas, ore wetland obligate vegetation, or that would be considered jurisdictional or qualify as riparian/riverine habitat under the MSHCP. Additionally, no blueline streams have been mapped onsite. Therefore, development of the proposed project will not result in impacts to riparian/riverine habitats and a DBESP will not be required for 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.



BARKER LOGISTICS
HABITAT ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

MSHCP Conservation Areas

ELMT CONSULTING

0 625 1,250 2,500 Feet

Source: ESRI Aerial Imagery, Western Riverside County, MSHCP, Riverside County

Exhibit 8

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 (1994-2018) of the project site and its immediate vicinity did not provide visual evidence of an astatic or vernal pool conditions on or in the vicinity of the project site. No ponding was observed on-site, further supporting the fact that the drainage patterns currently occurring on the project site do not follow hydrologic regimes needed for vernal pools, or astatic ponds. 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 on the project site, as no ponding was observed on-site. Further, no special-status plant and wildlife species associated with vernal pools were observed. Additionally, the routine disturbances on-site, also preclude vernal pools from existing on-site.

5.2 NARROW ENDEMIC PLANT 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 the designated survey area for Narrow Endemic Plant Species.

5.3 URBAN/WILDLANDS INTERFACE GUIDELINES

According to Section 6.1.4 the MSHCP, *Guidelines Pertaining to Urban/Wildlands Interface*, the guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area (MSHCP, p 6-42). The proposed project site is not located within any Criteria Cells or designated conservation areas, but is located immediately adjacent to Criteria Cell 2529, which contributes to assembly of Proposed Non-Contiguous Habitat Block 4. As a result, the Urban/Wildlife

Interface Guidelines, as discussed below, will be incorporated into the project to ensure that indirect project-related impacts, including drainage, toxics, lighting, noise, invasive plant species, barriers, and grading/land development, are avoided or minimized.

5.3.1 Drainage

The project's stormwater should be directed to a stormwater basin located on the southeast corner of the project site. The basin shall be designed in accordance with all federal, state, regional, and local standards and regulations concerning water quality. These measures will assure that the project stormwater discharges are no greater in volume and velocity than current undeveloped conditions and that the water leaving the site complies with all applicable water quality standards. No drainage/runoff from the site shall flow into the Criteria Cell to the south of the project site.

5.3.2 Toxics

According to the MSHCP, measures shall be incorporated to ensure that application of chemicals does not result in discharge to the MSHCP Conservation Area. During the construction of the project, construction activities have the potential to cause release of toxics that could impact the MSHCP Conservation Area. To address these potential short-term impacts, the project is required to stage construction operations as far away from the MSHCP Conservation Area to the maximum extent feasible. These mitigation measures will be imposed by the County.

5.3.3 Lighting

The proposed project is not anticipated to significantly increase lighting and glare. However, light sources should be designed with internal baffles to direct the lighting towards the ground and the developed areas and have a zero-side angle cut off to the horizon. Parking lot area lighting for the proposed project will utilize energy-efficient LED shielded fixtures with energy savings control options and occupancy sensing units. In addition, the proposed project's landscape design incorporates use of shrubs and trees to reduce off-site light and glare. All lighting will be consistent with County of Riverside's Light Pollution Ordinance.

5.3.4 Noise

The project site should have a physical separation or barrier included in its design between the proposed development and the Criteria Cell to the south to buffer noise impacts on wildlife movement. A barrier would significantly lessen any noise exposure to any MSHCP-covered species. Construction-related noise will be mitigated to be consistent with the County Riverside's Noise Ordinances by limiting construction activities to daytime hours and requiring construction equipment to be tuned and equipped with mufflers. Under the MSHCP, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards.

5.3.5 Invasive Plant Species

Plant species acceptable for the project's landscaping must not be considered an invasive species pursuant to Table 6.2 of the MSHCP. To ensure this, the final landscape plans must be reviewed and verified by the

County for consistency with the plant species list in Table 6.2 of the MSHCP. Allowable use of invasive species on project sites is based on the proximity of the plantings to the Conservation Area (in this case, the willow forest plant community or its associated drainage), the sensitivity of resources in the Conservation Area to invasion, and barriers to plant and seed dispersal. If the site is sufficiently contained such that invasive plantings would not be able to spread outside of the developed project footprint, invasive plantings may be allowed on the site. However, the County of Riverside will make the final decision on the suitability of this species for the project's landscape plan. The proposed plant palette features drought tolerant plants in conformance with County standards.

5.3.6 Barriers

Barriers would restrict direct access to the MSHCP Conservation Area from the project site by unauthorized public access or domestic animals. Under the MSHCP, suitable barriers include native landscaping, rocks/boulders, fencing, walls, signage, and/or other appropriate mechanisms. The barriers would and should be placed within the boundaries of the development and will be outside of the confines of the open space/MSHCP Conservation Area. The project proposes to install perimeter walls that will be view-impenetrable walls of heights of eight feet above finished grade along the easterly and westerly property lines of the proposed project where the project abuts residential uses. The walls will be constructed at a height and type that will be sufficient to provide noise attenuation in accordance with noise mitigation measures if any, required for the proposed project.

5.3.7 Grading/Land Development

Manufactured slopes associated with proposed site development shall not extend into the MSHCP Conservation Area. No manufactured slopes are anticipated to be constructed within the MSHCP Conservation Area. Should manufactured slopes be necessary, they will be kept within the boundaries of the development footprint and not encroach into the open space/MSHCP Conservation Area or otherwise into the area of targeted conservation.

5.4 ADDITIONAL SURVEY NEEDS AND PROCEDURES

The RCA MSHCP Information Map query and review of the MSHCP identified that the project site is located within the designated survey area for burrowing owl as depicted in Figure 6-4 within Section 6.3.2 of the MSHCP.

5.4.1 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 [*Otospermophilus beecheyi*], coyotes, and badgers [*Taxidea taxus*]) 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 survey for burrowing owl requires a systematic survey of all areas that provide suitable habitat plus a 150-meter (approximately 500 feet) zone of influence on all sides of suitable habitat, where applicable. Survey transects were orientated north to south and were conducted at a maximum of 30-meter (approximately 100 feet) intervals to ensure 100% visual coverage of all areas in suitable habitat, as applicable based on topography of the site. 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. The location of all suitable burrowing owl habitat, potential owl burrows, burrowing owl sign, and any owls observed were recorded and mapped, with a hand-held GPS unit, if observed. Methods to detect presence of burrowing owls included direct observation, aural detection, and signs of presence; including pellets, white wash, feathers, or prey remains. Suitable burrows/sites, including rock piles and non-natural substrates, were thoroughly examined for signs of presence. The survey included identifying avian species in the area and observing behaviors that suggested nesting activity. Binoculars were used to observe distant birds and their activity around potential nesting habitat.

The eastern portion of the project site is vegetated with a variety of relatively low-growing plant species that allow for the line-of-sight observation opportunities favored by burrowing owl. In addition, several small mammal burrows that have the potential to provide suitable burrowing owl nesting habitat (>4 inches in diameter) were observed scattered throughout the project site. In order to comply with the conservation goals of the MSCHP, a focused survey for burrowing owl will need to be conducted during the breeding season prior to development. If burrowing owls are found to occupy the project site at the time of the focused survey, a relocation plan will need to be written, approved, and implemented prior to site development. However, if no burrowing owls or sign are found during the focused survey, a final pre-construction burrowing owl clearance survey would be required to ensure burrowing owl remain absent from the project site.

5.5 FUELS MANAGEMENT

Fuels management focuses on hazard reduction for humans and their property (MSHCP, p. 6-72). According to the Fuels Management Guidelines, for new development that is planned adjacent to the MSHCP Conservation Area or other undeveloped areas, brush management shall be incorporated in the development boundaries and shall not encroach into the MSHCP Conservation Area (MSHCP, p. 6-72).

The proposed project would decrease the fuel load within the project site by developing it. Any areas proposed to be planted with fire-resistant, non-invasive plants must not encroach into Proposed Non-

Contiguous Habitat Block 4. Accordingly, with these measures, the project is consistent with the MSHCP Fuels Management Guidelines.

5.6 ADDITIONAL MSHCP CONSIDERATIONS

5.6.1 Nesting Birds

Vegetation within and surrounding the project site has the potential to provide refuge cover from predators, perching sites and favorable conditions for avian nesting that could be impacted by construction activities associated with the project. Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.3, 3511, and 3513 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season. Consequently, if avian nesting behaviors are disrupted, such as nest abandonment and/or loss of reproductive effort, it is considered "take" and is potentially punishable by fines and/or imprisonment.

If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a 300-foot buffer around the active nest. For listed and raptor species, this buffer is expanded to 500 feet. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Section 6 Conclusion and Recommendtions

With completion of the recommendations in this document and payment of the MSHCP and SKR mitigation fees, development of the project site is fully consistent with the Western Riverside County MSHCP.

6.1 MSHCP CRITERIA CELL

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. However, the project site is located immediately adjacent to Criteria Cell 2529, which contributes to assembly of Proposed Non-Contiguous Habitat Block 4. Since the project site is not located within designated Criteria Cells, a Habitat Acquisition Negotiation Strategy (HANS) application will not be required.

6.2 ADDITIONAL SURVEY NEEDS AND PROCEDURES

6.2.1 Burrowing Owl

In order to comply with the conservation goals of the MSCHP, a focused survey for burrowing owl will need to be conducted during the breeding season prior to development. If burrowing owls are found to occupy the project site at the time of the focused survey, a relocation plan will need to be written, approved, and implemented prior to site development. However, if no burrowing owls or sign are found during the focused survey, a final pre-construction burrowing owl clearance survey would be required to ensure burrowing owl remain absent from the project site.

6.3 URBAN/WILDLANDS INTERFACE GUIDELINES

Guidelines presented in Section 5.3 of this report shall be implemented to minimize edge effects to the Conservation Area. No further actions are recommended.

6.4 JURISDICTIONAL DRAINAGES, RIPARIAN/RIVERINE AREAS, AND VERNAL POOLS

There are no on-site water features within the upland portion of the project site. The project site does not support any discernible drainage courses, inundated areas, or wetland obligate vegetation that would be considered jurisdictional by the Corps, Regional Board, or CDFW, or qualify as riparian/riverine habitat under the MSHCP. Therefore, regulatory approvals from the Corps, Regional Board, and/or CDFW will not be required for implementation of the project. Further, site development will not result in impacts to riparian/riverine habitats and a DBESP will not be required for the loss of riparian/riverine habitat.

Additionally, none of the clay soils needed to support vernal pools were observed on-site; therefore, special-status plant and wildlife species associated with vernal pools, including fairy shrimp, are presumed absent from the project site.

6.5 MIGRATORY BIRD TREATY ACT/FISH AND GAME CODE

Pursuant to the Migratory Bird Treaty Act (MBTA) and Fish and Game Code, removal of any trees, shrubs, or any other potential nesting habitat should be conducted outside the avian nesting season. The nesting season generally extends from March through August, beginning as early as January 1 for raptor species, but can vary slightly from year to year based upon seasonal weather conditions. In coordination with the RCA, if ground disturbance and vegetation removal cannot occur outside of the nesting season, a pre-construction clearance survey for nesting birds should be conducted within three days of the start of any ground disturbing activities to ensure that no nesting birds will be disturbed during construction.

The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a 300-foot buffer around the active nest. For raptor species, this buffer is expanded to 500 feet. It is recommended that a biological monitor be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, normal construction activities can occur. As part of the nesting bird clearance survey, a pre-construction burrowing owl clearance survey shall be conducted to ensure that burrowing owl remain absent from the project site.

Section 7 References

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Appendix A Site Photographs

Photograph 1: Looking south from the northern boundary of the project site where the residential lots meet the undeveloped portion.

Photograph 2: Looking southwest from the northeast corner of the project site.

Photograph 3: Looking south from the northeast corner of the project site.

Photograph 4: Looking northwest from the southeast corner of the project site.

Photograph 5: Looking north from the southern boundary of the project site where the residential lots meet the undeveloped portion.

Photograph 6: Looking east along the southern boundary from the southwest corner of the project site.

Photograph 7: Looking north along the western boundary from the southwest corner of the project site at the back portion of the residential lots.

Photograph 8: Looking south along the western boundary from the northwest corner of the project site at the back portion of the residential lots.

Photograph 9: Looking east from the northwest corner of the project site at the back portion of the residential lots.

Photograph 10: Looking west from the middle of the undeveloped eastern portion of the project site.

Appendix B Potentially Occurring Special-Status Biological Resources

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

Scientific Name Common Name	**Status**	**Habitat**	**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.	No	**Moderate**. There is minimal foraging habitat on-site. This species is adapted to urban environments and occurs commonly. No suitable nesting opportunities occur on-site.
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.	No	**Moderate**. There is minimal foraging habitat on-site. This species is adapted to urban environments and occurs commonly. This species does not nest in this area.
Agelaius tricolor tricolored blackbird	Fed: None CA: SSC	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.	No	**Presumed absent.** No suitable habitat is present on-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.	No	**Presumed absent.** No suitable habitat is present on-site.
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.	No	**Presumed absent.** No suitable habitat is present on-site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
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	**Presumed absent.** No suitable habitat is present on-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.	No	**Presumed absent.** No suitable habitat is present on-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	**Low.** The site provides minimal foraging habitat. The site does not provide suitable nesting habitat.
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.	No	**Low.** The site provides minimal foraging habitat. The site does not provide suitable nesting habitat.
Arizona elegans occidentalis California glossy snake	Fed: None CA: CSC	Inhabits arid scrub, rocky washes, grasslands, and chaparral habitats.	No	**Presumed absent.** No suitable habitat is present on-site.
Artemisiospiza belli belli Bell's sage 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.	No	**Presumed absent.** No suitable habitat is present on-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	**Presumed absent.** No suitable habitat is present on-site.
Aspidoscelis hyperythra orangethroat whiptail	Fed: None CA: SSC	Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	No	**Presumed absent.** No suitable habitat is present on-site.
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: None CA: None	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	No	**Presumed absent.** No suitable habitat is present on-site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
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.	No	**Moderate**. The eastern half of the project site provides line-of-site opportunities, and suitable burrows were observed on the project site that have the potential to provide nesting opportunities.
Aythya americana redhead	Fed: None CA: SSC	Typically found in shallow freshwater lakes, ponds, and marshes.	No	**Presumed absent.** No suitable habitat is present on-site.
Bombus crotchii Crotch bumble bee	Fed: None CA: None	Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada.	No	**Presumed absent.** No suitable habitat is present on-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.	No	**Low**. Marginal foraging habitat is present onsite. This species is commonly seen around Lake Perris, San Jacinto Wildlife Area, and the general open fields north and south of Ramona Expressway to the east of the project site. This species does not nest in southern California.
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.	No	**Presumed absent.** No suitable habitat is present on-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	**Presumed absent.** No suitable habitat is present on-site.
Chaetodipus californicus femoralis Dulzura pocket mouse	Fed: None CA: SSC	Found most often in grass-chaparral edges, but may also be found in coastal scrub or other habitats, primarily in San Diego County.	No	**Presumed absent.** No suitable habitat is present on-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.	No	**Presumed absent.** No suitable habitat is present on-site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
Chaetura vauxi Vaux's swift	Fed:None CA:SSC	Prefers redwood and Douglas-fir habitats with nest-sites in large hallow 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	**Presumed absent.** No suitable habitat is present on-site.
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.	No	**Presumed absent.** No suitable habitat is present on-site.
Circus cyaneus 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.	No	**Presumed absent**. No suitable habitat is present.
Coleonyx variegatus abbotti San Diego banded gecko	Fed:None CA:None	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.	No	**Presumed absent.** No suitable habitat is present on-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.	No	**Presumed absent.** No suitable habitat is present on-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	**Presumed absent.** No suitable habitat is present on-site.
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	**Presumed absent.** No suitable habitat is present on-site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
Dipodomys merriami parvus San Bernardino Kangaroo Rat	Fed: **END** CA: SSC	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.	No	**Presumed absent.** No suitable habitat is present on-site.
Dipodomys simulans Dulzura kangaroo rat	Fed: None CA: None	Relatively common in chaparral, coastal sage scrub, Riversidean alluvial fan sage scrub, and peninsular juniper woodland habitats.	No	**Presumed absent.** No suitable habitat is present on-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.	No	**Presumed absent.** No suitable habitat is present on-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	**Presumed absent.** No suitable habitat is present on-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.	No	**Low**. The project site provides marginal foraging habitat. No suitable nesting habitat onsite.
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.	No	**Presumed absent.** No suitable habitat is present on-site.
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).	No	**Presumed absent.** No suitable habitat is present on-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.	No	**Moderate**. The eastern portion of the site provides foraging habitat. Continuous disking likely prevents this species from nesting onsite.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
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	**Presumed absent.** No suitable habitat is present on-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.	No	**Presumed absent.** No suitable habitat is present on-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.	No	**Presumed absent.** No suitable habitat is present on-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.	No	**Presumed absent.** No suitable habitat is present on-site.
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.	No	**Presumed absent.** No suitable habitat is present on-site.
Haliaeetus leucocephalus bald eagle	Fed: Delisted CA: **END**; FP	Occur primarily at or near seacoasts, rivers, swamps, and large lakes. Need ample foraging opportunities, typically near a large water source.	No	**Presumed absent.** No suitable habitat is present on-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	**Presumed absent.** No suitable habitat is present on-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.	No	**Presumed absent.** No suitable habitat is present on-site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
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.	No	**Presumed absent.** No suitable habitat is present on-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	**Presumed absent.** No suitable habitat is present on-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	**Presumed absent.** No suitable habitat is present on-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.	No	**Low**. The open habitat onsite provides marginal foraging habitat, but due to extensive disking activities, there are no denning habitats onsite.
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.	No	**Presumed absent.** No suitable habitat is present on-site.
Myotis yumanensis Yuma myotis	Fed: None CA: None	Found in forests and woodlands near water. Roosts in caves, buildings, mines, and crevices.	No	**Presumed absent.** No suitable habitat is present on-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.	No	**Presumed absent.** No suitable habitat is present on-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	**Presumed absent**. No suitable habitat is present.
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.	No	**Presumed absent.** No suitable habitat is present on-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	**Presumed absent**. No suitable habitat is present.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
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	**Presumed absent.** No suitable habitat is present on-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.	No	**Presumed absent.** No suitable habitat is present on-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	**Presumed absent.** No suitable habitat is present on-site.
Pelecanus occidentalis californicus California brown pelican	Fed: None CA: 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	**Presumed absent.** No suitable habitat is present on-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.	No	**Presumed absent.** No suitable habitat is present on-site.
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.	No	**Presumed absent.** No suitable habitat is present on-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.	No	**Presumed absent.** No suitable habitat is present on-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.	No	**Presumed absent**. No suitable habitat is present.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
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.	No	**Presumed absent.** No suitable habitat is present on-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	**Presumed absent.** No suitable habitat is present on-site.
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	**Presumed absent.** No suitable habitat is present on-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	**Presumed absent.** No suitable habitat is present on-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.	No	**Presumed absent**. No suitable habitat is present.
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	**Presumed absent.** No suitable habitat is present on-site.
Streptocephalus woottoni Riverside fairy shrimp	Fed: **END** CA: None	Freshwater crustacean that is found in vernal pools in the coastal California area.	No	**Presumed absent**. No suitable habitat is present.
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	**Presumed absent.** No suitable habitat is present on-site.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
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.	No	**Presumed absent.** No suitable habitat is present on-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	**Presumed absent**. No suitable habitat is present.
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.	No	**Presumed absent**. No suitable habitat is present.
Atriplex coronata* var. *notatior San Jacinto Valley crownscale	Fed: **END** 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.	No	**Presumed absent**. No suitable habitat is present.
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	**Presumed absent**. No suitable habitat is present.
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.	No	**Presumed absent**. No suitable habitat is present.
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.	No	**Presumed absent**. No suitable habitat is present.
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.	No	**Presumed absent**. No suitable habitat is present.
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.	No	**Presumed absent**. No suitable habitat is present.

Scientific Name Common Name	**Status**	**Habitat**	**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.	No	**Low**. The site provides minimal habitat for this species. This species is found in disturbed areas.
Chorizanthe leptotheca Peninsular spineflower	Fed: None CA: None CNPS: 4.2	Found in granitic soils within alluvial fan, chaparral, coastal scrub, and lower montane coniferous forest habitat. Found at elevations ranging from 984 to 6,234 feet. Blooming period is from May to August.	No	**Presumed absent**. No suitable habitat is present.
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.	No	**Presumed absent**. No suitable habitat is present.
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.	No	**Presumed absent**. No suitable habitat is present.
Convolvulus simulans small-flowered morning-glory	Fed: None CA: None CNPS: 4.2	Found in clay and serpentinite seeps within chaparral (openings), coastal scrub, valley and foothill grassland. Found at elevations ranging from 98 to 2,297 feet. Blooming period is from March to July.	No	**Presumed absent**. No suitable habitat is present.
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	**Low**. The site provides minimal habitat for this species. This species is found in disturbed areas.
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 habitats. Grows in elevation from 66 to 3,133 feet. Blooming period ranges from March to May.	No	**Presumed absent**. No suitable habitat is present.
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.	No	**Presumed absent**. No suitable habitat is present.
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.	No	**Presumed absent**. No suitable habitat is present.
Lepidium virginicum var. robinsonii Robinson's pepper-grass	Fed: None CA: None CNPS: 4.3	Dry soils on chaparral and coastal sage scrub from 66 to 4,396 feet in elevation. Blooming period ranges from January to July.	No	**Presumed absent**. No suitable habitat is present.

Scientific Name Common Name	**Status**	**Habitat**	**Observed On-site**	**Potential to Occur**
Myosurus minimus ssp. ***Apus*** little mousetail	Fed: None CA: None CNPS: 3.1	Occurs in areas that have semi-regular inundation in association with vernal pools, alkali vernal pools, and alkali grassland. The species is primarily restricted to clay or alkali soils on alkali vernal floodplains. Found at elevations ranging from 66 to 2,100 feet above msl. Blooming period is from March to June.	No	**Presumed absent**. No suitable habitat is present.
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.	No	**Presumed absent**. No suitable habitat is present.
Romneya coulteri Coulter's maatilija 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.	No	**Presumed absent**. No suitable habitat is present.
Texosporium sancti-jacobi woven-spore 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	**Presumed absent**. No suitable habitat is present.
Tortula californica California screw moss	Fed: None CA: None CNPS: 1B.2	Found in chenopod scrub and valley and foothill grassland. Grows on sandy soil. Found at elevations ranging from 33 to 4,790 feet.	No	**Presumed absent**. No suitable habitat is present.
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.	No	**Presumed absent**. No suitable habitat is present.
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.	No	**Absent**
Southern Cottonwood Willow Riparian Forest	CDFW Sensitive Habitat	Dominated by cottonwood (*Populus* ssp.) and willow (*Salix* ssp.) 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.	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.	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

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 residential development ranges from approximately $800 per unit to $1,600 per unit depending on development density (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 U.S. Environmental Protection Agency (EPA) have jointly regulated the filling of "waters of the U.S.," including wetlands, pursuant to Section 404 of the Clean Water Act (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, sand, rock, clay, construction debris, wood chips, and "materials used to create any structure or infrastructure in the waters of the United States." In order to further define the scope of waters protected under the CWA, the Corps and EPA published the Clean Water Rule on June 29, 2015. Pursuant to the Clean Water Rule, the term "*waters of the United States*" is defined as follows:

(i) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

(ii) All interstate waters, including interstate wetlands[1].

(iii) The territorial seas.

(iv) All impoundments of waters otherwise defined as waters of the United States under the definition.

(v) All tributaries[2] of waters identified in paragraphs (i) through (iii) mentioned above.

(vi) All waters adjacent[3] to a water identified in paragraphs (i) through (v) mentioned above, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

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1 The term *wetlands* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

2 The terms *tributary* and *tributaries* each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (iv) mentioned above), to a water identified in paragraphs (i) through (iii) mentioned above, that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark.

3 The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (i) through (v) mentioned above, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like.

(vii) All prairie potholes, Carolina bays and Delmarva bays, Pocosins, western vernals pools, Texas coastal prairie wetlands, where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (i) through (iii) meantioned above.

(viii) All waters located within the 100-year floodplain of a water identified in paragraphs (i) through (iii) mentioned above and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (i) through (v) mentioned above, where they are determined on a case-specific basis to have a significant nexus to a waters identified in paragraphs (i) through (iii) mentioned above.

The following features are not defined as "waters of the United States" even when they meet the terms of paragraphs (iv) through (viii) mentioned above:

(i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.

(ii) Prior converted cropland.

(iii) The following ditches:

- (A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
- (B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
- (C) Ditches that do not flow, either directly or through another water, into a water of the United States as identified in paragraphs (i) through (iii) of the previous section.

(iv) The following features:

- (A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;
- (B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;
- (C) Artificial reflecting pools or swimming pools created in dry land;
- (D) Small ornamental waters created in dry land;
- (E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;
- (F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of a tributary, non-wetland swales, and lawfully constructed grassed waterways; and
- (G) Puddles.

(v) Groundwater, including groundwater drained through subsurface drainage systems.

(vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

(vii) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

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.