ARROYO VISTA

RIVERSIDE COUNTY, CALIFORNIA

RIVERSIDE EAST USGS 7.5-MINUTE TOPOGRAPHIC QUADRANGLE
SECTION 24, TOWNSHIP 3 SOUTH, RANGE 5 WEST
APNS: 245-300-001 AND -004

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

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March 2023
Updated January 2025

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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.

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March 2023
Updated January 2025

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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 Arroyo Vista project located in unincorporated Riverside County, California. The report was prepared to document baseline conditions and assess the potential for special-status[1] plant and wildlife species to occur within the proposed project site and offsite improvement areas (i.e., roadway frontage improvements and off-site sewer line in Chicago Avenue extending to Van Buren Boulevard) that could pose a constraint to implementation of the proposed project. Special attention was given to the suitability of the on-site habitat to support special-status species identified by the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) and other electronic databases as potentially occurring in the general vicinity of the project. Additionally, the report also addresses resources protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (FGC), federal Clean Water Act (CWA) regulated by the United States Army Corps of Engineers (Corps) and Regional Water Quality Control Board (Regional Board) respectively, and Section 1602 of the FGC administered by CDFW.

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

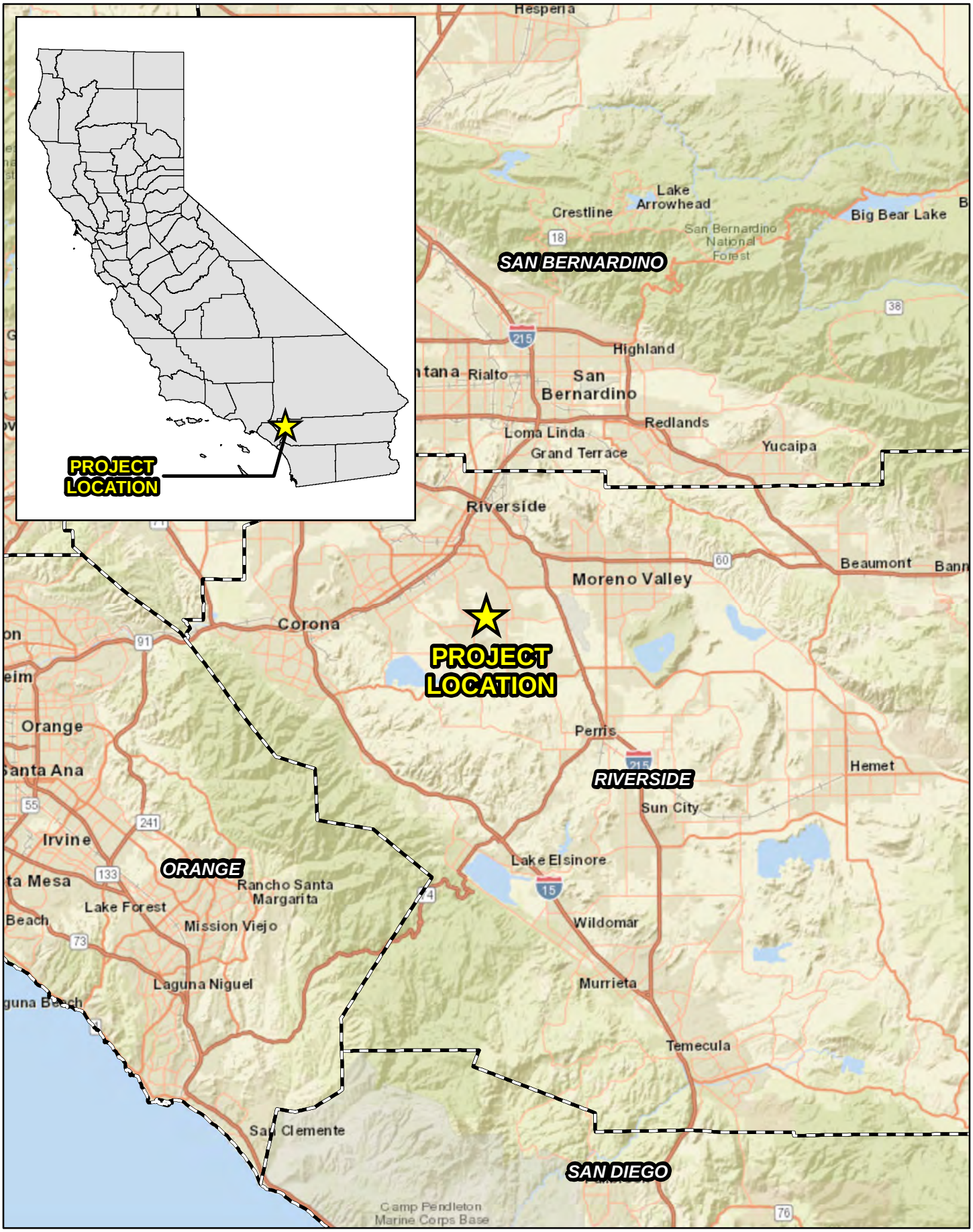
1.1 PROJECT LOCATION

The site is generally located southeast of Interstate 91, west of Interstate 215 and east of Interstate 15 in unincorporated Riverside County California (Exhibit 1, *Regional Vicinity*). The project site is depicted on the Riverside East quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map within Section 24 of Township 3 South, Range 5 West (Exhibit 2, *Site Vicinity*). Specifically, the project site is located south of Gentian, west of Chicago Avenue, north of Iris Avenue, and east of Porter Avenue within Assessor Parcel Numbers 245-300-001 and 245-300-004 (Exhibit 3, *Project Site*).

[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.

1.2 PROJECT DESCRIPTION

The project proposes to develop a Tentative Tract Map No. 38510 with 231 residential lots. The project will include offsite improvemtns to the frontage road and the rod on the northeast corrner of the site. No temporary impact areas are proposed.

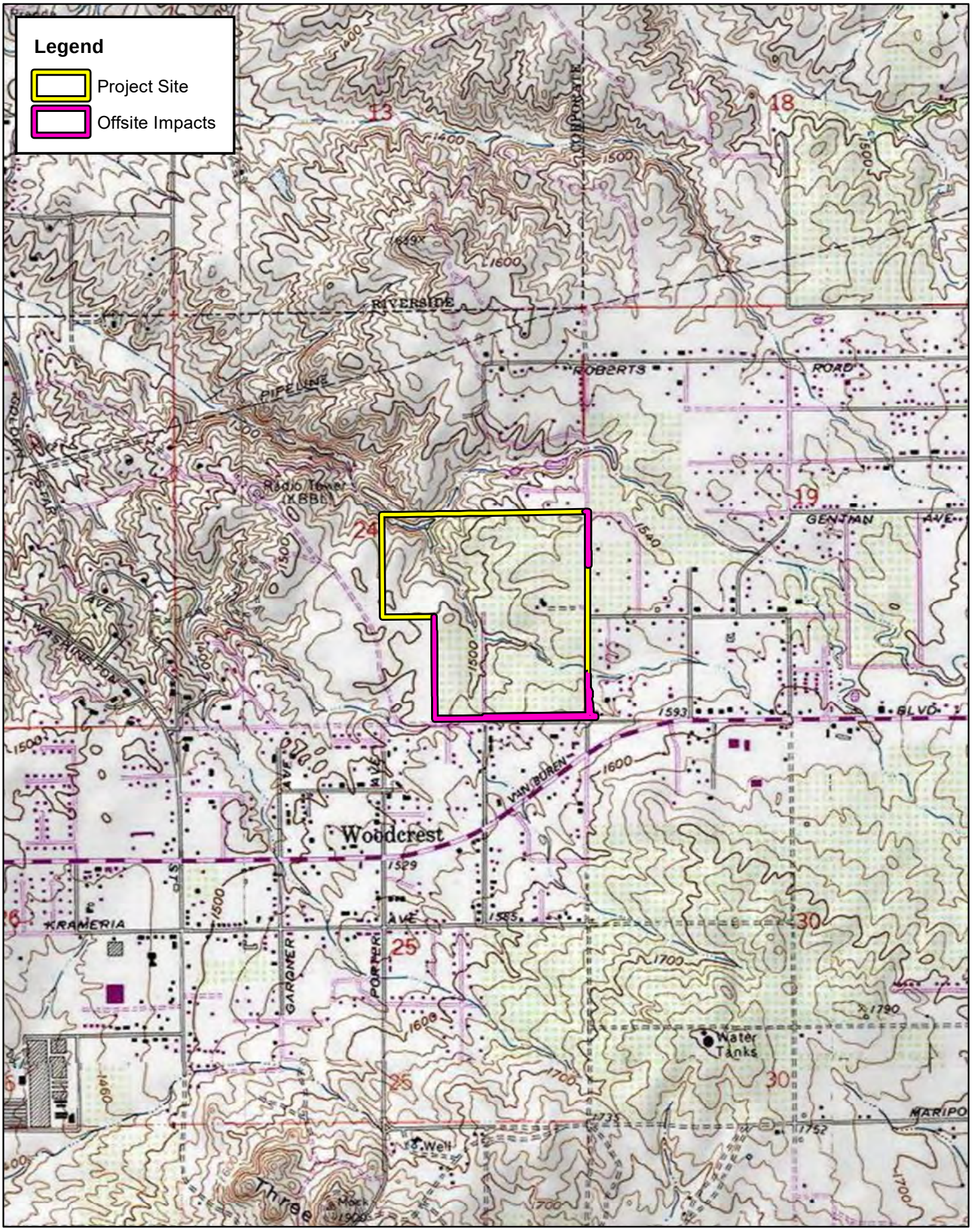


ELMT CONSULTING

WOODCREST PROJECT

Regional Vicinity

Exhibit 1



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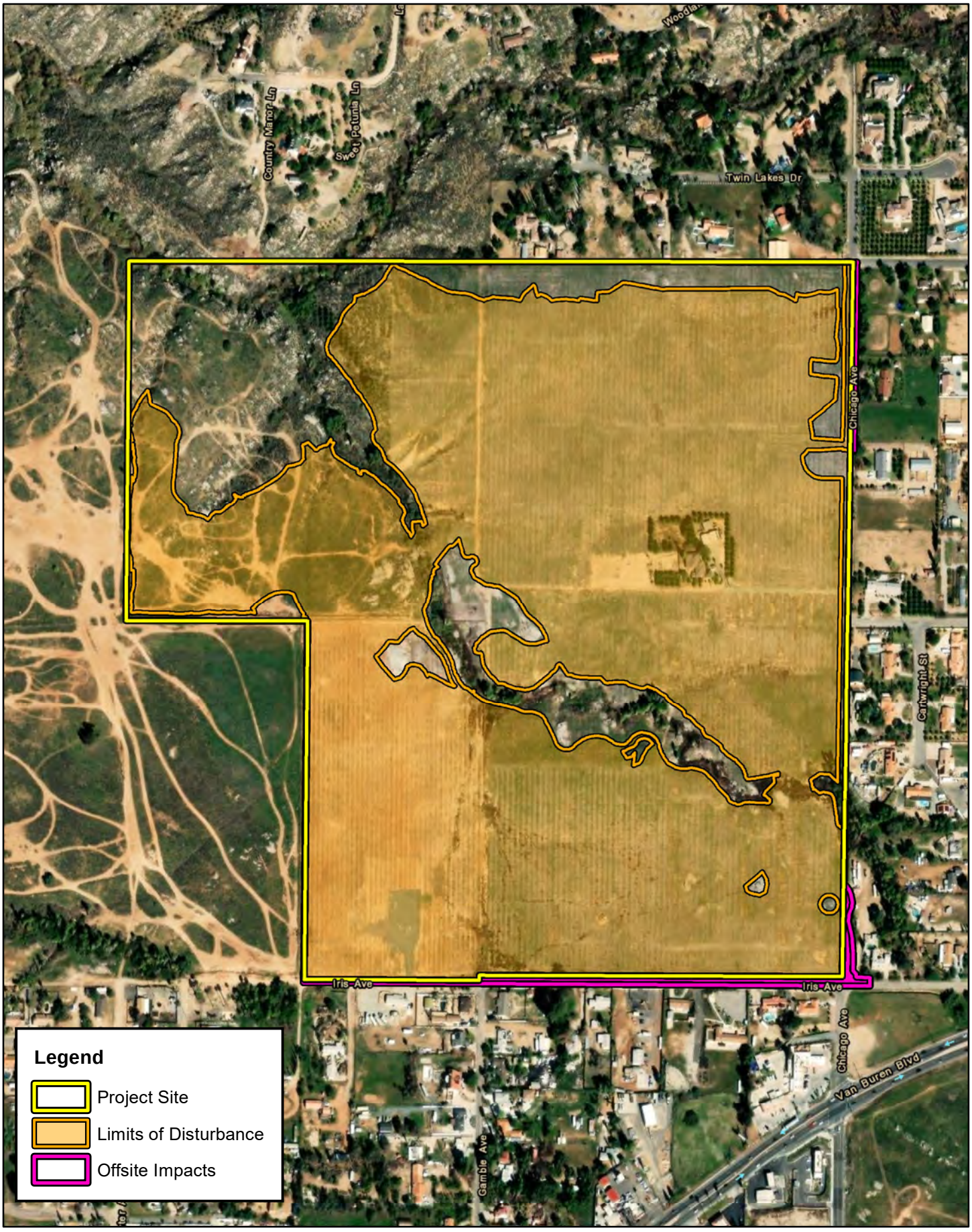
Source: USA Topographic Map, Riverside County

WOODCREST PROJECT

Site Vicinity

Exhibit 2



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Source: ESRI Aerial Imagery, Riverside County

WOODCREST PROJECT

Project Site

Exhibit 3

Section 2 Methodology

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

2.1 LITERATURE REVIEW

Prior to conducting the field investigation, species and habitat information was gathered from the reports related to the specific project and relevant databases for the *Riverside East, Riverside West, Lake Mathews*, and *Steele Peak* USGS quadrangles to determine which species and/or habitats would be expected to occur on-site. These sources include:

- California Native Plant Society Electronic Inventory (CNPSEI) database;
- California Natural Diversity Database (CNDDB) *Rarefind 5*;
- CNDDB Biogeographic Information and Observation System (BIOS);
- Environmental Protection Agency (EPA) Water Program "My Waters" data layers
- Google Earth Pro historic aerial imagery (1985-2023);
- Stephen's Kangaroo Rat Habitat Conservation Plan
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey[2];
- United States Fish and Wildlife Service (USFWS) Critical Habitat designations for Threatened and Endangered Species;
- USFWS National Wetlands Inventory (NWI);
- Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map; and
- 2006 Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area.

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

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

2.2 FIELD INVESTIGATION

Following the literature review, biologist Thomas J. McGill, Ph.D. inventoried and evaluated the condition of the habitat within the project site on November 1, 2021. A follow-up field investigation was conducted by biologist Jacob H. Lloyd Davies on February 9, 2023. Plant communities identified on aerial photographs during the literature review were verified by walking meandering transects through the plant communities and along boundaries between plant communities.

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

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

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

2.3 SOILS SERIES ASSESSMENT

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

2.4 PLANT COMMUNITIES

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

2.5 PLANTS

Common plant species observed during the field survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less-familiar plants were photographed in the field and identified in the laboratory using taxonomic guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

2.6 WILDLIFE

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

2.7 JURISDICTIONAL DRAINAGES AND WETLANDS

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

Section 3 Existing Conditions

3.1 LOCAL CLIMATE

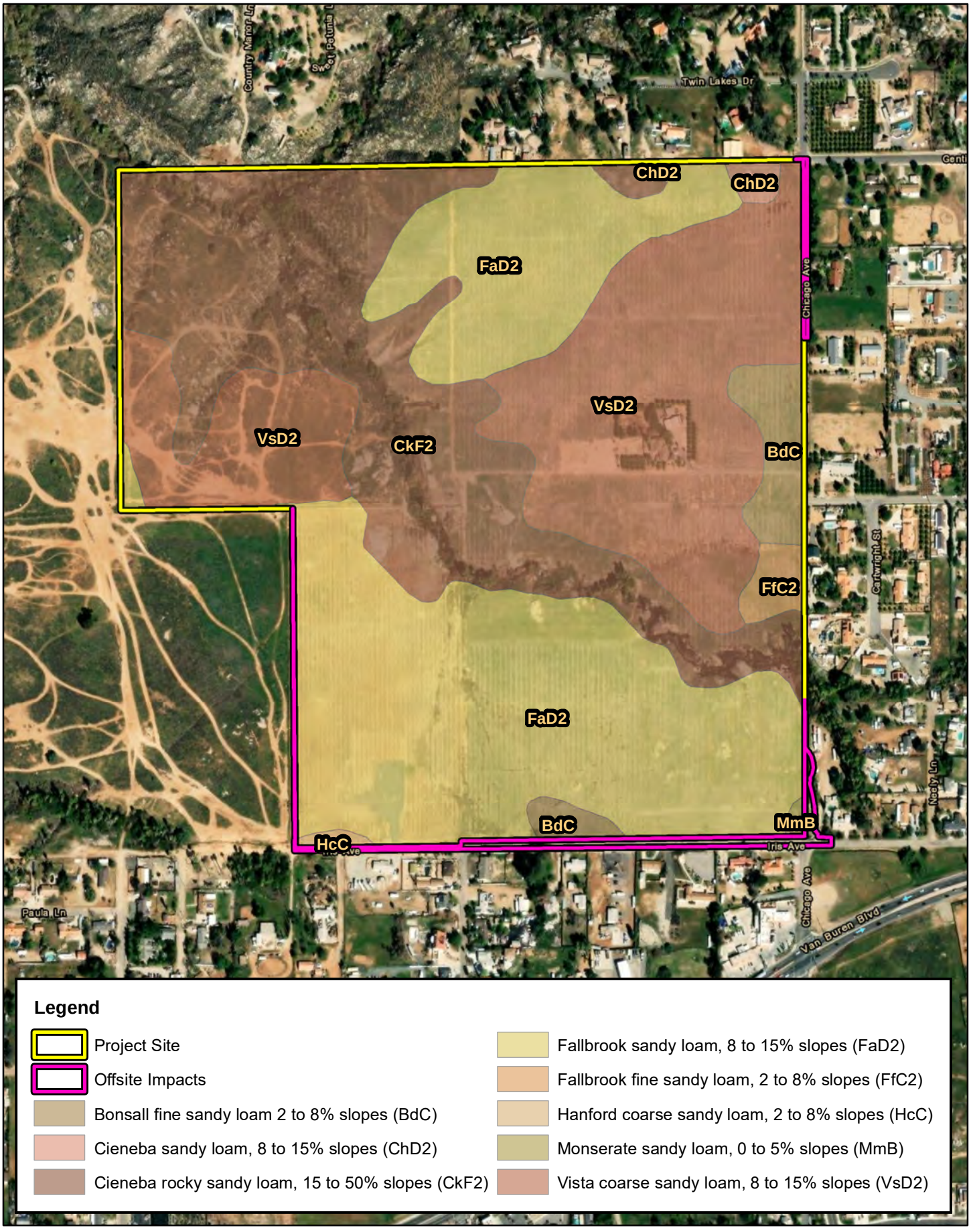
Western Riverside County features a somewhat cooler version of a Mediterranean climate, or semi-arid climate, with warm, sunny, dry summers and cool, rainy, mild winters. Relative to other areas in Southern California, winters are colder, with chilly to cold morning temperatures with frost common. Climatological data obtained for the City of Riverside indicates the annual precipitation averages 9.39 inches per year. Almost all of the precipitation in the form of rain occurs in the months between December and April, with hardly any occurring between the months of June and August. The wettest months are January and February, with monthly average total precipitation of 2.29 and 2.41 inches, respectively, and the driest months are June and August, with monthly average total precipitation of 0.04 and 0.03 inches, respectively. The average maximum and minimum temperatures are 79.5- and 53-degrees Fahrenheit (°F), respectively, with July and August (monthly average highs of 93.3 and 94.9°F) being the hottest months and December and January (monthly average lows 42.8 and 43.6°F) being the coldest. The temperature during the site visit was in the mid-70s°F with clear skies and calm winds.

3.2 TOPOGRAPHY AND SOILS

The project site is located at an approximate elevation of 1,415 to 1,550 feet above mean sea level and supports variable topography consisting of rolling hills with ravine features extending from the southeast corner to the northwest corner. Based on the NRCS USDA Web Soil Survey, the project site is underlain by the following soil units: Bonsall fine sandy loam (2 to 8 percent slopes), Cieneba sandy loam (8 to 15 percent slopes, eroded), Cieneba rocky sandy loam (15 to 50 percent slopes, eroded), Fallbrook sandy loam (8 to 15 percent slopes, eroded), Fallbrook fine sandy loam (2 to 8 percent slopes, eroded), Hanford coarse sandy loam (2 to 8 percent slopes), Monserate sandy loam (0 to 5 percent slopes), and Vista coarse sandy loam (8 to 15 percent slopes, eroded). Refer to Exhibit 4, *Soils*. Soils on-site have been mechanically disturbed and heavily compacted from historic land uses (i.e., agricultural activities, grading activities, and weed abatement).

3.3 SURROUNDING LAND USES

The project site occurs in a former agricultural community that abuts highly topographical rolling hills supporting undeveloped open space. Urbanization in the latter half of the 20th century has resulted in the majority of former agricultural land being converted into primarily residential developments, with commercial and industrial developments and remaining undeveloped former agricultural land intermixed. At present, the project site is bounded to the north by undeveloped, vacant land and residential development; to the east and south by residential development; and to the west by undeveloped, vacant land.



ELMT CONSULTING

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

WOODCREST PROJECT

Soils

Exhibit 4

Section 4 Discussion

4.1 SITE CONDITIONS

Presently, the project site primarily supports inactive agricultural fields with some associated development and a series of arroyos that slope downwards from the southern and eastern boundaries towards the northwest corner. Undeveloped land supported on-site has been subject to a variety of anthropogenic disturbances associated with historic agricultural activities, associated development, discing activities, routine weed abatement, light vehicle and off-highway recreational vehicle access, and illicit dumping and camping. Historic aerials show that the site supported agricultural land uses since at least 1948. Prior to conducting the field investigation, aerial photography was reviewed to document existing site conditions and document the changes to the project site and surrounding area.

1948: The project site and surrounding areas support agricultural fields. The only portions of the site that do not support agricultural land uses occur along the steep arroyos that permeate the site. The site is bounded by agricultural fields to the west, south, and east, and open space to the north along downstream portions of the arroyos.

1948 – 1966: On-site and surrounding agricultural fields have been converted to citrus groves. Citrus groves now abut the top of the arroyo slopes. A relatively shallow arroyo extending north from the southern boundary has been filled and supports citrus groves. A residential development is present near the middle of the eastern portion of the site. Some residential parcels are present just beyond Iris Avenue at the southern boundary of the site. Former agricultural fields in the northwest portion of the site and off-site to the west are in various states of unuse.

1966 – 1967: Citrus groves have expanded further into the northwest portion of the site.

1967 – 1978: Agricultural fields are now present in the northwest corner of the site. The majority of adjacent land to the south has been converted into residential developments. New residential developments are present off-site to the southeast and northeast.

1978 – 1985: Agricultural land uses have been abandoned in the northwest corner of the site. Additional residential developments are present to the north.

1985 – 1994: Additional residential developments are present to the north and east. The abandoned agricultural field in the northwest corner of the site have been impacted by off-roading activities such that tracks are visible.

1994 – 2005: No changes.

2005 – 2009: Some grading and crop clearing has occurred in association with agricultural operations.

2010 – 2012: A small, paved loading area is present in the southeast portion of the site.

2012 – 2020: No changes occur outside of normal crop rotation activities.

2020 – 2021: Citrus groves have been removed.

2021 – 2023: No changes.

The disturbances outlined above have eliminated the natural plant communities that historically occurred on the less-topographically variable portions of the project site and surrounding area. Natural plant communities supported within the arroyo remain in a relatively natural state. Refer to Appendix B, *Site Photographs*, for representative site photographs of the project site.

4.2 VEGETATION

Three (3) plant communities are supported within the project site: southern willow scrub, Riversidean sage scrub, and non-native grassland. In addition, the project site supports two (2) land cover types that would be classified as disturbed and developed. Refer to Exhibit 5, *Vegetation*. The vegetation communities and land cover types are described in further detail below.

Table 1: Onsite Vegetation Communities and Impacts

Vegetation Communities	On-Site Acreage	Vegetation Impacts (acres)
Southern Willow Scrub	2.90	0.24
Riversidean Sage Scrub	7.62	1.79
Non-Native Grassland	14.24	8.35
Disturbed	113.81	99.79
Developed	2.61	2.61
Totals	**141.18**	**112.78**

It should be noted that off-site improvements (limited to frontage improvements along Iris/Chicago and a sewer line extending within Chicago between the southeast corner of the site and Van Buren Boulevard) occurs within fully disturbed/developed areas (improved roadways).

4.2.1 Southern Willow Scrub

The drainage feature that bisects the project site primarily supports a southern willow scrub plant community. This plant community is dominated by arroyo willow (*Salix lasiolepsis*) and black willow (*Salix goodingii*) and supports a variety of other trees and shrubs with an herbaceous understory. Other common species observed in the southern willow scrub plant community include Mexican fan palm (*Washingtonia robusta*), salt cedar (*Tamarix* sp.), giant creek nettle, mule fat, elderberry (*Sambucus mexicana* [*S. caerulea*]), bowlesia (*Bowlesia incana*), California bee plant (*Scrophularia californica*), common phacelia (*Phacelia distans*), Douglas' nightshade (*Solanum douglasii*), goldfields (*Lasthenia glabrata*), hairy leaved sunflower (*Helianthus annuus*), London rocket (*Sisymbrium irio*), needle goldfields (*Lasthenia gracilis*), stinknet (*Oncosiphon pilulifer*), virgin's bower (*Clematis pauciflora*), barley (*Hordeum murinum*), and willow baccharis (*Baccharis salicina*).

The areas within the arroyo that support more routine surface flows are dominated by narrow-leaved cattail (*Typha augustifolia*), sparse watercress (*Sisymbrium nasturtium-aquaticum*), watercress (*Nasturtium officinale*), salt grass (*Distichlis spicata*), mule fat (*Baccharis salicifolia*), and giant creek nettle (*Urtica dioica* ssp. *holosericea*).

4.2.2 Riversidean Sage Scrub

The upper limits of the drainage feature that bisects the project site and some adjacent spaces support Riversidean sage scrub plant communities similar to historic vegetative cover that historically occupied the rolling hills of the site, prior to agricultural land uses. Due to the proximity of this plant community to the active flows and southern willow scrub supported within the arroyo, the Riversidean sage scrub supported on-site exhibits denser vegetation and higher diversity than would otherwise be found in the surrounding hills. This plant community is dominated by woody shrubs and trees such as elderberry, California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), and mulefat, and supports a variety of low-growing shrubs and an herbaceous understory. Other common plant species observed in the Riversidean sage scrub supported by the project site include common phacelia, Douglas' nightshade, goldfields, London rocket, needle goldfields, stinknet, virgin's bower, barley, baby blue eyes (*Nemophila menziesii*), popcorn flower (*Plagiobothrys collinus*), chia sage (*Salvia columbariae*), fiddleneck (*Amsinckia* sp.), desert wishbone bush (*Mirabilis laevis*), foxtail chess (*Bromus madritensis*), miniature lupine (*Lupinus bicolor*), Pomona milk vetch (*Astragalus pomonensis*), strigose lotus (*Acmispon strigosus*), wild canterbury bells (*Phacelia minor*), wildoats (*Avena fatua*), and tarragon (*Artemisia dracunculus*).

4.2.3 Non-Native Grassland

The non-native grassland plant community is located on the northeast portion of the project site, in areas that have been subject to frequent anthropogenic disturbances, but did not support historic agricultural land uses. This plant community is dominated by non-native grasses such as oat grasses (*Avena barbata* and A. *fatua*), brome grasses (*Bromus diandrus* and *B. madritensis*), and rattail fescue (*Festuca myuros*), with a limited presence of other early successional species such as Mediterranean schismus (*Schismus barbatus*), filarees (*Erodium brachycarpum* and *E. cicutarum*), mustard (*Hirschfeldia incana*), tocalote (*Centaurea melitensis*), annual beard grass (Polypogon monspeliensis), and Jersey cudweed (*Pseudognaphalium luteoalbum*).

4.2.4 Disturbed

Disturbed land is supported through most portions of the project site that occur away from the arroyo, where historic agricultural land uses eliminated the natural plant communities that once occurred. The disturbed areas of the project site support many of the aforementioned species found in the non-native grassland plant community. Disturbance type varies throughout the site, with grading and weed abatement occurring throughout all areas, piling of refuse materials occurring near the center of most parcels, and illegal dumping being prominent around the site boundaries.

Additionally, the northern boundary of the site supports an unnamed man-made drainage and is bounded to the north by residential development. This feature primarily supports non-native weedy/early successional

species, but also supports ornamental vegetation, and species adapted to more mesic conditions. Common plant species observed along the northern boundary include those observed in the non-native grassland in addition to oleander (*Nerium oleander*), red gum eucalyptus (*Eucalyptus camaldulensis*), vinegar weed (*Trichostema lanceolatum*), morning glory (*Calystegia macrostegia*), curly dock (*Rumex crispus*), speedwell (*Veronica* sp.), and common sunflower (*Helianthus annuus*).

4.2.5 Developed

Developed areas generally encompass all buildings/structures or any paved or otherwise impervious surfaces. Developed land is present in the northern and southwest portions of the project site, in the middle portion of the site where remnant roads have not deteriorated, and areas associated with the house onsite. Vegetative cover in these areas is generally barren but may include sparse coverage of weedy, invasive, and/or primary-successional species, or remnant ornamental species.

4.3 WILDLIFE

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

4.3.1 Fish

The MSHCP does not identify any covered or special-status fish species as potentially occurring on the project site. While the arroyo that transects the site receives regular flows from urban runoff, the active portions of the arroyo terminate at several water percolation basins downstream, and no connection to regularly habitable waters upstream or downstream from the site are present. As such, the site is not expected to support native fish species. No fish were observed during the field investigation. The only species of fish that might be expected to persist on-site is mosquitofish (*Gambusia affinis*), which is introduced to surface water occurring near development in association with mosquito-borne disease vector mitigation efforts.

4.3.2 Amphibians

The MSHCP does not identify any covered or special-status amphibian species as potentially occurring on the project site. Active portions of the arroyo and associated plant communities have the potential to support local amphibian species that are adapted to degraded conditions (i.e., adjacent agricultural operations and residential runoff). Amphibian species observed during the field investigation include Baja California chorus frog (*Pseudacris hypochondriaca hypochondriaca*) and garden slender salamander (*Batrachoseps major major*). Other common amphibian species that may be expected to occur include western toad (*Anaxyrus boreas*).

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 suitable foraging and cover habitat for local reptile species adapted to degraded conditions and riparian communities. Reptilian species observed during the field investigation include western side-blotched lizard (*Uta stansburiana elegans*), Great Basin fence lizard (*Sceloporus occidentalis longipes*), and granite spiny lizard (*Sceloporus orcutti*). Other common reptilian species expected to occur on-site include southern alligator lizard (*Elgaria multicarinata*), San Diego gopher snake (*Pituophis catenifer annectens*), San Diego nightsnake (*Hypsiglena ochrorhyncha klauberi*), and red racer (*Coluber flagellum piceus*).

4.3.4 Birds

In accordance with the MSHCP, the project site is located within the designated survey area for burrowing owl. The project site provides suitable foraging and nesting habitat for local and migratory bird species adapted to degraded conditions and riparian environs. Avian species detected during the field survey include northern mockingbird (*Mimus polyglottos*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), Cassin's kingbird (*Tyrannus vociferans*), lesser goldfinch (*Spinus psaltria*), California towhee (*Calozone crissalis*), white-crowned sparrow (*Zonotrichia leucophrys*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), California quail (*Callipepla californica*), common raven (*Corvus corax*), and song sparrow (*Melospiza melodia*).

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 provides suitable foraging and denning habitat for mammalian species adapted to degraded conditions and riparian environs. Mammalian species observed during the field investigation included coyote (*Canis latrans*) and desert cottontail (*Sylvilagus audubonii*). Other common mammalian species that could be expected to occur include California ground squirrel (*Otospermophilus beecheyi*), striped skunk (*Mephitis mephitis*), gray fox (*Urocyon cinereoargentus*), virginia opossum (*Didelphis virginiana*), fox squirrel (*Sciurus niger*), and raccoon (*Procyon lotor*).

4.4 NESTING BIRDS

Plant communities within and along the arroyo have the potential to provide nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area. Additionally, the disturbed habitats have the potential to support birds that nest on the open ground such as killdeer (*Charadrius vociferus*).

Nesting birds are protected pursuant to the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 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 prior to the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction.

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. The nearest linkages to the project, as identified by the MSHCP, occur approximately 1.77 miles to the northeast and 2.96 miles to the southwest. The proposed project will be confined to existing areas that have been heavily disturbed. The arroyo and associated plant communities likely serve as linkages for wildlife species to move locally, but the site is isolated from regional wildlife corridors and linkages as there are no riparian corridors, creeks, or useful patches of steppingstone habitat (natural areas) within or connecting the site to any recognized wildlife corridor or linkage. Project activities will be limited to former agricultural areas and are designed to avoid the arroyo and associated plant communities. As such, implementation of the proposed project is not expected to impact wildlife movement opportunities and no impacts to wildlife corridors or linkages are expected to occur.

4.6 STATE AND FEDERAL JURISDICTIONAL AREAS

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

The National Wetlands Inventory (NWI) maps two (2) riverine resources on the project site that correspond to two drainage features on-site. The NWI does not depict any wetland resources on or immediately bordering the project site.

Two unnamed drainage features (Drainages 1 and 2) were observed within the boundaries of the project site. Drainage 1 generally flows in a southeast to northwest direction across the middle of the project site, and Drainage 2 flows in an east to west direction across the northwest corner of the project site. The onsite drainage features receive flows via direct precipitation, and from the discharge urban runoff from residential developments upstream. Portions of Drainage 1 support a southern willow scrub plant community. The onsite drainage features are ephemeral drainage features that are not relatively permanent, standing, or a continuously flowing body of water and, therefore, are not expected to qualify as waters of the United States under the regulatory authority of the Corps (*Sackett v. EPA* (2022) 143 S. Ct. 1322, 1336). However, the onsite drainage feature will qualify was waters of the State and fall under the regulatory authority of the

Regional Board and CDFW. Table 2 identifies the on-site jurisdictional areas including the total acreage of jurisdiction and anticipated impacts for each regulatory agency within the boundaries of the project site.

Table 2: Jurisdictional Areas and Impacts

Jurisdictional Feature	Stream Flow	Cowardin Class	Class of Aquatic Resource	Linear Feet	Regional Board Jurisdiction		CDFW Streambed	
					On-Site Jurisdiction	Impacts	On-Site Jurisdiction	Impacts
Drainage 1	Ephemeral	Riverine	Non-Section 10 Non-Wetland	4,795	1.12	0.14	2.24	0.24
Drainage 2	Ephemeral	Riverine	Non-Section 10 Non-Wetland	803	0.25	0.00	0.75	0.0
			TOTALS	**5,598**	**1.37**	**0.14**	**2.99**	**0.24**

4.7 SPECIAL-STATUS BIOLOGICAL RESOURCES

A records search was conducted reported locations of special-status plant and wildlife species as well as natural communities of special concern in the *Riverside East*, *Riverside West*, *Lake Mathews*, and *Steele Peak* USGS 7.5-minute quadrangle. One quadrangle was used due to the proximity of the site to quadrangle boundaries and regional topography. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability, and quality of suitable habitat, and known distributions. Thirty-two (32) special status plant species, ninety-four (94) special-status wildlife species, and six (6) special-status plant communities have been recorded in the *Riverside East, Riverside West, Lake Mathews*, and *Steele Peak* USGS 7.5-minute quadrangle. Species determined to have the potential to occur within the general vicinity are provided in Appendix C, *Potentially Occurring Special-Status Biological Resources*.

4.7.1 Special-Status Plants

According to the CNDDB and CNPS, thirty-two (32) special-status plant species have been recorded in the *Riverside East*, *Riverside West*, *Lake Mathews*, and *Steele Peak* quadrangle (refer to Appendix C). No special-status plant species were observed on the project site during the field investigation. The project site and surrounding area have been subject to decades of anthropogenic disturbances which have removed the majority of the native plant communities that historically occurred. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the site has a low potential to support smooth tarplant (*Centromadia pungens* ssp. *laevis*), and paniculate tarplant (*Deinandra paniculata*). It was further determined that the site does not have potential to support any of the other special-status plant species known to occur in the vicinity of the site and all are presumed to be absent.

None of the aforementioned species are federally or state listed as endangered or threatened. They are designated as CNPS Rare Plant Rank 1B.1, and 4.2, species, respectively. In addition, smooth tarplant is

listed as covered species under the MSHCP. While the historic and ongoing land uses supported by the project site have removed the majority of the natural plant communities that once occurred in the area, freshwater marsh, southern willow scrub, and Riversidean sage scrub persist on-site in limited densities and breadth. Therefore, these species were determined to have low potentials to occur. The proposed project is designed to avoid impacts to the arroyo, with the exception of the two crossings, and its associated plant communities, and no impacts to these species are expected to occur, if present. No further surveys related to this species are recommended.

4.7.2 Special-Status Wildlife

According to the CNDDB, ninety-four (94) special-status wildlife species have been reported in the *Riverside East*, *Riverside West*, *Lake Mathews*, and *Steele Peak* quadrangle (refer to Appendix C). No special-status wildlife species were observed during the field investigation. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the project site has a high potential to support Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), great egret (*Ardea alba*), great blue heron (*Ardea herodias*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), Costa's hummingbird (*Calypte costae*), and California horned lark (*Eremophila alpestris actia*); a moderate potential to support least Bell's vireo (*Vireo bellii pusillus*); and a low potential to support grasshopper sparrow (*Ammodramus savannarum*), southern California legless lizard (*Anniella stebbinsi*), short-eared owl (*Asio flammeus*), long-eared owl (*Asio otus*), burrowing owl (*Athene cunicularia*), northern harrier (*Circus hudsonius*), San Bernardino ringneck snake (*Diadophis punctatus modestus*), San Diego ringneck snake (*Diadophis punctatus similis*), willow flycatcher (*Empidonax traillii*), southwestern willow flycatcher (*Empidonax traillii extimus*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), pallid bobcat (*Lynx rufus pallescens*), San Diego desert woodrat (*Neotoma lepida intermedia*), coast horned lizard (*Phrynosoma blainvillii*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), rufous hummingbird (*Selasphorus rufus*), yellow warbler (*Setophaga petechia*), western spadefoot (*Spea hammondii*), and south coast gartersnake (*Thamnophis sirtalis* pop. 1).

Of the aforementioned species, southwestern willow flycatcher and least Bell's vireo are both federally and state listed as endangered, willow flycatcher is state listed as endangered. None of the other species are federally or state listed as endangered or threatened. In addition, Cooper's hawk, sharp-shinned hawk, great blue heron, coastal whiptail, red-diamond rattlesnake, California horned lark, burrowing owl, northern harrier, southwestern willow flycatcher, San Diego black-tailed jackrabbit, pallid bobcat, San Diego desert woodrat, coast horned lizard, western spadefoot, and least Bell's vireo are listed as covered species by the MSHCP.

Due to specific nesting requirements and ranges for each species, the majority of the aforementioned avian species are only expected to occur incidentally while foraging or during migration, and only Costa's hummingbird, California horned lark, grasshopper sparrow, long-eared owl, and yellow warbler have the potential to nest on-site. To ensure impacts to aforementioned avian species do not occur from implementation of the proposed project, a pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance. With implementation of the pre-construction nesting bird clearance survey, impacts to the aforementioned species will be less than significant and no mitigation will be required.

Due to listing status, the potential occurrence of willow flycatcher, southwestern willow flycatcher, least Bell's vireo, and Crotch's bumble bee are discussed in further detail below.

Willow Flycatcher and Southwestern Willow Flycatcher

The willow flycatcher is a nearly transcontinental species which breeds widely across temperate North America and migrates to Middle and northwestern South America for the winter. It consists of the following four subspecies, all of which are migratory. The species as a whole winters from southern Mexico south through Central America to Panama and western Venezuela. Subspecies *extimus* has been collected in winter in Guatemala, El Salvador, Honduras, and Costa Rica. In southern California the subspecies *extimus* arrives in spring, usually in early May.

The southwestern willow flycatcher is a federally and state endangered species that usually arrives in southern California in early May, but rarely as early as the last two or three days of April. In fall, adults depart mainly during the last half of August and rarely can remain as late as September 4th. Juveniles remain until later in September, but all have departed by October 1st. The southwestern willow flycatcher breeds only in riparian habitats, typically along a dynamic river or lakeside. Surface water or saturated soil is usually present in or adjacent to nesting sites during at least the initial portion of the nesting period. Riparian habitats used by southwestern willow flycatchers typically have a dense thicket of trees and shrubs that can range in height from about 2 to 30 meters. Preferred nesting sites usually contain riparian foliage from the ground level up to a dense (about 50 to 100 percent) tree or shrub canopy.

The southern willow scrub plant community supported within and along the arroyo that transects the site provides suitable foraging habitat for willow flycatcher and southwestern willow flycatcher. Neither of these species were observed on-site or detected nearby during the field investigation. Due to encroachment of agricultural activities into the upper limits of the plant communities that historically within the arroyo, and the preference of willow flycatcher and southwestern willow flycatcher for wider blocks of riparian habitats, the southern willow scrub supported on-site is likely too narrow to support breeding flycatchers. As a result, the project site was determined to have a low potential to provide foraging habitat for migrant willow flycatcher and southwestern willow flycatcher, outside of the breeding season. No willow flycatcher or southwestern willow flycatcher were observed onsite during the 2024 focused surveys.

Least Bell's Vireo

Least Bell's vireo is a federally and state endangered subspecies of the Bell's vireo. It is a summer migrant to California and is the only regularly occurring subspecies of Bell's vireo in Riverside County. Its nesting habitat typically consists of a well-developed over-story and understory, along with low densities of aquatic and herbaceous plant cover. The understory frequently contains dense sub-shrub or shrub thickets that are often dominated by plants such as willow, mulefat, and one or more herbaceous species. Least Bell's vireos begin to arrive at their breeding grounds in southern California riparian areas from mid-March to early April. Upon arrival, males establish breeding territories that range in size from 0.5 to 7.4 acres, with an average size of approximately two acres. In California, females begin laying eggs in April, fledging birds until the end of July. The fledglings will remain in the parental territory for up to a month. Bell's vireos leave the breeding grounds and migrate south mid- to late September. Although not common, a few have been found wintering in southern California.

Focused surveys were conducted during the 2024 breeding season for least Bell's vireo (refer to Appendix E). Five least Bell's vireo territories were observed onsite within Drainage 1 and 2 onsite, and one additional territory was observed within Drainage 2, just outside the project footprint.

Crotch's Bumble Bee

Crotch's bumblebee is a candidate species for listing status by the California Endangered Species Act (CESA). It is a colonial species that lives almost exclusively from coastal California east towards the Sierra-Cascade Crest and can be found uncommonly in western Nevada and south through Baja California. The Crotch bumblebee inhabits grassland and scrub habitats in hotter and drier climates than most other bumblebee species and is only capable of tolerating a narrow range of climatic conditions. This species feeds on a variety of annual and perennial plant species, classifying it as a dietary generalist. It usually nests underground, often in abandoned rodent dens. However, bumble bees generally overwinter in soft disturbed soil, leaf litter, or abandoned small mammal burrows (Williams et al. 2014; Xerces Society 2018). Queens are active from March to May, with peak activity occurring in April; workers are active from April to August, with peak activity occurring between May and June; and males are active from May to September, with peak activity occurring in July.

A records search was conducted for Crotch's bumble bee occurrences within a 5-mile radius of the project site. In accordance with iNaturalist and the CNDDB, no observations of Crotch's bumble bee have been recorded in the Woodcrest area. The nearest recorded observations of Crotch's bumble bee have been documented approximately 4 miles northeast of the project site around Sycamore Canyon Park.

The proposed project site will generally span existing disturbed areas that historically supported agricultural land uses. The majority of the Riversidean sage scrub habitat will not be impacted from project development, which is primarily located on the northwest corner of the project site outside of the proposed limits of disturbance. Only 23% of the onsite Riversidean sage scrub habitat will be impacted. The project site predominantly supports a disturbed land cover type with an unnamed drainage feature that primarily support riparian vegetation. The disturbed areas onsite largely outcompete the native nectar and pollen-producing plants that Crotch's bumble bee require. Crotch bumble bee habitat on the project site is of low quality due to high disturbance and low diversity of flowering plant species. No Crotch bumble bees, or nests were incidentally identified within the project.

While the available native plant diversity supported by onsite Riversidean sage scrub plant community is constrained compared to undisturbed scrub habitats nearby, it provides limited foraging habitat for Crotch bumblebee due to this species being a dietary generalist. In addition, the density of available vegetation and historic land uses and anthropogenic disturbances onsite have reduced the suitability of on-site soils for burrowing. Crotch's bumble bee is typically associated with sandy or loose soils. These soils are ideal for nesting and foraging because they provide easy access for digging nests. Therefore, the project site was determined to have a low potential to support Crotch bumblebee.

Generally, for all bumble bee species, high-quality habitat has three major components: a diverse supply of flowers for nectar and pollen, nesting locations, and subterranean spaces for overwintering queens (Hatfield et al. 2012). Based on the results of this assessment, the project site and immediately surrounding areas were determined to provide low plant diversity for nectar sources. Further, no bumble bees have been

recorded in the immediate vicinity of the project site, and no bumble bees were observed onsite during the field investigation. Due to existing anthropogenic disturbances, low plant diversity for nectar sources, no recorded occurrences in the immediate vicinity of the project site, and lack of observations during the field investigations Crotch bumble bee are presumed absent from the project site.

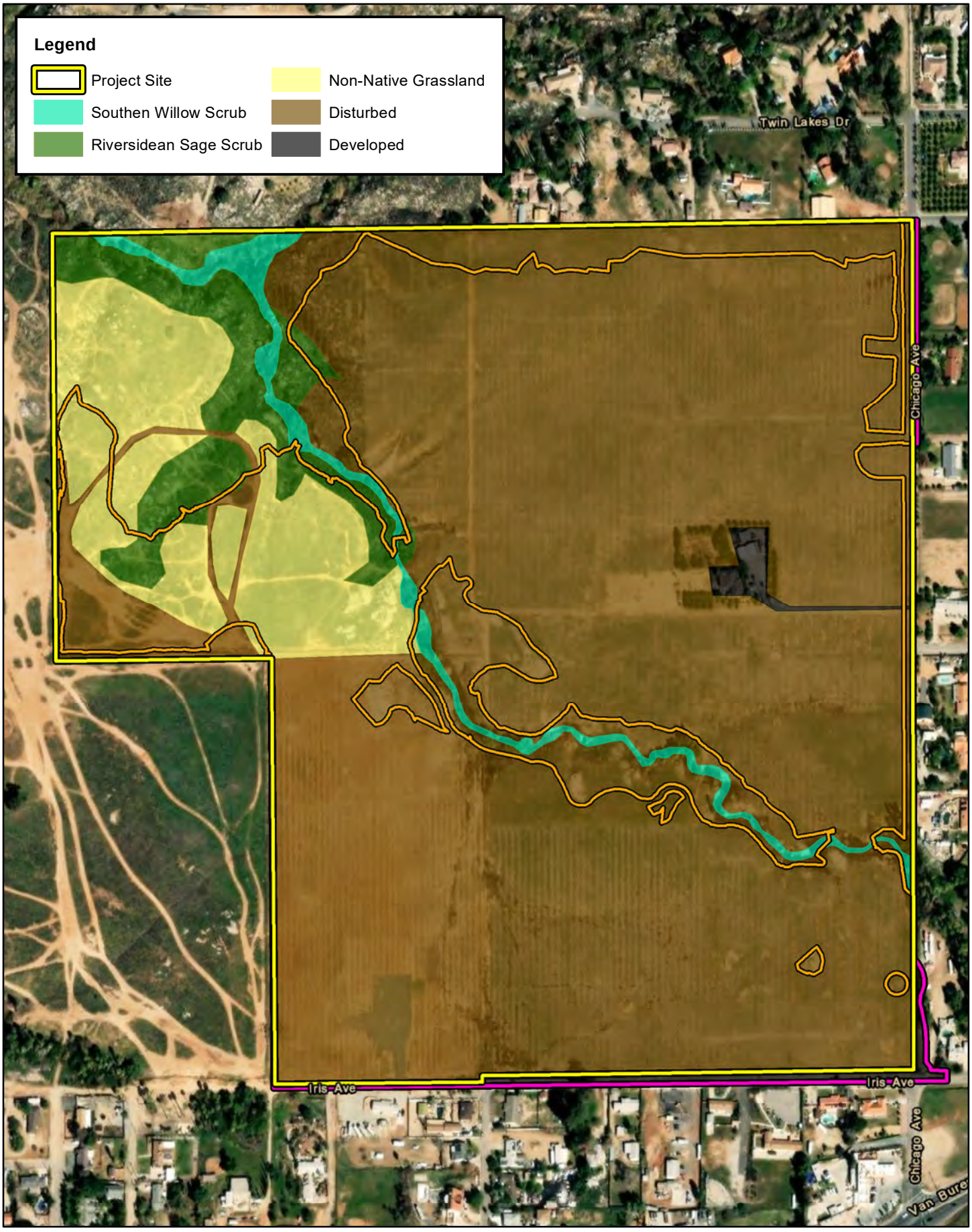
4.7.3 Special-Status Plant Communities

The CNDDB lists six (6) special-status habitats as being identified within the *Riverside East*, *Riverside West*, *Lake Mathews*, and *Steele Peak* quadrangle: Southern California Arroyo Chub/Santa Ana Sucker Stream, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Riparian Forest, Southern Sycamore Alder Riparian Woodland, and Southern Willow Scrub. One special-status plant community was observed on-site during the field investigation: Southern Willow Scrub. The proposed project is designed to avoid the majority of the Southern Willow Scrub. Minimal impacts to the Southern Willow Scrub plant community will occur from road crossings.

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 (Exhibit 6, *Critical Habitat*). The nearest designated Critical Habitat to the site is located approximately 5.9 miles to the northwest for least Bell's vireo. 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.



ELMT CONSULTING

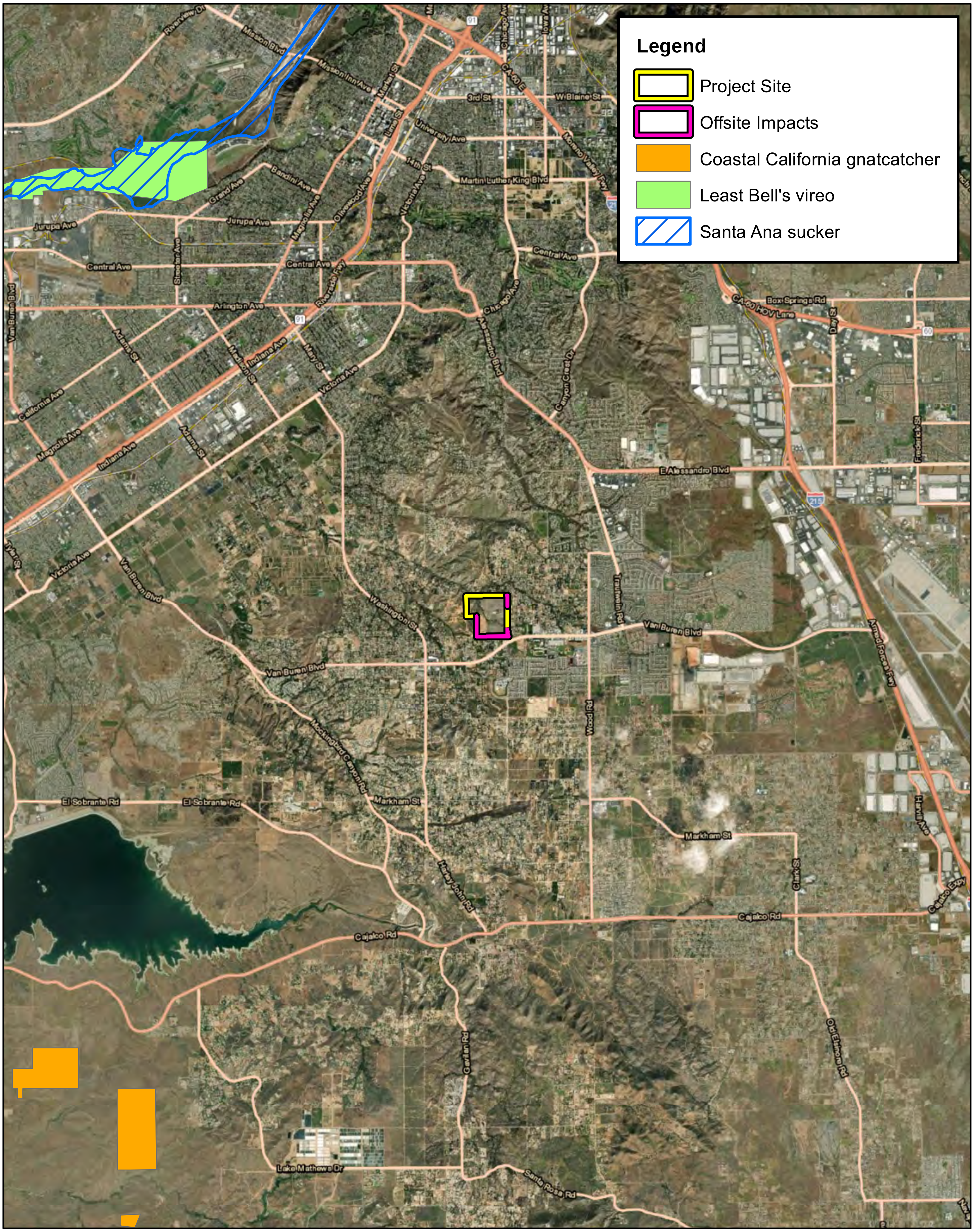
0 125 250 500 Feet

Source: ESRI Aerial Imagery, Riverside County

WOODCREST PROJECT

Vegetation

Exhibit 5



0 0.5 1 2 Miles

WOODCREST PROJECT

Critical Habitat

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

Exhibit 6

Section 5 MSHCP Consistency Analysis

The project site is located in the Lake Mathews/Woodcrest Area Plan of the MSHCP but is not located within any Criteria Cells or designated conservation areas (Exhibit 7, *MSHCP Conservation Areas*). Additionally, the project site is the project site is only located within the MSHCP designated survey area for burrowing owl.

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

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

5.1 RIPARIAN/RIVERINE AREAS AND VERNAL POOLS

5.1.1 Riparian/Riverine Areas

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

Based on the results of a Delineation of State and Federal Jurisdictional Waters Report (ELMT, 2023) prepared under a separate cover, two (2) unnamed drainage features were observed on the project site. These features will be considered riparian/riverine habitat under Section 6.1.2 of the MSHCP. The extent of the riparian/riverine habitat on the project site is synonymous with the jurisdiction of CDFW. The

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

majority of the project has been designed to avoid riparian areas associated with Drainage 1 and Drainage 2 in their existing condition. However, approximately 0.24 acre of southern willow scrub habitat will be impacted from project implementation.

The applicant will mitigate impacts to 0.24 acre of riparian/riverine habitat through the management (removal of invasives) of approximately 2.75 acres of the riparian/riverine habitat onsite. Further, a conservation easement will be placed over the 2.75 acre area onsite, and a Habitat Mitigation Monitoring and Reporting Program will be prepared that will need to be approved by the County and/or regulatory agencies. The 2.75 acre of riverine/riparian habitat remaining onsite currently supports invasive plant species (i.e., Mexican fan palm, salt cedar, Arundo, and tree tobacco) that will be removed to enhance the riparian/riverine habitat onsite.

The applicant will mitigate impacts to 0.24 acre of riparian/riverine habitat through the management (removal of invasives) of approximately 2.75 acres of the riparian/riverine habitat onsite. Further, a conservation easement will be placed over the 2.75 acre area onsite, and a Habitat Mitigation Monitoring and Reporting Program will be prepared that will need to be approved by the County of Riverside Environmental Programs Division, Western Riverside County Regional Conservation Authority and regulatory agencies. The 2.75 acre of riverine/riparian habitat remaining onsite currently supports invasive plant species (i.e., Mexican fan palm, salt cedar, Arundo, and tree tobacco) that will be removed to enhance the riparian/riverine habitat onsite. This area will be managed by an approved third party.

The above actions would result in a net increase in the function and ecological value of riparian/riverine habitat within the region by preserving/enhancing high quality habitat within the existing drainage, and by ensuring that approximately 92 percent of all riparian/riverine habitat onsite remain in its existing state in perpetuity through a conservation easement on future development over Drainage 1 and Drainage 2.

Riparian Birds

The majority of the project site does not support riparian habitats; however, Drainage 1 and 2, support a southern willow scrub plant community that provides moderate quality habitat for the State- and federally-listed as endangered least Bell's Vireo (*Vireo bellii pusillus* [LBVI]), and is not expected to provide suitable habitat for the other riparian obligate species listed under the MSHCP that may occur within the regional vicinity, including southwestern willow flycatcher (*Empidonax traillii extimus*), or yellow-billed cuckoo (*Coccyzus americanus*).

The composition of the southern willow scrub plant community riparian scrub supported on-site has been degraded by invasive plant species and previous agricultural activities. The mixed riparian scrub, located outside of the proposed limits of disturbance does not have a contiguous willow canopy, and does not provide the dense, multi-storied canopy for southwestern willow flycatcher and yellow-billed cuckoo. Due to incomplete canopy, limited acreage, and lack of riparian plant species diversity of the mixed riparian scrub supported on-site, the habitat associated with the on-site drainage feature was determined not to provide suitable habitat for southwestern willow flycatcher and yellow-billed cuckoo. However, the southern willow scrub plant community has the potential to provide moderate quality habitat for LBVI. LBVI do not require the dense multi-storied riparian canopy that southwestern willow flycatcher and yellow-billed cuckoo need.

Based on results of the habitat assessment for Section 6.1.2 riparian bird species, focused surveys for the least Bell's vireo were conducted during the spring of 2024. A total of eight (8) protocol least Bell's vireo surveys were conducted within the riparian corridor that bisects the property as illustrated in Exhibit 4. All surveys followed the recommended USFWS guidelines. Specifically, guidelines for least Bell's vireo surveys require that at least eight (8) surveys be conducted from April 10th to July 31st, and guidelines for southwestern willow flycatcher require five (5) surveys from May 15 and May 31, with the second and third between June 1 and June 21, and the fourth and fifth between June 22 and July 17.

The riparian habitats were systematically surveyed on May 11, 21, 31, June 10, 21, and July 3 and 11, 2024, by walking slowly and methodically along their margins. All observations of least Bell's vireo, including their behavior and breeding status were recorded and their locations noted. All surveys were conducted under optimal weather conditions and during early morning hours when bird activity is at a peak.

Five least Bell's vireo territories were observed onsite within Drainage 1 and 2 onsite, and one additional territory was observed within Drainage 2, just outside the project footprint.

A total of 0.24-acre of permanent and temporary impacts to suitable and occupied least Bell's vireo habitat (southern willow scrub) will occur within Drainage 1. As outlined below, the MSHCP identifies four (4) objectives (presented as *italics/underlined*) for the protection of least Bell's vireo habitat, followed by an analysis of MSHCP project consistency.

1) "*Include within the MSHCP Conservation Area at least 9,430 acres of suitable habitat*" (MSHCP 2004). Permanent impacts to 0.24-acre of riparian habitat occupied or representing suitable habitat for the least Bell's vireo within Drainage 1 will be subject to additional mitigation through enhancement and protection of the remaining onsite riparian habitat. The preservation and enhancement of approximately 2.75 acre of onsite riparian/riverine habitat will provide suitable habitat to the MSHPC conservation area, that would not have normally been conserved in perpetuity for least Bell's vireo.

2) "*Include within the MSHCP Conservation Area at least 8 core areas and interconnecting linkages*" (MSHCP 2004). Permanent and temporary impacts to 0.24-acre of riparian habitat occupied or representing suitable habitat for the least Bell's vireo within Drainage 1. The project site is not located within any of the 8 identified core areas or interconnecting linkages.

3) "*Include within the MSHCP Conservation Area additional areas within the Criteria Area identified as important to the least Bell's vireo. If survey results are positive, 90% of the occupied portions of the property that provide for long-term conservation value shall be conserved. This will involve including 100 meters of undeveloped landscape adjacent to the habitat conserved*" (MSHCP 2004). As previously noted, the project site is not located within any of the 8 identified core areas, interconnecting linkages, or MSHCP designated Criteria Cells. In order to reduce impacts to least Bell's vireo, approximately 92% of the onsite drainage features will be preserved and enhanced and 6 foot solid masonry walls will be installed as far away from the edge of the riparian habitat as possible. The masonry walls will be installed approximately 20 feet from the edge of riparian habitat which will separate the riparian habitats within Drainage 1 and Drainage 2 from the onsite development. Additionally, the elevation difference between the drainage features and the pads

ranges between 5 feet and 39 feet. With the 6 foot solid masonry wall, the elevation difference between the drainage feature would range from approximately 11 to 45 feet, creating noise barrier from indirect impacts to the riparian area.

4) "*Within the MSHCP Conservation Area, maintain (once every 3 years) the continued use of, and successful reproduction at 75% percent of known vireo occupied habitat (including any nesting locations identified in the MSHCP Conservation Area in the future)*" (MSHCP 2004). Based on recent as well as historic observations of least Bell's vireo within Riverside County, the species is expected to continue to breed within Drainage 1 and 2 onsite following project implementation.

In addition to implementing all four (4) least Bell's vireo objectives listed above, initial vegetation clearing of occupied or potential least Bell's vireo habitat will occur outside of the nesting season (March 15th to September 15th). Potential indirect impacts to suitable least Bell's vireo habitat within Drainage 1 and Drainage 2 during and following completion of construction and riparian reestablishment will be avoided by implementing all MSHCP Best Management Practices (BMP) including a commitment to conduct noise monitoring during construction activities in order to ensure noise levels do not exceed 60dB within 300 feet of least Bell's vireo habitat during the nesting period.

5.1.2 Vernal Pools

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

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

The MSHCP lists two general classes of soils known to be associated with special-status plant species; clay soils and Traver-Domino Willow association soils. The specific clay soils known to be associated with

special-status species within the MSHCP plan area include Bosanko, Auld, Altamont, and Porterville series soils, whereas Traver-Domino Willows association includes saline-alkali soils largely located along floodplain areas of the San Jacinto River and Salt Creek. Without the appropriate soils to create the impermeable restrictive layer, none of the special-status species associated with vernal pools can occur on the project site. Bonsall fine sandy loam (2 to 8 percent slopes), Cieneba sandy loam (8 to 15 percent slopes, eroded), Cieneba rocky sandy loam (15 to 50 percent slopes, eroded), Fallbrook sandy loam (8 to 15 percent slopes, eroded), Fallbrook fine sandy loam (2 to 8 percent slopes, eroded), Hanford coarse sandy loam (2 to 8 percent slopes), Monserate sandy loam (0 to 5 percent slopes), and Vista coarse sandy loam (8 to 15 percent slopes, eroded) are mapped as historically underlying the project site. In addition, agricultural land uses spanning much of the past century have thoroughly mixed and compacted on-site soils, such that conditions suitable for the formation of vernal pools are no longer present.

A review of recent and historic aerial photographs (1948-2023) of the project site during wet and dry seasons did not provide visual evidence of an astatic or vernal pool conditions within the project site. The site supported historic agricultural activities which heavily compacted the soils on-site. No ponding was observed during the field investigation, further supporting the fact that the drainage patterns currently occurring on the project site do not follow hydrologic regime needed for vernal pools. From this review of historic aerial photographs and observations during the field investigations, it can be concluded that there is no indication of vernal pools or suitable fairy shrimp habitat occurring within the proposed project site.

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

Riverside fairy shrimp (*Streptocephalus woottoni*)

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

No soil types that are known to support Riverside fairy shrimp occur on the project site. Furthermore, no indicators of water ponding or astatic water conditions were observed during the field investigation, and no ponding was observed on historic aerials during the wet season due to existing activities on-site. Therefore, the site was determined not to provide suitable habitat for Riverside fairy shrimp.

Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*)

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

to occur on-site. Therefore, the site was determined not to provide suitable habitat for Santa Rosa Plateau fairy shrimp.

No soils that are known to support Santa Rosa Plateau fairy shrimp occur on the project site. Furthermore, no indicators of water ponding or astatic water conditions were observed during the field investigation, and no ponding was observed on historic aerials during the wet season due to existing activities on-site. Therefore, the site was determined not to provide suitable habitat for Santa Rosa Plateau fairy shrimp.

Vernal pool fairy shrimp (*Branchinecta lynchi*)

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

No soils that are known to support vernal pool fairy shrimp occur on the project site. Furthermore, no indicators of water ponding or astatic water conditions were observed during the field investigation, and no ponding was observed on historic aerials during the wet season due to existing activities on-site. Therefore, the site was determined not to provide suitable habitat for vernal pool fairy shrimp.

5.2 NARROW ENDEMIC PLANT SPECIES

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

5.3 URBAN/WILDLANDS INTERFACE GUIDELINES

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

5.4 ADDITIONAL MSHCP CONSIDERATIONS

In accordance with Section 6.3.2 of the MSHCP, *Additional Survey Needs and Procedures*, additional surveys may be needed for certain species in order to achieve coverage for these species. The query of the RCA MSHCP Information Map and review of the MSHCP 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.

Burrowing Owl

Burrowing owl is currently designated as a Candidate for listing under the CESA. The burrowing owl is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with level to gently-sloping areas characterized by open vegetation and bare ground. The western burrowing owl (*A.c. hypugaea*), which occurs throughout the western United States including California, rarely digs its own burrows and is instead dependent upon the presence of burrowing mammals (i.e., California ground squirrels, coyotes, and badgers) whose burrows are often used for roosting and nesting. The presence or absence of colonial mammal burrows is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. They also require low growth or open vegetation allowing line-of-sight observation of the surrounding habitat to forage and watch for predators. In California, the burrowing owl breeding season extends from the beginning of February through the end of August.

Under the MSHCP burrowing owl is considered an adequately conserved covered species that may still require focused surveys in certain areas as designated in Figure 6-4 of the MSHCP. The project site occurs within the MSHCP burrowing owl survey area and a habitat assessment was conducted for the species to ensure compliance with MSHCP guidelines for the species. In accordance with the MSHCP Burrowing Owl Survey Instructions (2006), survey protocol consists of two steps, Step I – Habitat Assessment and Step II – Locating Burrows and Burrowing Owls. The following section describes the methodology followed during the burrowing owl habitat assessment conducted for this project.

- Step I – Habitat Assessment: Step 1 of the MSHCP habitat assessment for burrowing owl consists of a walking survey to determine if suitable habitat is present on-site. Two habitat assessments were conducted on November 1, 2021, and February 9, 2023. Upon arrival at the project site, and prior to initiating the assessment survey, binoculars were used to scan all suitable habitats on and adjacent to the property, including perch locations, to establish owl presence.

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

cement, asphalt, rock, wood debris piles, openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or in close proximity to man-made structures.

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

- Step II – Locating Burrows and Burrowing Owls: Concurrent with the initial habitat assessments, a detailed focused burrow survey was conducted and included documentation of appropriately sized natural burrows or suitable man-made structures that may be utilized by burrowing owl - as part of the MSHCP protocol, which is described below under Part A, Focused Burrow Survey. The MSHCP protocol indicates that no more than 100 acres should be surveyed per day/per biologist.

    - Part A – Focused Burrow Survey: A systematic survey for burrows, including burrowing owl sign, was conducted by walking across all suitable habitats mapped within the project site on November 1, 2021, and February 9, 2023. Pedestrian survey transects were spaced to allow 100% visual coverage of the ground surface. The distances between transect centerlines were no more than 30 meters (approximately 100 feet) apart, and owing to the terrain, often much smaller. Transect routes were also adjusted to account for topography and in general ground surface visibility. Areas providing potential habitat for burrowing owls were surveyed for suitable burrows, consisting of natural and non-natural substrates in areas with low, open vegetation. All burrows encountered were examined for shape, scat, pellets, white-wash, feathers, tracks, and prey remains. Suitable burrows/sites, including rock piles and non-natural substrates, were thoroughly examined for signs of presence.

    - Part B – Focused Surveys: Due to surrounding development to the south, east, and northeast, a zone of influence was not able to be surveyed; however, these areas do not support suitable habitat for burrowing owls. Some areas to the north and west of the project site within 500 feet, support dense vegetation and were determined not to provide suitable habitat. Survey transects on the project site were oriented north to west and were conducted at a maximum of 30-meter (approximately 100 feet) intervals to ensure 100% visual coverage of all areas in suitable habitat on the project site, and within the survey area. The focused burrowing owl surveys were conducted during the recognized timeframe (the breeding season is typically March through August) in the morning one hour before sunrise to two hours after sunrise.

      Suitable burrows/sites, including rock piles and non-natural substrates, were thoroughly examined for signs of presence. 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. Binoculars were used to observe distant birds and their activity around potential nesting habitat. During the focused surveys, the survey area was assessed on foot by qualified biologists Jacob H. Lloyd Davies, Rachael A. Lyons, and Megan E. Peukert, who are knowledgeable in the habitats and behavior of burrowing owls.

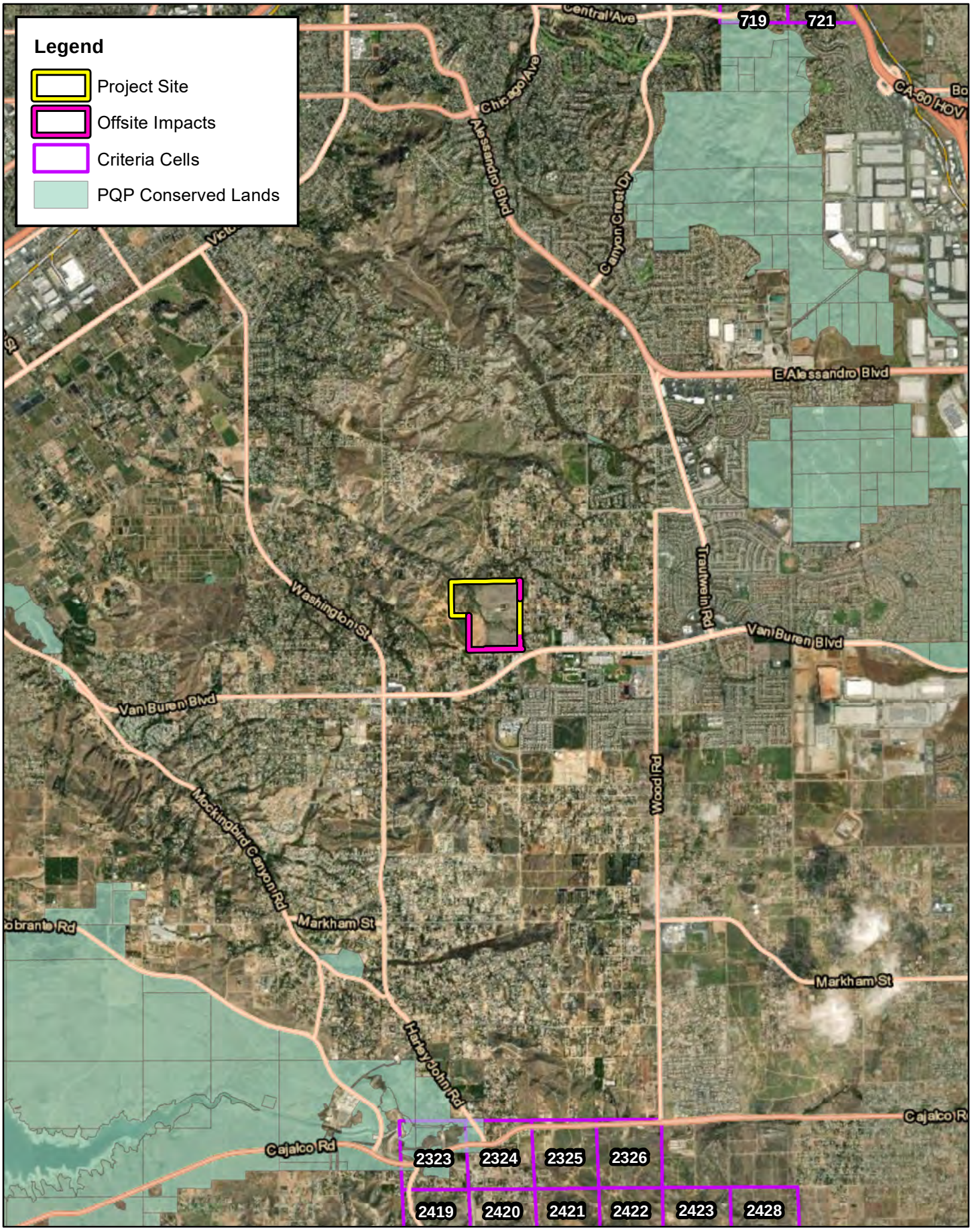
Four focused burrowing owl surveys were conducted on April 22, May 6 and 28, and June 18, 2024. All surveys were completed between 0630 and 1030. The surveys were conducted to document the presence/absence of burrowing owl on the project site. Refer to Table 3, *Survey Data*, for a summary of the survey dates and times, personnel, weather conditions, and general findings.

Table 3: Survey Data

Survey No.	Survey Date	Surveyor	Time	Temperature (˚F)	Cloud Cover	Wind Speed (mph)	Burrowing Owl Detected On-Site
1	4/22/24	Jacob H. Lloyd Davies, Rachael A. Lyons, Megan E. Peukert	0700-1030	56-67	0%	2-5	No
2	5/6/24	Rachael A. Lyons & Megan E. Peukert	0700-1015	57-63	30%	3-8	No
3	5/28/24	Rachael A. Lyons & Megan E. Peukert	0700-1030	56-67	30%	2-10	No
4	6/18/24	Rachael A. Lyons & Megan E. Peukert	0630-1030	61-73	30%	2-10	No

Based on the results of the 2024 burrowing owl focused surveys, no burrowing owls or evidence of recent or historic use by burrowing owls were observed on the project site. As a result, burrowing owls are presumed to be absent from the project site.

To ensure burrowing owl remain absent from the project site, it is recommended that a 30-day burrowing owl pre-construction clearance survey be conducted in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* prior to any ground disturbing activities. If burrowing owls and/or birds displaying nesting behaviors are observed within the project site during future construction, further review may be needed to ensure compliance with the MSHCP, MBTA and Fish and Game Code.



ELMT CONSULTING

0 0.5 1 2 Miles

Source: ESRI Aerial Imagery, Riverside County

WOODCREST PROJECT

MSHCP Criteria Area

Exhibit 7

Section 6 Stephen's Kangaroo Rat Habitat Conservation Plan

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

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

Section 7 Conclusion and Recommendations

The discussion below provides a summary of survey results; avoidance and minimization efforts; direct, indirect, and cumulative project impacts; and compensatory mitigation measures for each biological resource area required to be analyzed according to CEQA, based on Appendix G (Environmental Checklist Form) of the CEQA Guidelines:

***CEQA Threshold**: Would the proposed Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?*

Special-Status Plant Species

No special-status plant species were observed during the field investigation. Based on habitat requirements for the identified special-status species, known species distributions, and the quality and availability of habitats present, it was determined that the project site has a low potential to support smooth tarplant and paniculate tarplant. The proposed project will be largely confined to existing developed and heavily disturbed areas that have been subject to several decades of agricultural activities, and the site is isolated from known occupied areas. As such, any smooth tarplant, and paniculate tarplant supported on-site are not expected to make a meaningful contribution to the conservation of these species, if present. No additional surveys are recommended.

Special-Status Wildlife Species

Recommendations for avoidance and minimization:

1. Prior to grading or construction activities, including vegetation removal, 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 Project Applicant shall ensure that impacts to nesting bird species at the project site are avoided through the implementation of preconstruction surveys, ongoing monitoring, and if necessary, establishment of minimization measures. The Project Applicant shall adhere to the following:

    a. Applicant shall designate a biologist (Designated Biologist) experienced in: identifying local and migratory bird species of special concern; conducting bird surveys using appropriate survey methodology; nesting surveying techniques, recognizing breeding and nesting behaviors, locating nests and breeding territories, and identifying nesting stages and nest success; determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures.

b. Surveys shall be conducted by the Designated Biologist at the appropriate time of day/night, during appropriate weather conditions, no more than 3 days prior to the initiation of project activities. Surveys shall encompass all suitable areas including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration shall take into consideration the size of the project site; density, and complexity of the habitat; number of survey participants; survey techniques employed; and shall be sufficient to ensure the data collected is complete and accurate. If a nest is suspected, but not confirmed, the Designated Biologist shall establish a disturbance-free buffer until additional surveys can be completed, or until the location can be inferred based on observations. If a nest is observed, but thought to be inactive, the Designated Biologist shall monitor the nest for one hour (four hours for raptors during the non-breeding season) prior to approaching the nest to determine status. The Designated Biologist shall use their best professional judgement regarding the monitoring period and whether approaching the nest is appropriate.

c. If an active avian nest is confirmed, the Designated Biologist shall immediately establish a conservative avoidance buffer surrounding the nest based on their best professional judgement and experience. The Designated Biologist shall monitor the nest at the onset of project activities, and at the onset of any changes in such project activities (e.g., increase in number or type of equipment, change in equipment usage, etc.) to determine the efficacy of the buffer. If the Designated Biologist determines that such project activities may be causing an adverse reaction, the Designated Biologist shall adjust the buffer accordingly or implement alternative avoidance and minimization measures, such as redirecting or rescheduling construction or erecting sound barriers. All work within these buffers will be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The on-site qualified biologist will review and verify compliance with these nesting avoidance buffers and will verify the nesting effort has finished. Work can resume within these avoidance areas when no other active nests are found. Upon completion of the survey and nesting bird monitoring, a report shall be prepared and submitted to County for mitigation monitoring compliance record keeping.

2) The project Applicant will implement applicable MSHCP Standard BMPs from the MSHCP Volume 1, Appendix C. These measures are summarized below (refer to Section 10.0 of this document for the complete text of each measure):

- Worker environmental awareness training;
- Development and implementation of water pollution and erosion control plans;
- Minimizing the project footprint of disturbance;
- Demarcating the limits of project disturbance;
- Avoiding the placement of personnel and equipment in streams and sensitive habitat areas/ avoiding such during the breeding season;
- Diverting stream flows using methods requiring minimal instream impacts;

- Locating equipping storage, fueling, stockpiling, and staging areas in upland areas with minimal risks of direct drainage into riparian areas or sensitive habitats;
- Prohibiting the deposit of erodible fill material into watercourses and prohibiting stockpiling brush, loose soils, or similar materials within the stream or on its banks;
- Monitoring of construction activities by a qualified biologist for the duration of the project;
- Avoiding and minimizing the removal of native habitat and revegetating temporary impact areas with appropriate native species;
- Removing invasive exotic species that prey upon or displace target species to the extent feasible;
- Maintaining the project site as clean of debris as possible/placing all food-related trash items into sealed containers that are regularly removed from the site;
- Limit all construction employees' activities, vehicles, equipment, and construction materials to the project footprint, staging areas, and routes of travel; and
- Allowing access and inspection of the project site and any restoration/enhancement areas for compliance with approval conditions by the RCA.

CEQA Threshold: *Would the proposed Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?*

Riparian Habitat and Special-Status Natural Communities

Two jurisdictional drainage features were observed within the project site during the field investigation. No vernal pools were observed. The onsite drainage feature is not relatively permanent, standing, or a continuously flowing body of water and, therefore, will not qualify as waters of the United States under the regulatory authority of the Corps (*Sackett v. EPA* (2022) 143 S. Ct. 1322, 1336). However, the on-site drainage feature will qualify was waters of the State and fall under the regulatory authority of the Regional Board and CDFW.

The project applicant will likely be required to obtain the following regulatory approvals prior to impacts occurring within the identified jurisdictional areas: Corps Approved Jurisdictional Determination/Waiver; Regional Board CWA Section 401 Water Quality Certification; and CDFW Section 1602 SAA.

No sensitive habitats were identified within the Project site. Thus, no sensitive natural communities will be impacted from Project implementation.

CEQA Threshold: *Would the proposed Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Federally Protected Wetlands

No inundated areas, wetland features, or wetland plant species that would be considered wetlands as defined by Section 404 of the Clean Water Act occur within the proposed Project footprint. As a result, implementation of the proposed Project would not result in any impacts or have substantial adverse effect on federally protected wetlands.

CEQA Threshold: *Would the proposed Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

Wildlife Corridors

The project site has not been identified as occurring in a wildlife corridor or linkage. The nearest linkages to the project, as identified by the MSHCP, occur approximately 1.77 miles to the northeast and 2.96 miles to the southwest. The proposed project will be confined to existing areas that have been heavily disturbed. The arroyo and associated plant communities likely serve as linkages for wildlife species to move locally, but the site is isolated from regional wildlife corridors and linkages as there are no riparian corridors, creeks, or useful patches of steppingstone habitat (natural areas) within or connecting the site to any recognized wildlife corridor or linkage. Project activities will be limited to former agricultural areas and are designed to avoid the arroyo and associated plant communities. As such, implementation of the proposed project is not expected to impact wildlife movement opportunities and no impacts to wildlife corridors or linkages are expected to occur.

CEQA Threshold: *Would the proposed Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Local Policies or Ordinances

There are no local policies or ordinances that pertain to the proposed project. Therefore, impacts to local polices or ordinances are not expected to occur from development of the proposed project, and mitigation is not required.

CEQA Threshold: *Would the proposed Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan?*

Local, Regional, and State Plans

The project site is located in the within the Lake Mathews/Woodcrest Area Plan of the MSHCP, but is not located within any designated Criteria Cells or conservation areas. Based on the analysis provided in this report and with completion of recommendations provided below and payment of the MSHCP Local Development Mitigation Fee, development of the project site will be fully consistent with the MSHCP. Additionally, the project site is also located within the fee area for the SKR HCP. With payment of the Stephen's kangaroo rat mitigation fee, MSHCP mitigation fee, and compliance with the mitigation measure listed in this report, development of the project will be consistent with the SKR HCP and MSHCP.

Section 8 References

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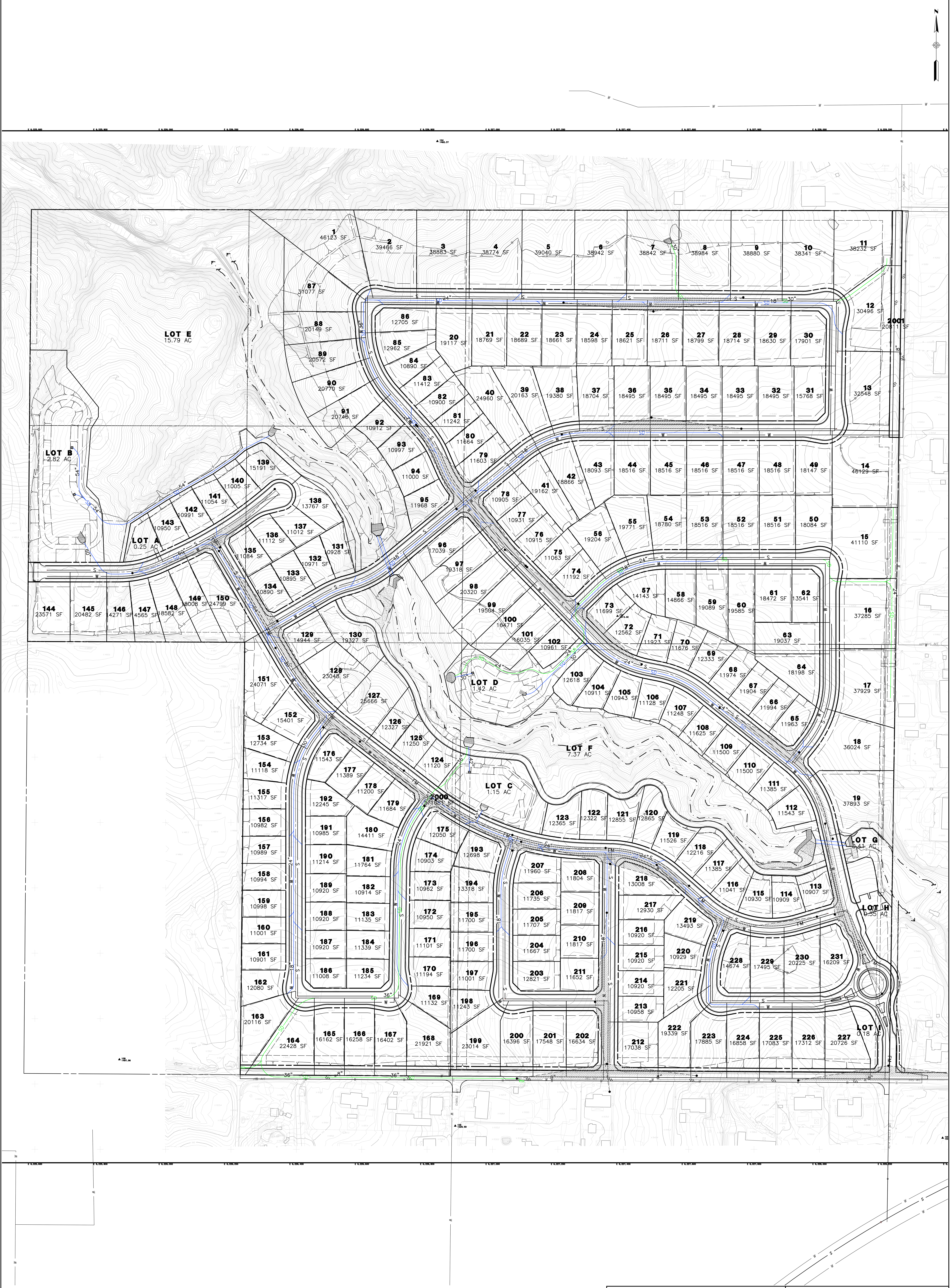
Appendix A Site Plan



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LOT B 2.82 AC
LOT C 1.15 AC
LOT D 1.42 AC
LOT E 15.79 AC
LOT F 7.37 AC
LOT G 0.41 AC
LOT H 0.55 AC
LOT I 0.18 AC
CHICAGO AVE
HIBISCUS AVE
GAMBLE AVE
ALTA CRESTA AVE

100 50 0 100 200
GRAPHIC SCALE: 1"=100'

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TTLC ARROYO VISTA

TENTATIVE TRACT MAP 38510
CAD BASE FILES

PROJECT NO:	19427–A	SCALE:	1"=100'
DRAWN BY:	JMA	DATE:	12/2/2024

Appendix B Site Photographs

Photograph 1: Looking north at the riparian habitat within the arroyo as it enter the project site at the northern boundary.

Photograph 2: Looking west across the arroyo at the northwest portion of the site. Note the patches of Riversidean Sage Scrub (RSS) habitat at the top center of the photo.

Photograph 3: Marshy habitat in the southern portion of the arroyo before the arroyo turns east

Photograph 4: Palm trees, an invasive non-native species, within the eastern portion of the arroyo

Photograph 5: Looking north across the eastern portion of the arroyo before it exits the project site at the southeast corner.

Photograph 6: Looking west across the southern portion of the stie. The orange trees have been removed, run through a chipper onsite and the chips spread across the site.

Photograph 7: Looking north across the northern portion of the site following removal of the orange trees and deposition of the wood chips onsite.

Photograph 8: Closeup of the woodchips spread across the site.

Appendix C Potentially Occurring Special-Status Biological Resources

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

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
WILDLIFE SPECIES					
Accipiter cooperii Cooper's hawk	Fed: None CA: WL	Generally found in forested areas up to 3,000 feet in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.	Yes	No	**High** Suitable foraging habitat is found within and surrounding the project site. Suitable nesting opportunities likely occur nearby.
Accipiter gentilis northern goshawk	Fed: None CA: SSC	Includes a variety of forest types and stand structures, depending on geographic location. In general, they appear to prefer relatively dense forests with large trees and relatively high canopy closures which are used for protection from predators, increased food availability, and limited exposure to cold temperatures and precipitation.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project 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.	Yes	No	**High** Suitable foraging habitat is found within and surrounding the project site. This species does not nest in the region.
Agelaius tricolor tricolored blackbird	Fed: None CA: **THR**; 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.	Yes	No	**Presumed Absent** The project site does not provide accessible open water, protected nesting substrate (freshwater marsh dominated by cattails, willows, and bulrushes, and flooded or thorny or spiny vegetation and suitable foraging space providing adequate insect prey

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Aimophila ruficeps canescens southern California rufous-crowned sparrow	Fed: None CA: WL	Typically found between 3,000 and 6,000 feet in elevation. Breed in sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (*Artemisia californica*), but they can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project 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.	Yes (e)	No	**Low** Suitable foraging and nesting habitat are present within and surrounding the project site.
Anniella stebbinsi southern California legless lizard	Fed: None CA: SSC	Occurs in sparsely vegetated habitat types including coastal sand dunes, chaparral, pine-oak woodland, desert scrub, open grassland, and riparian areas. Requires sandy or loose loamy substrates conducive to burrowing.	No	No	**Low** Limited foraging and burrowing habitat are present within and surrounding the project site.
Aquila chrysaetos golden eagle	Fed: None CA: FP; WL	Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Ardea alba great egret	Fed: None CA: None	Yearlong resident throughout California, except for the high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures.	No	No	**High** Suitable foraging habitat is found within and surrounding the project site. No suitable nesting opportunities are present.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Ardea herodias great blue heron	Fed: None CA: None	Forages along streams, marshes, lakes, and meadows. Nests colonially in tall trees (typically Eucalyptus sp.), on cliffsides, or in isolated spots in marshes.	Yes	No	**High** Suitable foraging habitat is found within and surrounding the project site. No suitable nesting opportunities are present.
Arizona elegans occidentalis California glossy snake	Fed: None CA: SSC	Inhabits arid scrub, rocky washes, grasslands, and chaparral habitats.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Artemisiospiza belli belli Bell's sparrow	Fed: None CA: WL	Generally prefers semi-open habitats with evenly spaced shrubs 1 – 2 meters in height. Dry chaparral and coastal sage scrub. Less common in tall dense, old chaparral.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Asio flammeus short-eared owl	Fed: None CA: SSC	Suitable habitats include salt- and freshwater marshes, irrigated alfalfa or grain fields, and ungrazed grasslands and old pastures. Tule marsh or tall grasslands with cover 30 to 50 cm in height can support nesting pairs.	No	No	**Low** Suitable foraging habitat is present within the project site. No suitable nesting habitat is present.
Asio otus long-eared owl	Fed: None CA: SSC	Hunts mostly at night over grasslands and other open habitats. Nesting occurs in dense trees such as oaks and willows where it occupies stick nests of other species, particularly raptors or corvids.	No	No	**Low** Suitable foraging habitat is present within the project site. No suitable nesting habitat is present.
Aspidoscelis hyperythra orangethroat whiptail	Fed: None CA: WL	Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: None CA: SSC	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	Yes	No	**High** Suitable foraging and cover habitat are present within the project site.
Athene cunicularia burrowing owl	Fed: None CA: SSC	Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Dependent upon fossorial mammals for burrows, most notably ground squirrels.	Yes (c)	No	**Low** The project site provides line-of-sight opportunities favored by burrowing owls.
Bombus crotchii Crotch bumblebee	Fed: None CA: CE	Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Bombus pensylvanicus American bumble bee	Fed: None CA: None	Prefers habitats in open farmland, prairies, and agricultural fields. Nests below grass or underground. Forages for pollen and nectar in meadows, parks, open fields, gardens, and sometimes forests.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Botaurus lentiginosus American bittern	Fed:CA: None None	Lives in marshes and reedy lakes. Breeds in freshwater marshes, mainly large, shallow wetlands with much tall marsh vegetation such as cattails, grasses, and sedges, and areas of open shallow water. Winters in similar areas, and brackish, coastal marshes. Sometimes feeds in dry, grassy fields.	Yes	No	**Presumed Absent** The freshwater marsh supported by the project site is limited to narrow swathes and does not support suitable dense vegetation.
Branchinecta lynchi vernal pool fairy shrimp	Fed: **THR** CA: None	Associated with vernal pools. Can be found in association with other ephemeral habits including alkali pools, seasonal drainages, stock ponds, vernal swales, and rock outcrops.	Yes (a)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Branchinecta sandiegonensis San Diego fairy shrimp	Fed: **END** CA: None	Habitat is restricted to vernal pools along coastal southern California and northwestern Baja California, Mexico. Usually observed from January to March during seasonal rainfall events.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Buteo regalis ferruginous hawk	Fed: None CA: WL	Occurs primarily in open grasslands and fields, but may be found in sagebrush flats, desert scrub, low foothills, or along the edges of pinyon-juniper woodland. Feeds primarily on small mammals and typically found in agricultural or open fields.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Buteo swainsoni Swainson's hawk	Fed: None CA: **THR**	Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grassland or suitable grain or alfalfa fields or livestock pastures.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Calypte costae Costa's hummingbird	Fed: None CA: None	Desert and semi-desert, arid brushy foothills and chaparral. A desert hummingbird that breeds in the Sonoran and Mojave Deserts. Departs desert heat moving into chaparral, scrub, and woodland habitats.	No	No	**High** Suitable foraging and nesting habitat are present within the project site.
Catostomus santaanae Santa Ana sucker	Fed: **THR** CA: None	Occur in the watersheds draining the San Gabriel and San Bernardino Mountains of southern California. Streams that Santa Ana Sucker inhabit are generally perennial streams with water ranging in depth from a few inches to several feet and with currents ranging from slight to swift.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Ceratochrysis longimala desert cuckoo wasp	Fed: None CA: None	Occurs in arid soils and uses flowers for sustenance. Lays eggs in the nests of bees, wasps, and other host insects.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Chaetodipus fallax fallax northwestern San Diego pocket mouse	Fed: None CA: SSC	Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or rocky outcroppings, as well as sandy soils for burrowing.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**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 hollow trees and snags, especially tall, burned-out snags. Fairly common migrant throughout most of the state in April and May, and August and September.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Circus hudsonius northern harrier	Fed: None CA: SSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	Yes	No	**Low** Suitable foraging/stop over habitat is present within the project site. No suitable nesting habitat is present.
Coccyzus americanus occidentalis western yellow-billed cuckoo	Fed: **THR** CA: **END**	Obligate riparian species with a primary habitat association of willow-cottonwood riparian forest. Nests are typically placed (72% of the time) in willows (*Salix* spp.), particularly in black willow (*S. gooddingii*), red willow (*S. laevigata*), and sandbar willow (*S. exigua*). This species typically requires large blocks of intact riparian habitat, with anything less than 37 acres in size and 328 feet wide generally considered unsuitable. Breeding season home ranges can be as much as 100 acres per individual bird. Yellow-billed cuckoos are considered rare anywhere in southern California outside of the Colorado River.	Yes (a)	No	**Presumed Absent** Riparian habitats present on-site are too narrow for this species.
Coleonyx variegatus abbotti San Diego banded gecko	Fed: None CA: SSC	Occurs in coastal and cismontane southern California from interior Ventura County south, although it is absent from the extreme outer coast. It is uncommon in coastal scrub and chaparral, most often occurring in granite or rocky outcrops in these habitats.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Contopus cooperi olive-sided flycatcher	Fed: None CA: SSC	Uncommon to common, summer resident in a wide variety of forest and woodland habitats below 9,000 ft. throughout California exclusive of the deserts, the Central Valley, and other lowland valleys and basins. Preferred nesting habitats include mixed conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir, and lodgepole pine.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Coturnicops noveboracensis yellow rail	Fed: None CA: SSC	Shallow marshes, and wet meadows; in winter, drier fresh-water and brackish marshes, as well as dense, deep grass, and rice fields.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Crotalus ruber red-diamond rattlesnake	Fed: None CA: SSC	It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Diadophis punctatus modestus San Bernardino ringneck snake	Fed: None CA: None	Common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats.	No	No	**Low** Limited habitat is present within the project 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	No	**Low** Limited habitat is present within the project site.
Dipodomys merriami parvus San Bernardino kangaroo rat	Fed: **END** CA: CE; 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.	Yes (c)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Dipodomys simulans Dulzura kangaroo rat	Fed: None CA: None	Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grassland or suitable grain or alfalfa fields or livestock pastures.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Dipodomys stephensi Stephens' kangaroo rat	Fed: **THR** CA: **THR**	Occur in arid and semi-arid habitats with some grass or brush. Prefer open habitats with less than 50% protective cover. Require soft, well-drained substrate for building burrows and are typically found in areas with sandy soil.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Egretta thula snowy egret	Fed: None CA: None	Widespread in California along shores of coastal estuaries, fresh and saline emergent wetlands, ponds, slow-moving rivers, irrigation ditches, and wet fields. In southern California, common yearlong in the Imperial Valley and along the Colorado River.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Elanus leucurus white-tailed kite	Fed: None CA: FP	Occurs in low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Uses trees with dense canopies for cover.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Empidonax traillii willow flycatcher	Fed: None CA: **END**	A rare to locally uncommon, summer resident in wet meadow and montane riparian habitats (2,000 to 8,000 ft) in the Sierra Nevada and Cascade Range. Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows.	No	No	**Low** Limited stopover habitat is supported on-site, but no long-term value nesting habitat is present.
Empidonax traillii extimus southwestern willow flycatcher	Fed: **END** CA: **END**	Occurs in riparian woodlands in southern California. Typically requires large areas of willow thickets in broad valleys, canyon bottoms, or around ponds and lakes. These areas typically have standing or running water, or are at least moist.	Yes (a)	No	**Low** Limited stopover habitat is supported on-site, but no long-term value nesting habitat is present.
Emys marmorata western pond turtle	Fed: None CA: SSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Found at elevations from sea level to over 5,900 feet (1,800 m).	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Eremophila alpestris actia California horned lark	Fed: None CA: WL	Generally found in shortgrass prairies, grasslands, disturbed fields, or similar habitat types along the coast or in deserts. Trees are shrubs are usually scarce or absent. Generally rare in montane, coniferous, or chaparral habitats. Forms large flocks outside of the breeding season.	Yes	No	**High** Suitable foraging and nesting habitat are present within the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Eugnosta busckana Busck's gallmoth	Fed: None CA: None	Inhabits coastal scrub dunes.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Eumops perotis californicus western mastiff bat	Fed: None CA: SSC	Primarily a cliff-dwelling species, roost generally under exfoliating rock slabs. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight. In California, it is most frequently encountered in broad open areas. Its foraging habitat includes dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Euphydryas editha quino Quino checkerspot butterfly	Fed: **END** CA: None	Range is now limited to a few populations in Riverside and San Diego counties. Common in meadows and upland sage scrub/chapparal habitat.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Falco columbarius merlin	Fed: None CA: WL	Nest in forested openings, edges, and along rivers across northern North America. Found in open forests, grasslands, and especially coastal areas with flocks of small songbirds or shorebirds.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Falco mexicanus prairie falcon	Fed: None CA: WL	Commonly occur in arid and semiarid shrubland and grassland community types. Also occasionally found in open parklands within coniferous forests. During the breeding season, they are found commonly in foothills and mountains which provide cliffs and escarpments suitable for nest sites.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project 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.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

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

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Laterallus jamaicensis coturniculus California black rail	Fed: None CA: **THR;** FP	Shallow marshes, and wet meadows; in winter, drier fresh-water and brackish marshes, as well as dense, deep grass.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Lepus californicus bennettii San Diego black-tailed jackrabbit	Fed: None CA: None	Occurs in diverse habitats, but primarily is found in arid regions supporting shortgrass habitats. Openness of open scrub habitat is preferred over dense chaparral.	Yes	No	**Low** Limited foraging and cover habitat are present within the project site.
Lynx rufus pallescens pallid bobcat	Fed: None CA: None	Found on the western edge of the great basin habitat in extreme northeast California. Live in a variety of habitats including forests, deserts, mountains, swamps and farmland.	Yes	No	**Low** Limited foraging and cover habitat are present within the project site.
Myotis yumanensis Yuma myotis	Fed: None CA: None	Found in forests and woodlands near water. Roosts in caves, buildings, mines, and crevices.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Nannopterum auritum double-crested cormorant	Fed: None CA: WL	Common yearlong resident in southern California. Occurs widely in freshwater and marine habitats along coastlines. Require open water where they can forage for schooling fish.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Neolarra alba white cuckoo bee	Fed: None CA: None	Found in dry, sandy areas (particularly deserts) in the American southwest near the host plants for *Perdita* bee species, of which it is a nest parasite.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Neotoma lepida intermedia San Diego desert woodrat	Fed: None CA: SSC	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Prefers moderate to dense canopies, and especially rocky outcrops.	Yes	No	**Low** Limited foraging and cover habitat are present within the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Nycticorax nycticorax black-crowned night heron	Fed: None CA: None	Fairly common, yearlong resident in lowlands and foothills throughout most of California, including the Salton Sea and Colorado River areas, and very common locally in large nesting colonies. Feeds along the margins of lacustrine, large riverine, and fresh and saline emergent habitats and rarely, on kelp beds in marine sub tidal habitats. Nests and roosts in dense-foliaged trees and dense emergent wetlands.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Nyctinomops femorosaccus pocketed free-tailed bat	Fed: None CA: SSC	Often found in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
***Oncorhynchus mykiss irideus* pop. 10** steelhead – southern California DPS	Fed: **END** CA: None	Found in permanent coastal streams from San Diego to the Smith River.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Onychomys torridus ramona southern grasshopper mouse	Fed: None CA: SSC	Inhabits alkali desert scrub and other desert scrub habitats, and to a lesser extent succulent shrubs, desert washes, desert riparian, coastal scrub, mixed chaparral, and sagebrush habitats. Generally rare in valley foothill and montane riparian habitats. Prefers low to moderate shrub cover and requires friable soils.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Pandion haliaetus osprey	Fed: None CA: WL	Remain close to still or slow-moving bodies of water including oceans, rivers, lakes, mangroves, coastal wetlands, lagoons, reefs, estuaries and marshes. Generally nest in high places, such as trees, power poles, or cliffs.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Pelecanus erythrorhynchos American white pelican	Fed: None CA: SSC	Locally common winter resident of southern California. Typically forage in shallow inland waters, such as open areas in marshes and along lake or river edges. Also occur in shallow coastal marine habitats.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Perognathus longimembris brevinasus Los Angeles pocket mouse	Fed: None CA: SSC	Occurs in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows, but instead will seek refuge under weeds and dead leaves instead.	Yes (c)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Phrynosoma blainvillii coast horned lizard	Fed: None CA: SSC	Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (i.e. fire, floods, roads, grazing, fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.	Yes	No	**Low** Limited foraging and burrowing habitat are present within the project site.
Plegadis chihi white-faced ibis	Fed: None CA: WL	Prefers to feed in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded partures and croplands. Nests in dense, fresh emergent wetland.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Polioptila californica californica coastal California gnatcatcher	Fed: **THR** CA: SSC	Obligate resident of sage scrub habitats that are dominated by California sagebrush (*Artemisia californica*). This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. Ranges from the Ventura County, south to San Diego County and northern Baja California and it is less common in sage scrub with a high percentage of tall shrubs. Prefers habitat with more low-growing vegetation.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Polioptila melanura black-tailed gnatcatcher	Fed: None CA: WL	In Mojave, Great Basin, Colorado and Sonoran Desert communities, prefers nesting and foraging in densely lined arroyos and washes dominated by creosote bush and salt bush with scattered bursage, burrowed, ocotillo, saguaro, barrel cactus, nipple cactus, and prickly pear and cholla.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Progne subis purple martin	Fed: None CA: SSC	Summer resident in a variety of wooded, low-elevation habitats throughout the state. Uses valley foothill and montane hardwood, valley foothill and montane hardwood-conifer, and riparian habitats. Also occurs in coniferous habitats, including closed-cone pine-cypress, ponderosa pine, Douglas-fir, and redwood.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Pyrocephalus rubinus vermilion flycatcher	Fed: None CA: SSC	Occupies desert riparian habitat, particularly cottonwoods, willows, mesquite, and other large desert riparian trees, in habitat adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas where it can forage.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Rana draytonii California red-legged frog	Fed: **THR** CA: SSC	Inhabits quiet pools of streams, marshes, and occasionally ponds. Occurs along the coast ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges.	Yes (c)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
***Rhinichthys osculus* ssp. 8** Santa Ana speckled dace	Fed: None CA: SSC	Inhabits the Santa Ana, San Jacinto, San Gabriel, and Los Angeles River systems. Prefers perennial streams fed by cool springs with overhanging riparian vegetation and shallow gravel riffles for spawning.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project 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	No	**Low** Limited foraging and cover habitat are present within the project site.
Selasphorus rufus rufous hummingbird	Fed: None CA: None	During breeding, they are found in forests, on seed-tree harvest units, riparian shrub, and spruce-fir habitats. During the winter, it migrates to lowland stream bottoms, foothill brush land, seacoast and high mountain meadows.	No	No	**Low** Suitable stopover and foraging habitat are present within the project site. This species does not nest in the region.
Setophaga petechia yellow warbler	Fed: None CA: SSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	No	No	**Low** Limited foraging and nesting habitat are present within the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Spea hammondii western spadefoot	Fed: None CA: SSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washed, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rainpools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	Yes	No	**Low** Limited foraging and cover habitat are present within the project site.
Spinus lawrencei Lawrence's goldfinch	Fed: None CA: None	Open woodlands, chaparral, and weedy fields. Closely associated with oaks. Nests in open oak or other arid woodland and chaparral near water.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Spizella breweri Brewer's sparrow	Fed: None CA: None	Habitats include sagebrush and brushy plains.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Streptocephalus woottoni Riverside fairy shrimp	Fed: **END** CA: None	Freshwater crustacean that is found in vernal pools in the coastal California area.	Yes (a)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Taricha torosa Coast Range newt	Fed: None CA: SSC	Found in coastal areas and coastal range mountains in oak forests, woodlands, or rolling grasslands. In the terrestrial phase they live in moist to dry habitats under woody or leafy debris, in rock crevices, and in animal burrows.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Taxidea taxus American badger	Fed: None CA: SSC	Primarily occupy grasslands, parklands, farms, tallgrass and shortgrass prairies, meadows, shrub-steppe communities and other treeless areas with sandy loam soils where it can dig more easily for its prey. Occasionally found in open chaparral (with less than 50% plant cover) and riparian zones.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Thamnophis hammondii two-striped garter snake	Fed: None CA: SSC	Occurs in or near permanent fresh water, often along streams with rocky beds and riparian growth up to 7,000 feet in elevation.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
***Thamnophis sirtalis* pop. 1** south coast gartersnake	Fed: None CA: SSC	Found in areas with permanent water, low gradient topography, and dense multistoried riparian vegetation. Restricted to shallow, freshwater aquatic habitats such as wetlands and marshes. Requires open water for foraging.	No	No	**Low** Limited foraging and cover habitat are present within the project site.
Vireo bellii pusillus least Bell's vireo	Fed: **END** CA: **END**	Primarily occupy Riverine riparian habitat that typically feature dense cover within 1 -2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.	Yes (a)	No	**Moderate** The southern willow scrub plant community has the potential to provide suitable habitat.
Xanthocephalus xanthocephalus yellow-headed blackbird	Fed: None CA: SSC	Uncommon yearlong resident of southern California throughout freshwater emergent wetlands, and moist, open areas along agricultural areas, and mudflats of lacustrine habitats. Prefers to nest in dense wetland vegetation characterized by cattails, tules, or other similar plant species along the border of lakes and ponds.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
PLANT SPECIES					
Abronia villosa* var. *aurita chaparral sand-verbena	Fed: None CA: None CNPS: 1B.1	Grows in sandy soils in coastal sage scrub and in chaparral habitats. Grows in elevation from 262 to 5,249 feet. Blooming period ranges from January to September.	No	No	**Presumed Absent** There is no suitable habitat present within the project site.
Allium marvinii Yucaipa onion	Fed: None CA: None CNPS: 1B.2	Found in chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland. Found at elevations ranging from 974 to 3,510 feet. Blooming period is from March to May.	Yes (b)	No	**Presumed Absent** There is no suitable habitat present within the project site.
Allium munzii Munz's onion	Fed: **END** CA: **THR** CNPS: 1B.1	Found in chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland. Found at elevations ranging from 974 to 3,510 feet. Blooming period is from March to May.	Yes (b)	No	**Presumed Absent** There is no suitable habitat present within the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Ambrosia pumila San Diego ambrosia	Fed: **END** CA: None CNPS: 1B.1	Occurs in open habitats in coarse substrates near drainages, and in upland areas on clay slopes or on the dry margins of vernal pools. This species occurs in a variety of associations that are dominated by sparse grasslands or marginal wetland habitats such as river terraces, pools, and alkali playas. Found at elevations ranging from 65 to 1,360 feet. Blooming period is from April to October.	No	No	**Presumed Absent** There is no suitable habitat present within the project site.
Arctostaphylos rainbowensis rainbow manzanita	Fed: None CA: None CNPS: 1B.1	Grows within chaparral habitats. Found at elevations ranging from 675 to 2,200 feet. Blooming period is from December to March.	No	No	**Presumed Absent** There is no suitable habitat present within the project site.
Arenaria paludicola marsh sandwort	Fed: **END** CA: **END** CNPS: 1B.1	Grows mainly in wetlands and freshwater marshes in arid climates. The plant can grow in saturated acidic bog soils and soils that are sandy with a high organic content. Found at elevations ranging from 33 to 558 feet. Blooming period is from May to August.	No	No	**Presumed Absent** There is no suitable habitat present within the project site.
Berberis nevinii Nevin's barberry	Fed: **END** CA: **END** CNPS: 1B.1	Occurs on steep, north-facing slopes or in low-grade sandy washes in chaparral, cismontane woodland, coastal scrub, and riparian scrub. Found at elevations ranging from 951 to 5,167 feet. Blooming period is from March to June.	Yes (d)	No	**Presumed Absent** There is no suitable habitat present within the project site.
Calochortus plummerae Plummer's mariposa-lily	Fed: None CA: None CNPS: 4.2	Prefers openings in chaparral, foothill woodland, coastal sage scrub, valley foothill grasslands, cismontane woodland, lower montane coniferous forest and yellow pine forest. Often found on dry, rocky slopes and soils and brushy areas. Can be very common after a fire. Found at elevations ranging from 459 to 6,299 feet. Blooming period is from May to July.	Yes (e)	No	**Presumed Absent** There is no suitable habitat present within the project site.
Caulanthus simulans Payson's jewelflower	Fed: None CA: None CNPS: 4.2	Occurs on granitic sandy soils in chaparral and coastal scrub habitats. Found at elevations ranging from 295 to 7,218 feet. Blooming period is from February to June.	Yes	No	**Presumed Absent** There is no suitable habitat present within the project site.
Centromadia pungens ssp. laevis smooth tarplant	Fed: None CA: None CNPS: 1B.1	Found in alkaline soils within chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland habitats. Found at elevations ranging from 0 to 2,100 feet. Blooming period is from April to September.	Yes (d)	No	**Low** Limited habitat is present within the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	Fed: **END** CA: **END** CNPS: 1B.2	Upper terraces and higher edges of coastal salt marshes where tidal inundation is periodic. Found at elevations ranging from 0 to 98 feet. Blooming period is from May to October.	No	No	**Presumed Absent** There is no suitable habitat present within the project site. The project site occurs outside of the known elevation range for this species.
Chorizanthe leptotheca Peninsular spineflower	Fed: None CA: None CNPS: 4.2	Found in granitic soils within chaparral, coast scrub, and lower montane coniferous forest habitats. Found at elevations ranging from 984 to 6,234 feet. Blooming period is from May to August.	Yes (e)	No	**Presumed Absent** There is no suitable habitat present within the project site.
Chorizanthe parryi* var. *parryi Parry's spineflower	Fed: None CA: None CNPS: 1B.1	Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet. Blooming period is from April to June.	Yes (e)	No	**Presumed Absent** There is no suitable habitat present within the project site.
Chorizanthe polygonoides var. longispina long-spined spineflower	Fed: None CA: None CNPS: 1B.2	Typically found on clay lenses which are largely devoid of shrubs. Can be found on the periphery of vernal pool habitat and even on the periphery of montane meadows near vernal seeps. Found at elevations ranging from 98 to 5,020 feet. Blooming period is from April to July.	Yes	No	**Presumed Absent** There is no suitable habitat present within the project site.
Convolvulus simulans small-flowered morning-glory	Fed: None CA: None CNPS: 4.2	Grows in clay soils within serpentinite seeps, chaparral, coastal scrub, valley and foothill grassland habitats. Found at elevations ranging from 98 to 2,297 feet. Blooming period is from March to July.	Yes	No	**Presumed Absent** There is no suitable habitat present within the project site.
Deinandra paniculata paniculate tarplant	Fed: None CA: None CNPS: 4.2	Typically found in vernally mesic, sometimes sandy soils in coastal scrub, valley and foothill grasslands, and vernal pools. Found at elevations ranging from 82 to 3,084 feet. Blooming period is from April to November.	No	No	**Low** Suitable habitat is present within the project site. This species is well-adapted to growing in disturbed/degraded conditions.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Dudleya multicaulis many-stemmed dudleya	Fed: None CA: None CNPS: 1B.2	Found on dry stony outcrops, coastal sage scrub, and chaparral habitats at up to 2,000 feet. Most common in Orange County along coastal plains in heavy clay soils.	Yes (b)	No	**Presumed Absent** There is no suitable habitat present within the project site.
Eriastrum densifolium* ssp. *sanctorum Santa Ana River woollystar	Fed: **END** CA: **END** CNPS: 1B.1	Grows in sandy or gravelly soils within Riversidean Alluvial Fan Sage Scrub habitat. Found at elevations ranging from 299 to 2,001 feet. Blooming period is from April to September.	Yes	No	**Presumed Absent** There is no suitable habitat present within the project site.
Harpagonella palmeri Palmer's grapplinghook	Fed: None CA: None CNPS: 4.2	Occurs on clay soils in chaparral, coastal scrub, and valley and foothill grasslands. Found at elevations ranging from 66 to 3,133 feet. Blooming period is from March to May.	Yes	No	**Presumed Absent** There is no suitable habitat present within the project site.
Hordeum intercedens vernal barley	Fed: None CA: None CNPS: 3.2	Found in coastal dunes, coastal scrub, vernal pools, and valley and foothill grassland habitats. Found at elevations ranging from 16 to 3,281 feet. Blooming period is from March to June.	Yes	No	**Presumed Absent** There is no suitable habitat present within the project site.
Juglans californica southern California black walnut	Fed: None CA: None CNPS: 4.2	Occurs in alluvial soils in chaparral, cismontane woodland, coastal scrub, and riparian woodlands. From 15 to 5,875 feet in elevation. Blooming period is from May to June.	Yes	No	**Presumed Absent** There is no suitable habitat present within the project site.
Lasthenia glabrata* ssp. *coulteri Coulter's goldfields	Fed: None CA: None CNPS: 1B.1	Prefers playas, vernal pools, and coastal salt marshes and swamps. Found at elevations ranging from 3 to 4,003 feet. Blooming period is from February to June.	Yes (d)	No	**Presumed Absent** There is no suitable habitat present within the project site.
Lepidium virginicum var. robinsonii Robinson's pepper-grass	Fed: None CA: None CNPS: 4.3	Dry soils on chaparral and coastal sage scrub. Found at elevations ranging from 3 to 2,904 feet. Blooming period is from January to July.	No	No	**Presumed Absent** There is no suitable habitat present within the project site.
Microseris douglasii* ssp. *platycarpha small-flowered microseris	Fed: None CA: None CNPS: 4.2	Occurs in clay soils in cismontane woodland, coastal scrub, valley and foothill grasslands, and around vernal pools. Found at elevations ranging from 49 to 3,510 feet. Blooming period is from March to May.	No	No	**Presumed Absent** There is no suitable habitat present within the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Myosurus minimus ssp. apus little mousetail	Fed: None CA: None CNPS: 3.1	Occurs in alkaline soils in valley and foothill grassland and vernal pools. Found at elevations ranging from 66 to 2,100 feet. Blooming period is from March to June.	Yes (d)	No	**Presumed Absent** There is no suitable habitat present within the project site.
Phacelia stellaris Brand's star phacelia	Fed: None CA: None CNPS: 1B.1	Occurs in coastal dunes and coastal sage scrub habitats. In western Riverside County this species is restricted to sandy benches along the Santa Ana River. Grows in elevations ranging from 3 to 1,312 feet. Blooming period is from March to June.	Yes (b)	No	**Presumed Absent** The project site occurs outside of the known elevation range for this species.
Pseudognaphalium leucocephalum white rabbit-tobacco	Fed: None CA: None CNPS: 2B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodlands in sandy gravelly soils. Grows in elevation from 3 to 6,890 feet in elevation. Blooming period ranges from July to December.	No	No	**Presumed Absent** There is no suitable habitat present within the project site.
Quercus engelmannii Engelmann oak	Fed: None CA: None CNPS: 4.2	Grows along the foothills from Pasadena through Baja California. Requires elevations of 500 to 4,000 feet. Found in mesas, savannas, and woodlands above the dry coastal plain.	Yes	No	**Presumed Absent** There is no suitable habitat present within the project site.
Romneya coulteri Coulter's matilija poppy	Fed: None CA: None CNPS: 4.2	Found in recently burned areas within chaparral and coastal scrub habitats. Found at elevations ranging from 66 to 3,937 feet. Blooming period is from March to July.	Yes (e)	No	**Presumed Absent** There is no suitable habitat present within the project site.
Senecio aphanactis chaparral ragwort	Fed: None CA: None CNPS: 2B.2	Found in sometimes alkaline soils in chaparral, cismontane woodland, and coastal scrub. Found at elevations ranging from 425 to 2,165 feet. Blooming period is from January to April.	No	No	**Presumed Absent** There is no suitable habitat present within the project site.
Symphyotrichum defoliatum San Bernardino aster	Fed: None CA: None CNPS: 1B.2	Grows in grasslands and disturbed areas in the San Gabriel and San Bernardino Mountains and Peninsular Range. Occurs in vernally wet sites including ditches, streams, and springs in many plant communities including meadows and seeps, marshes and swamps, coastal scrub, cismontane woodland, lower montane coniferous woodland, and grassland. Found at elevations ranging from 7 to 6,693 feet. Blooming period is from July to November.	No	No	**Presumed Absent** There is no suitable habitat present within the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Texosporium sancti-jacobi woven-spored lichen	Fed: None CA: None CNPS: 3	Found on soil, small mammal pellets, dead twigs, and on *Selaginella* sp. within openings in chaparral habitat. Found at elevations ranging from 951 to 2,165 feet.	No	No	**Presumed Absent** There is no suitable habitat present within the project site.
CDFW SENSITIVE HABITATS					
Southern California Arroyo Chub/Santa Ana Sucker Stream	CDFW Sensitive Habitat	Characterized by a functioning hydrological system that experiences peaks and ebbs in the water volume throughout the year; a mosaic of loose sand, gravel, cobble, and boulder substrates in a series of riffles, runs, pools and shallow sandy stream margins; water depths greater than 1.2 inches and water bottom velocities of more than 0.01 feet per second; non-turbid conditions or only seasonally turbid water; water temperatures less than 86° Fahrenheit; and stream habitat that includes algae, aquatic emergent vegetation, macroinvertebrates, and riparian vegetation.	NA	No	**Absent**
Southern Coast Live Oak Riparian Forest	CDFW Sensitive Habitat	Open to locally dense evergreen riparian woodlands dominated by *Quercus agrifolia*. This type appears to be richer in herbs and poorer in understory shrubs than other riparian communities. Bottomlands and outer floodplains along larger streams, on fine-grained, rich alluvium. Canyons and valleys of coastal southern California.	NA	No	**Absent**
Southern Cottonwood Willow Riparian Forest	CDFW Sensitive Habitat	Dominated by cottonwood (*Populus* sp.) and willow (*Salix* sp.) trees and shrubs. Considered to be an early successional stage as both species are known to germinate almost exclusively on recently deposited or exposed alluvial soils.	NA	No	**Absent**
Southern Riparian Forest	CDFW Sensitive Habitat	Dense riparian forests found along streams and rivers. Characteristic plant species include western sycamore, cottonwood, and many other wetland plants.	NA	No	**Absent**
Southern Sycamore Alder Riparian Woodland	CDFW Sensitive Habitat	Occurs below 2,000 meters in elevation, sycamore and alder often occur along seasonally-flooded banks; cottonwoods and willows are also often present. Poison oak, mugwort, elderberry and wild raspberry may be present in understory.	NA	No	**Absent**

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Southern Willow Scrub	CDFW Sensitive Habitat	Southern willow scrub consists of dense, broadleaved, winter-deciduous stands of trees dominated by shrubby willows in association with mule fat and scattered emergent cottonwood and western sycamores. This vegetation community occurs on loose, sandy or fine, gravelly alluvium deposited near stream channels during flood flows. Frequent flooding maintains this early seral community, preventing succession to a riparian woodland or forest. In the absence of periodic flooding, this early seral type would be succeeded by southern cottonwood or western sycamore riparian forest.	NA	Yes	**Present** This CDFW Sensitive Habitat occurs along the arroyo that transects the project site. Project activities are designed to avoid impacts to the arroyo.

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

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

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

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

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

Appendix D Regulations

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

Federal Regulations

Endangered Species Act of 1973

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

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

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

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

Migratory Bird Treaty Act

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

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

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

State Regulations

California Environmental Quality Act (CEQA)

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

California Endangered Species Act (CESA)

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

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

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

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

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

Fish and Game Code

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

Native Plant Protection Act

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

California Native Plant Society Rare and Endangered Plant Species

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

California Rare Plant Rank

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

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

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

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

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

4- Plants of Limited Distribution - A Watch List

Threat Ranks

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

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

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

Local Policies

Western Riverside County MSHCP

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

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

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

Federal Regulations

Section 404 of the Clean Water Act

In accordance with the Revised Definition of "Waters of the United States" (March 20, 2023), "waters of the United Sates" are defined as follows:

> The ''waters of the United States'' are defined in paragraph (a) of this rule:
>
> (1) traditional navigable waters, the territorial seas, and interstate waters;
>
> (2) impoundments of ''waters of the United States'';
>
> (3) tributaries to traditional navigable waters, the territorial seas, interstate waters, or impoundments when the tributaries meet either the relatively permanent standard or the significant nexus standard (''jurisdictional tributaries'');
>
> (4) wetlands adjacent to traditional navigable waters; wetlands adjacent to and with a continuous surface connection to relatively permanent paragraph impoundments or to jurisdictional tributaries when the jurisdictional tributaries meet the relatively permanent standard; and wetlands adjacent to impoundments or jurisdictional tributaries when the wetlands meet the significant nexus standard (''jurisdictional adjacent wetlands''); and
>
> (5) intrastate lakes and ponds, streams, or wetlands not identified in (1) through (4) above that meet either the relatively permanent standard or the significant nexus standard.

The ''relatively permanent standard'' means relatively permanent, standing or continuously flowing waters connected to traditional navigable waters, and waters with a continuous surface connection to such relatively permanent waters or to traditional navigable waters. The ''significant nexus standard'' means waters that, either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of traditional navigable waters, the territorial seas, or interstate waters.

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.

Appendix E LBVI Survey

RESULTS OF 2024 LEAST BELL'S VIREO & SOUTHWESTERN WILLOW FLYCATCHER SURVEYS RIVERSIDE COUNTY, CALIFORNIA

SURVEYS CONDUCTED MAY 11-JULY 11, 2024

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AUGUST 5, 2024

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INTRODUCTION

Kidd Biological, Inc. (KBI) was contracted by to conduct protocol breeding season surveys for the southwestern willow flycatcher (*Empidonax traillii* extimus, SWFL) and least Bell's vireo (*Vireo bellii pusillus*, LBVI) on approximately 20 acres of suitable habitat in Woodcrest, California. The surveys were performed to satisfy requirements of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), under which SWFL and LBVI are considered covered species. In addition, under 6.1.2 of the MSHCP, surveys for these species must be conducted when there is potential for impacts to riparian habitats. The surveys followed protocol established for these species by the U.S. Fish and Wildlife Service (USFWS). Biologists Angela Johnson (ES 59592B-3) conducted three protocol SWFL surveys, and Jill Coumoutso (TE-93824C-0) conducted two protocol SWFL surveys. LBVI surveys were conducted by the above-mentioned biologists and by Jason Berkley. It should be noted a permit is not required to perform LBVI surveys.

PROJECT DESCRIPTION

TTLC Management proposes to develop a Tentative Tract Map (No. 38510) with 232 residential lots.

SURVEY LOCATION

The survey area is in an unnamed drainage feature that is southeast of the Woodcrest Dam in the Community of Woodcrest in western Riverside County. It is located in Section 24 of Township 3 South, Range 5 West of the Riverside East, California U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map (Figure 1). More specifically, the site is located east of Interstate 15, west of Interstate 215, southwest of Highway 91 and northwest of Highway 74 (Ortega Highway), and is northwest of the intersection of Van Buren Boulevard, Iris Avenue and Chicago Avenue (Figure 2).

HABITAT DESCRIPTION

The approximately 20-acre survey area is in a mixed residential area of an unincorporated area known as "Woodcrest". This area supports a mix of equestrian "ranchettes" (rural residential) as well as smaller single-family home parcels. This area was primarily used for citrus groves in the past. In recent years, the area has become more developed with housing tracts being constructed to the south and is now a suburb of the Cities of Riverside, Corona and Moreno Valley. There are

greenbelts between the tracts of homes that support native and naturalized vegetation communities.

The "Project Site" is 115.63 acres. The majority of the site, 104 acres, is comprised of non-native grasslands. The rest of the site supports: Riversidean sage scrub (7.62 acres), and southern willow scrub (2.90 acres). The remaining areas are classified as disturbed and developed.

The drainage feature that bisects the project site primarily supports a southern willow scrub plant community. This plant community is dominated by arroyo willow (*Salix lasiolepsis*) and black willow (*S. goodingii*) and supports a variety of other trees and shrubs with an herbaceous understory. Other common species observed in the southern willow scrub plant community include Mexican fan palm (*Washingtonia robusta*), salt cedar (*Tamarix* sp.), giant creek nettle (*Urtica dioca*), mule fat (*Baccharis salicifolia*), elderberry *(Sambucus mexicana* [*S. caerulea*]), bowlesia (*Bowlesia incana*), California bee plant (*Scrophularia californica*), common phacelia (*Phacelia distans*), Douglas' nightshade (*Solanum douglasii*), goldfields (*Lasthenia glabrata*), hairy leaved sunflower (*Helianthus annuus*), London rocket (*Sisymbrium irio*), needle goldfields (*Lasthenia gracilis*), stinknet (*Oncosiphon pilulifer*), virgin's bower (*Clematis pauciflora*), barley (*Hordeum murinum*), and willow baccharis (*Baccharis salicina*).

The presence of riparian vegetation suggests that this habitat has the potential to support both riparian least Bell's vireo and Southwestern Willow Flycatcher, however the proximity of residential development and the presence of recreational hiking and off-road trails, likely limits the use of this area for nesting by the SWFL which are less tolerant of human disturbance. The site does not support riparian forest habitat that is suitable for the Yellow Billed Cuckoo (*Coccyzus americanus*).

Southwestern Willow Flycatcher

Species Description, Distribution, and Status

The SWFL is a small, insectivorous passerine that migrates north in the spring from South America, Mexico, and Central America, to breed in the southwestern desert riparian habitats of California, Arizona, New Mexico, and Texas. Within western Riverside County there are very few reported occurrences with the majority occurring within the Prado Basin. The most current estimated number of range-wide flycatcher territories is 1,299 (288 breeding pairs) (USFWS 2014, Durst et al. 2008).

The SWFL occurs in riparian woodland habitat that is characterized by a dense growth of willows, mulefat, arrowweed (*Pluchea* sp.), cottonwood, sycamore (*Platanus* sp.), and tamarisk. In

addition to willow riparian woodland, the SWFL also nests in coast live oak woodland on the upper San Luis Rey River, San Diego County, California, in dense stands of tamarisk on the lower Colorado River, Imperial and Riverside Counties, California. Surface water or saturated soils are usually present in or adjacent to nesting thickets. The loss of habitat and parasitism by cowbirds are thought to be the major reasons for the declining numbers of SWFL (Pike et al, 2004, Kus 2002). The southwestern subspecies of willow flycatcher was federally listed as endangered in February 1995 (USFWS 1995). Critical habitat was established in 2005, and then revised in 2013. California Department of Fish and Wildlife (CDFW) determined that all subspecies in California are endangered under the California Endangered Species Act. Determining subspecies is based on the region the flycatcher is found breeding as they are nearly indistinguishable by site or call.

SWFL Survey Methods

Presence/absence surveys were conducted according to the July 11, 2000 revised protocol for project-related surveys and the general guidelines described by Sogge *et al.* (2010). All potential SWFL habitat and riparian areas within the survey area were surveyed five (5) times: one (1) visit during the 1st Survey Period (May 15 to May 31), two (2) visits during the 2nd Survey Period (June 1 to June 24), and two (2) visits during the 3rd Survey Period (June 25 to July 17). Each visit was at least five (5) days apart. Surveys of the sites were conducted during morning hours and when the temperature exceeded 13°C (55°f). Less than 1.9 miles (3 km) of habitat were surveyed per day. Surveys for the SWFL were conducted concurrently with those for the LBVI when schedules allowed, however the survey for each species was done on separate passes (e.g. LBVI was surveyed from the south to north transect, while SWFL were surveyed for during the north to south transect).

Surveys were conducted within all potential habitat patches. If a singing SWFL was not heard in an area after one to two minutes, a permitted biologist played a taped vocalization for 15 to 30 seconds and observed the area for responding SWFLs. This was repeated every 20 to 30 meters. If a SWFL was detected, tape playing was discontinued.

Any SWFL observations would be recorded in a field data form (found in Appendix C), and GPS readings of the locations were taken during the surveys. If this species was observed, their behavior, numbers, and locations of paired or unpaired birds; ages; and sexes of encountered SWFL would be noted. The biologist also checked for leg bands.

Least Bell's Vireo

Species Description, Distribution, and Status

The LBVI is a small greenish-gray songbird with a white underbelly, two white wingbars, and white spectacles across the lores. The LBVI was once widespread throughout the Central Valley and other low elevation river valleys of California. Historically, the LBVI's breeding range extended from the interior of northern California to northwestern Baja California (Grinnell and Miller 1944). The LBVI typically prefers riparian areas dominated by willows of mixed age composition. These areas frequently include other trees such as western cottonwood and California sycamore, with a. It has been noted that the most critical structural component of LBVI's habitat in California was the presence of a dense understory of young willows, mulefat, California wild rose (*Rosa californica*), and a variety of other shrubby species (Goldwasser 1981, Franzreb 1989). Territory sizes of LBVI in California have been reported to range from 0.3-1.3 hectares (0.75-3.2 acres) (Kus, et al. 2010). It was noted by Newman (1992) that "variability in territory size was unrelated to vegetation structure, and did not influence reproductive success of pairs in Southern California."

Within western Riverside County the core populations are primarily Prado Basin and the Santa Ana River, with other smaller populations in Temescal Wash (including Alberhill Creek), Mockingbird Canyon, Murrieta Creek, Temecula Creek, Lake Skinner (including Rawson Canyon), Vail Lake, Wilson Creek, and San Timoteo Canyon. According to the MSHCP "other geographic locations that are recorded within the UC Riverside database and by the USFWS include: Lake Elsinore, March Air Reserve Base, Meadowbrook, Canyon Lake, De Luz Creek, Potrero Creek, Bautista Creek, and Reche Canyon (USFWS 1998, CNDDB 2024)."

Loss and degradation of breeding habitat has been the greatest contributor to the decline of the LBVI and SWWF. Habitat conversion for agricultural purposes has removed much of the original riparian woodland, and flood control measures and channelization have further depleted the riparian habitats used by the LBVI and SWWF as well as other riparian birds. Another major contributing factor to the decline of the LBVI and SWWF was the introduction of the brown-headed cowbird (*Malothrus ater*) to California around 1890. Estimates from a 1989 study concluded that anywhere from 47% to 100% of all LBVI nests contained cowbird eggs (Franzreb 1989). The significant reduction in the population size and range of the vireo resulted in it being listed as a state endangered species in June 1980, and federally listed as endangered in May 1986. Critical Habitat for this species was designated in 1994; however, no critical habitat occurs within the survey areas.

LBVI Survey Methods

Presence/absence surveys were conducted according to the USFWS *Least Bell's Vireo Survey Guidelines* (2001). All potentially suitable LBVI habitat within the survey areas were surveyed seven (7) times between April 11 and July 15, 2024 with at least 10 days between survey visits for each site. The surveys were conducted during the morning hours during appropriate weather conditions. Some survey days continued into the early afternoon if weather conditions and bird activity remained conducive for bird detection. Less than three linear kilometers (km) (1.9 miles) of habitat were surveyed per day. LBVI surveys were conducted passively, listening for vireo songs, calls, whisper songs, scolds and visually looking for adults and juveniles. Any nesting behavior was also noted. Because LBVI were determined to be present in the project area and the surveyors were confident in the territory numbers, a final 8th survey was not performed.

LBVI observations were recorded in a field notebook, and GPS readings of the locations were taken during the surveys. If an exact point could not be taken, estimated points were determined post-survey. Numbers and locations of paired or unpaired territorial males, and the ages and sexes of encountered vireos (when discernible) were noted. Individual LBVI were also checked for colored leg bands.

Results

Surveys for LBVI and SWFL were conducted in all suitable habitat by permitted biologist's Jason Berkley, Angela Johnson and Jill Coumoutso between May 11 and July 11, 2024. Surveys were conducted where it was determined to support suitable habitat. Based on the level of effort and environmental conditions all surveys were considered valid as they followed published protocols. No SWFL were detected during the 2024 season.

A brief description of SWFL/LBVI survey results for the survey area is provided below. Data sheets for each of the SWFL surveys can be found in Appendix C.

Table 1. Survey Conditions

Survey #	Date	Surveyor	Start Time	Stop Time	Weather	Temp. Range (°F)	# SWFL Detected	# LBVI Detected
1	5/11/24	JB	0730	1030	0-100% CC, wind 1-2 mph	56-67	N/A	3
*2	5/21/24	JC	0600	0945	95-100% CC, wind 0-1 mph	55-61	0	4

*3	5/31/24	AJ	0645	1000	80-100% CC, (fog) wind 1-2 mph	56-62	0	5
*†4	6/10/24	AJ	0655	1100	30-100% CC, Wind 1-2 mph	58-64	0	5
*5	6/21/24	AJ	0609	1015	0% CC, Wind 1-4 mph	63-74	0	5
*6	7/3/24	JC	0557	0906	0% CC, wind 0-1 mph	66-80	0	6
7	7/11/24	AJ	0545	0945	30-50% CC, Wind 1-4 mph	67-80	N/A	5

** Indicates LBVI and SWFL surveys conducted on the same day.*

† Indicates SWFL surveys ended at 1030 protocol time, as LBVI surveys continued after

TABLE 2. LBVI LOCATIONS (UTM- ZONE 11S)

LBVI Territory	Easting	Northing
LBVI 1 (off site)	467219	3750459
LBVI 2	467131	3750472
LBVI 3	467155	3750394
LBVI 4	467213	3750281
LBVI 5	467285	3750157
LBVI 6	467389	3750017
When LBVI were detected in multiple locations, only the central point of the polygon is given.		

All three surveyors noted at least 6 territories during the course of the surveys. Figure 2 illustrates the locations of the territories. One territory is just offsite to the north of the project boundaries. The birds from this territory did appear to forage into the subject property boundaries.

There were two other questionable detections, one just to the northwest of the survey area. Here, a male was seen foraging in a small stand of willows, likely a seep or spring. The male was seen

flying to the northeast, back to the mail drainage feature. It could not be determined if this was the male from Territory 2, or a male from a separate, off-site territory.

The second is a male that was detected during more than one survey, but not during all surveys at the southeast portion of the site. This male may have a territory off site to the east, or it may be a male from Territory 6, or it may have been attempting to establish a territory but failed to do so and moved to another area.

Other Listed and Sensitive Species Observed

This survey focused on two species, the LBVI and SWFL; however, incidental observation(s) of all federal listed and state listed/sensitive species were documented. A total of eight (8) sensitive species were observed. Table 3 describes these. Of note, there were three California gnatcatcher territories documented.

There are various definitions of "sensitive" in accordance with State and Federal Agencies. The following is a brief summary of the status of the species that were observed on site (all definitions were taken directly from the CDFW Biogeographic Data Branch's Special Animals list [July 2024] unless otherwise indicated):

U.S. Fish and Wildlife Service Federally Endangered (FE): The classification provided to an animal or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range as defined in the Endangered Species Act.

U.S. Fish and Wildlife Service Federally Threatened (FT): Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range as defined in the Endangered Species Act.

CDFW State Endangered (SE): a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease. Any species determined by the commission as "endangered" on or before January 1, 1985, is an "endangered species."

CDFW California Species of Special Concern (**SSC):** The Department has designated certain vertebrate species as "Species of Special Concern" because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction. The goal of

designating species as "SSC" is to halt or reverse their decline early enough to secure their long-term viability.

CDFW: Watch List (WL): The birds on this Watch List are 1) not on the current Special Concern list but were on previous lists and they have not been state listed under CESA; 2) were previously state or federally listed and now are on neither list; or 3) are on the list of "Fully Protected" species.

TABLE 3. OTHER LISTED OR SENSITIVE SPECIES OBSERVED

Common Name	Scientific Name	Status
Bell's sparrow	*Artemisiospiza belli belli*	WL
California gnatcatcher	*Polioptila californica*	FT, SSC
California horned lark	*Eremophila alpestris*	WL
Cooper's hawk	*Accipiter cooperi*	WL
So. California Rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL
Yellow warbler	*Setophaga petechial*	SSC
San Diego Black-tailed Jackrabbit	*Lepus californicus bennettii*	SSC

BROWN-HEADED COWBIRDS AND INVASIVE SPECIES

Brown-headed cowbirds (*Molothrus ater*) (BHCO) were detected during three (3) of the surveys in 2024. They were observed on 5/31, 6/10, on 6/21 with juvenile BHCO being observed on the 6/21 survey. No cowbird traps were noted at the survey site. Nest searches were not performed, so it is not known if the BHCOs parasitized LBVI nests.

There were five invasive plant species within the survey area: Arundo (*Arundo donax*), salt cedar (*Tamarisk* sp.), Peruvian pepper (*Schinus molle*), tree tobacco (Nicotiana glauca) and Mexican fan palms (*Washingtonia robusta*). None of these species was found to be heavily abundant in the survey area except for a grove of Mexican fan palms at the south end of the survey area. Salt

cedar was found scattered throughout the survey area, and although an invasive plant, it is regularly used by SWFLs and other riparian birds for foraging and nesting.

Although this species out-competes native plant species, the small extent of salt cedar in this area does not likely have a significant impact on the population of sensitive birds in the area. However, if salt cedar should spread and dominate a substantial portion of the southern willow scrub in the surrounding area, the diversity of invertebrates in the willow riparian habitat may decline. The result of decreased abundance and diversity of invertebrates likely affects species at higher trophic levels (Baily et al 2001).

CONCLUSION

No SWFL were detected during the 2024 surveys. A total of six (6) LBVI territories were found within the study area. At least four fledglings were observed during the surveys indicating that this riparian habitat is substantial enough and productive enough to support breeding and is possibly valuable for the species in the region. Additionally, the biologists detected three California gnatcatcher territories in the sage scrub habitat immediately surrounding the survey area.

Other sensitive species detected included Cooper's hawk, yellow warbler, Bell's sparrow, California horned lark, southern California rufous-crowned sparrow, California gnatcatcher, and black-tailed jackrabbit.

CERTIFICATION

I certify that the information in this survey report and attached exhibits, fully and accurately represent my work.

Date: August 5, 2024 Signed: _____
Angela Johnson ES 59592B-3

Date: August 5, 2024 Signed: _____
Jill Coumoutso TE 93824C-0

Date: August 5, 2024 Signed: _____
Jason Berkley

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APPENDIX A- FIGURES

FIGURE 1. SURVEY LOCATION ON RIVERSIDE EAST, CA USGS TOPOGRAPHIC MAP (1:24,000 SCALE)

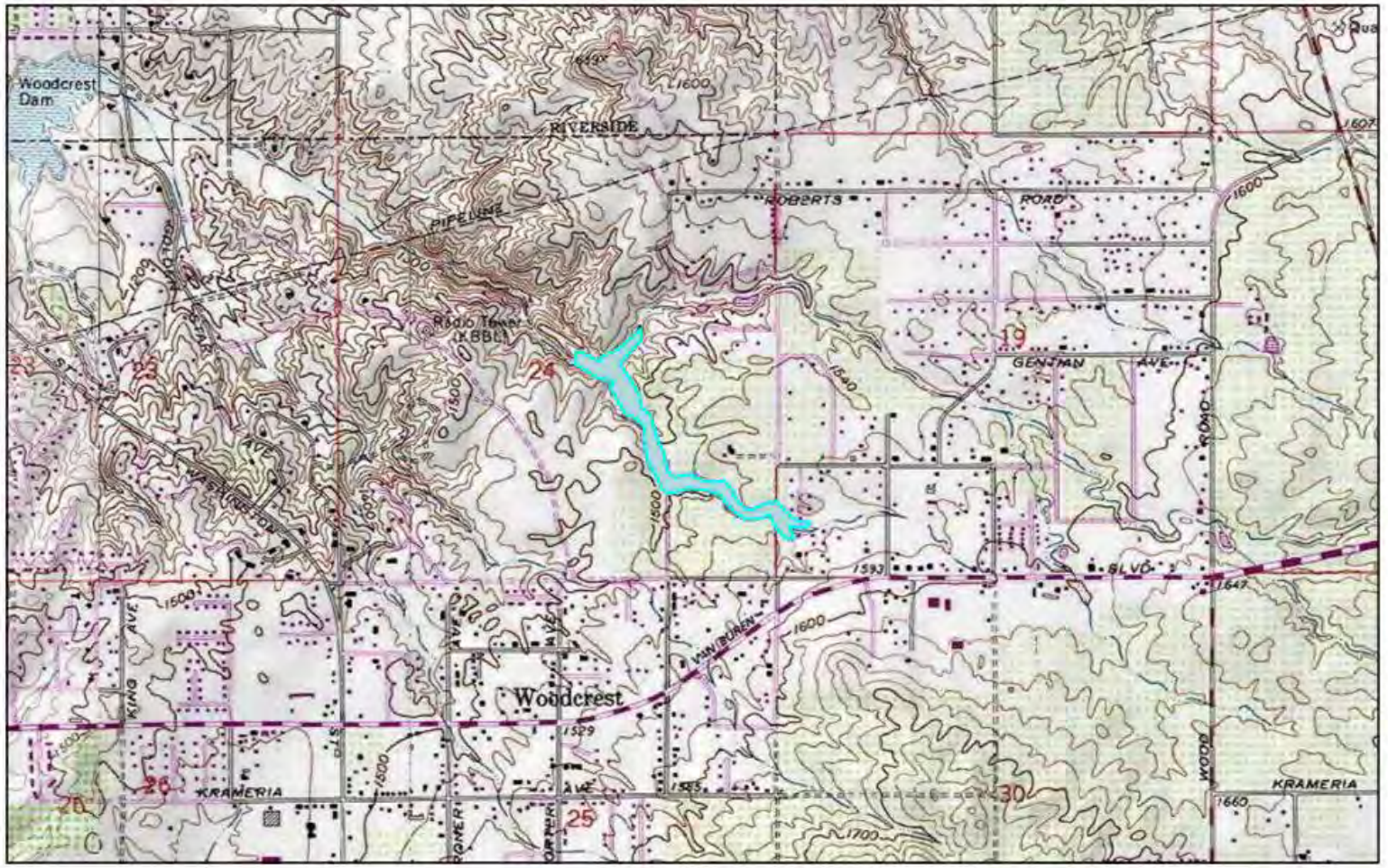
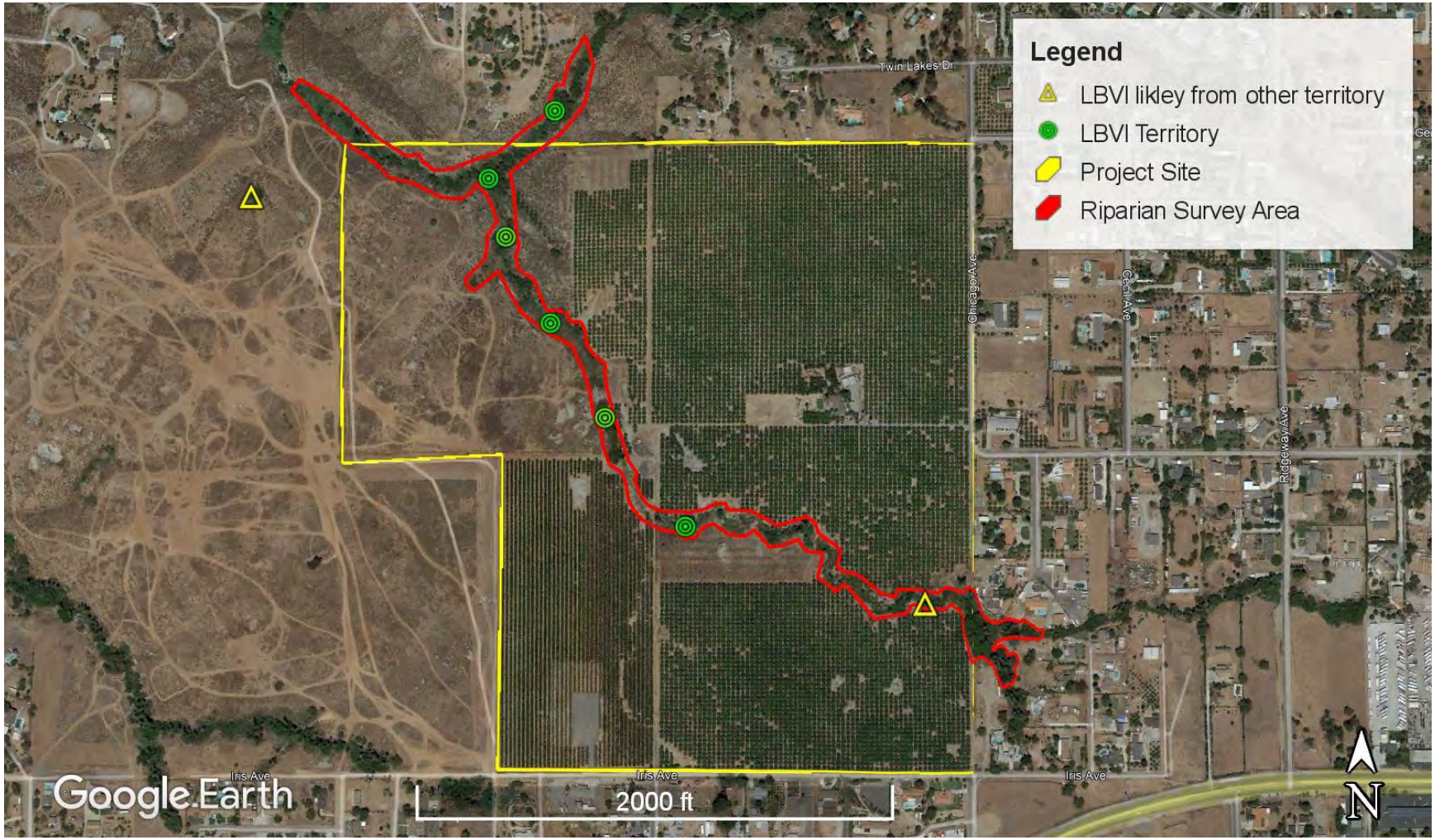


FIGURE 2. AERIAL PHOTO OF SURVEY LOCATION AND LBVI OBSERVATIONS



APPENDIX B- FAUNAL COMPENDIUM

AVES
Allen's Hummingbird (*Selasphorus sasin*)
American Crow (*Corvus brachyrhynchos*)
American Goldfinch (*Spinus tristis*)
American Kestrel (*Falco sparverius*)
American Robin (*Turdus migratorius*)
Anna's Hummingbird (*Calypte anna*)
§ Bell's Sparrow (*Aretemisiospiza belli belli)*
§ Bell's Vireo (Least) (V*ireo bellii pusillus*)
Bewick's Wren (*Thryomanes bewickii*)
Black-chinned Hummingbird (*Archilochus alexandri)*
Black-headed Grosbeak (*Pheucticus melanocephalus)*
Black Phoebe (*Sayornis nigricans*)
Brown-headed Cowbird (*Molothrus ater*)
Blue Grosbeak (*Passerina caerula*)
Bushtit (*Psaltriparus minimus*)
§ California Gnatcatcher (*Polioptila californica*)
§ California Horned Lark (*Eremophila alpestris actia*)
California Quail (*Callipepla californica*)
California Scrub-Jay (*Aphelocoma californica*)
California Thrasher (*Toxostoma redivivum*)
California Towhee (*Melozone crissalis*)
Cassin's Kingbird (*Tyrannus vociferans*)
Cliff Swallow (*Petrochelidon pyrrhonota*)
Common Raven (*Corvus corax*)
Common Yellowthroat (*Geothlypis trichas*)
§ Cooper's Hawk (*Accipiter cooperii*)

	Great Horned Owl (*Bubo virginianus*)
	Greater Roadrunner (*Geococcyx californianus*)
	Hooded Oriole (*Icterus cucullatus*)
	House Finch (*Haemorhous mexicanus*)
*	House Sparrow (*Passer domesticus*)
	House Wren (*Troglodytes aedon*)
	Killdeer (*Charadrius vociferus*)
	Lesser Goldfinch (*Spinus psaltria*)
	Mourning Dove (*Zenaida macroura*)
	Northern Flicker (Red-shafted) (*Colaptes auratus* [cafer Group])
	Northern Mockingbird (*Mimus polyglottos*)
	Northern Rough-winged Swallow (*Stelgidopteryx serripennis*)
	Nuttall's Woodpecker (*Dryobates nuttallii*)
	Phainopepla (*Phainopepla nitens*)
	Red-shouldered Hawk (*Buteo lineatus*)
	Red-tailed Hawk (*Buteo jamaicensis*)
§	Rufous-crowned Sparrow (*Aimophila ruficeps*)
	Say's Phoebe (*Sayornis saya*)
*	Scaly-breasted Munia (*Lonchura punctulata*)
	Song Sparrow (*Melospiza melodia*)
	Spotted Towhee (*Pipilo maculatus*)
	White-throated Swift (*Aeronautes saxatalis*)
	Wrentit (*Chamaea fasciata*)
§	Yellow Warbler (*Setophaga petechia*)
MAMMALIA	
§	San Diego black-tailed jackrabbit (*Lepus califronicus bennettii*)
	California Ground Squirrel (*Otosperophilus beecheyi*)

Coyote (*Canis latrans*)
Desert Cottontail (*Sylvilagus audubonii*)
REPTILIA
Granite Spiny Lizard (*Sceloporous orcutii*)
Western Fence Lizard (*Sceloporus occidentalis*)
Western Side-blotched Lizard (*Uta stansburiana elegans*)

*Introduced Species

§ Sensitive- Watch List Species

Taxonomic nomenclature follows American Ornithologists ' Union 1998 and all updates for birds, and California Department of Fish and Wildlife's, Natural Diversity Database, April 2024 for special-status.

APPENDIX C- SWFL SURVEY DETECTION FORMS

Appendix 1. Willow Flycatcher Survey and Detection Form

Always check the U.S. Fish and Wildlife Service Arizona Ecological Services Field Office web site (http://www.fws.gov/southwest/es/arizona/) for the most up-to-date version.

Willow Flycatcher (WIFL) Survey and Detection Form (revised April 2010)

Site Name SE of Woodcrest Dam State CA County Riverside
USGS Quad Name Riverside East Elevation 455 (meters)
Creek, River, Wetland, or Lake Name Unnamed Drainage
Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? *Yes*___ *No*___

Survey Coordinates: Start: E 466878 N 3750556 UTM Datum 11 (See instructions)
Stop: E 467843 N 3749880 UTM Zone 5
If survey coordinates changed between visits, enter coordinates for each survey in comments section on back of this page.
** ***Fill in additional site information on back of this page*** **

Survey # / Observer(s) (Full Name)	Date (m/d/y) Survey time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N. If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats [livestock, cowbirds, *Diorhabda* spp.]). If *Diorhabda* found, contact USFWS and State WIFL coordinator	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
							# Birds	Sex	UTM E	UTM N
Survey # 1 Observer(s) A. Johnson	Date 6/10/24 Start 0695 Stop 1030 Total hrs 3.6	0				2 BHCO present. 1 Adult and 1 Juvenile				
Survey # 2 Observer(s) A. Johnson	Date 6/21/24 Start 0609 Stop 0950 Total hrs 3.7	0				3 BHCO present. 2 Adults and 1 juvenile.				
Survey # 3 Observer(s) A. Johnson	Date 7/11/24 Start 0545 Stop 0930 Total hrs 3.75	0				NO BHCO				
Survey # 4 Observer(s)	Date Start Stop Total hrs ___									
Survey # 5 Observer(s)	Date Start Stop Total hrs ___									

Overall Site Summary	Total Adult Residents	Total Pairs	Total Territories	Total Nests	
Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals. Total Survey Hrs 11.05	0				Were any Willow Flycatchers color-banded? Yes___ No___ If yes, report color combination(s) in the comments section on back of form and report to USFWS.

Reporting Individual Angela Johnson Date Report Completed 7/30/2024
US Fish and Wildlife Service Permit # 51572B-3 State Wildlife Agency Permit # S-200340007
Submit form to USFWS and State Wildlife Agency by September 1st. Retain a copy for your records.

32 **A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher**

Fill in the following information completely. Submit form by September 1st. Retain a copy for your records.

Reporting Individual Angela Johnson Phone # 970-412-4777
Affiliation Kidd Biological Inc. E-mail angela@kiddbioinc.com
Site Name SC of Woodcrest Dam Date Report Completed 7/30/24
Was this site surveyed in a previous year? Yes ___ No ___ Unknown ✓
Did you verify that this site name is consistent with that used in previous years? Yes ___ No ___ Not Applicable ✓
If site name is different, what name(s) was used in the past? ___
If site was surveyed last year, did you survey the same general area this year? Yes ✓ No ___ If no, summarize below.
Did you survey the same general area during each visit to this site this year? Yes ✓ No ___ If no, summarize below.

Management Authority for Survey Area: Federal ___ Municipal/County ___ State ___ Tribal ___ Private ✓
Name of Management Entity or Owner (e.g., Tonto National Forest) ___

Length of area surveyed: 1.8 (km)

Vegetation Characteristics: Check (only one) category that best describes the predominant tree/shrub foliar layer at this site:

___ Native broadleaf plants (entirely or almost entirely, > 90% native)

✓ Mixed native and exotic plants (mostly native, 50 - 90% native)

___ Mixed native and exotic plants (mostly exotic, 50 - 90% exotic)

___ Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

Identify the 2-3 predominant tree/shrub species in order of dominance. Use scientific names.
Salix lasiolepsis, Salix goodingii, Baccharis salicifolia

Average height of canopy (Do not include a range): 6 (meters)

Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections; 2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests; 3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features. Attach additional sheets if necessary.

Territory Summary Table. Provide the following information for each verified territory at your site.

Territory Number	All Dates Detected	UTM E	UTM N	Pair Confirmed? Y or N	Nest Found? Y or N	Description of How You Confirmed Territory and Breeding Status (e.g., vocalization type, pair interactions, nesting attempts, behavior)

Attach additional sheets if necessary

Willow Flycatcher Survey and Detection Form (revised April, 2004)

Site Name Woodcrest State CA County Riverside
USGS Quad Name Riverside East Elevation _____ feet / meters (circle one)

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? ☐ ***Yes*** ☐ ***No***

Site Coordinates: Start: N 466878 E 3750556 UTM Datum 11 (NAD27 preferred)
Stop: N 467843 E 3749880 UTM Zone S

***** Fill in additional site information on back of this page *****

Survey # / Observer(s) (Full Name)	Date (m/d/y) Survey time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found ? Y or N	Cowbirds Detected? Y or N	Presence of Livestock, Recent sign, If Yes, Describe Y or N	Comments about this survey (e.g., bird behavior, evidence of pairs or breeding, number of nests, nest contents or number of fledges seen; potential threats)
1 Jill Coumoutso	Date 5/21/24 Start 0600 Stop 0945 Total hrs 3.75	0	0	0	0	N	N	
2	Date Start Stop Total hrs							
3	Date Start Stop Total hrs							
4	Date Start Stop Total hrs							
5 Jill Coumoutso	Date 7/3/24 Start 0557 Stop 0906 Total hrs 3.0	0	0	0	0	N	N	
Overall Site Summary (Total **resident** WIFLs only) Total survey hrs		Adults	Pairs	Territories	Nests	Were any WIFLs color-banded? Yes No If yes, report color combination(s) in the comments section on back of form		

Reporting Individual _____ Date Report Completed _____
US Fish and Wildlife Service Permit #_____ AZ Game and Fish Department (or other state) Permit # _____

Submit original form by August 1st. Retain a copy for your records.

Fill in the following information completely. Submit original form by August 1st. Retain a copy for your records.

Reporting Individual Jill Coumoutso Phone #
Affiliation Kidd Biological, Inc E-mail JCBiological@gmail.com
Site Name Woodcrest TTLC Date Report Completed 7/1/2024

Did you verify that this site name is consistent with that used in previous years? Yes (No) (circle one)
If name is different, what name(s) was used in the past?
If site was surveyed last year, did you survey the same general area this year? Yes / No If no, summarize in comments below.
Did you survey the same general area during each visit to this site this year? Yes (No) If no, summarize in comments below.

Management Authority for Survey Area (circle one): Federal Municipal/County State Tribal (Private)
Name of Management Entity or Owner (e.g., Tonto National Forest) TTLC Management Comany

Length of area surveyed: 1.8 km (specify units, e.g., miles = mi, kilometers = km, meters = m)

Vegetation Characteristics: Overall, are the species in tree/shrub layer at this site comprised predominantly of (check one):

☐ Native broadleaf plants (entirely or almost entirely, includes high-elevation willow)

☒ Mixed native and exotic plants (mostly native)

☐ Mixed native and exotic plants (mostly exotic)

☐ Exotic/introduced plants (entirely or almost entirely)

Identify the 2-3 predominant tree/shrub species: Salix lasiolepis, S. goodingi, Baccharis salicifolia

Average height of canopy (Do not put a range): 6 meters (specify units)

Was surface water or saturated soil present at or adjacent to site? Yes / No (circle one)
Distance from the site to surface water or saturated soil: (specify units)

Did hydrological conditions change significantly among visits (did the site flood or dry out)? Yes (No) (circle one)
If yes, describe in comments section below.

Remember to attach a copy of a USGS quad/topographical map (REQUIRED) of the survey area, outlining the survey site and location of WIFL detections. Also include a sketch or aerial photograph showing details of site location, patch shape, survey route in relation to patch, and location of any willow flycatchers or willow flycatcher nests detected. Such sketches or photographs are welcomed, but DO NOT substitute for the required USGS quad map. Please include photos of the interior of the patch, exterior of the patch, and overall site and describe any unique habitat features.

Comments (attach additional sheets if necessary)

WIFL Detection Locations:

Date Detected	N UTM	E UTM	Date Detected	N UTM	E UTM

APPENDIX D- SITE PHOTOS

1. Northern survey area

2. Northern survey area

3. Central survey area

4. Central Survey area

5. Southern survey area

6. Southern survey area