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UNINCORPORATED RIVERSIDE COUNTY, CALIFORNIA

STEELE PEAK USGS 7.5-MINUTE TOPOGRAPHIC QUADRANGLE
SECTION 16, TOWNSHIP 5 SOUTH, RANGE 3 WEST
NORTHERN PARCELS APNS: 317-080-003, -004, -005, -006, -007, -008, -013, -014, -019, -020, -021, -022, -023, -027, -028, AND -029.
SOUTHERN PARCELS APNS: 317-090-002, 003, -004, -005, -006, -007 AND -008.

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

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Prepared For:

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May 2024
Updated July 2024

CAJALCO COMMERCE CENTER

UNINCORPORATED, RIVERSIDE COUNTY, CALIFORNIA

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

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

Travis J. McGill
Director/Biologist

Thomas J. McGill, Ph.D.
Managing Director

May 2024
Updated July 2024

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EXHIBITS

APPENDIX

Section 1 Introduction

This report contains the findings of ELMT Consulting's (ELMT) Habitat Assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis for the proposed Cajalco Commerce Center project and associated off-site street improvement areas 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 off-site street improvement areas that could pose a constraint to implementation of the proposed project. Special attention was given to the suitability of the on-site habitat to support 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.

In addition to the sources mentioned above, ELMT reviewed several biological reports prepared for the proposed project by Glenn Lukos Associates, Inc. (GLA) in 2023. ELMT also consulted the Fire Protection Plan prepared for the project by DUDEK in 2024. The findings and determinations presented in the GLA and DUDEK reports were summarized and are included herein.

The County of Riverside is a signatory to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). 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 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 and off-site street improvement areas are 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 and off-site street improvement areas are located within the Mead Valley Area Plan and the subunit Motte/Rimrock Mead Valley Area Plan of the MSHCP and are located within Criteria Cell 2334. In addition, the project site and off-site street improvement areas are located within designated survey areas for burrowing owl (*Athene cunicularia*).

1.1 PROJECT LOCATION

The project site and off-site street improvement areas are generally located south and west and south of Interstate 215, east of Lake Matthews, and north of State Route 74 in unincorporated Riverside County, California (Exhibit 1, *Regional Vicinity*). The project site and off-site street improvement areas are depicted

[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.

on the Steele Peak quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map within Sections 11 through 14 of Township 4 South, Range 4 West (Exhibit 2, *Site Vicinity*). Specifically, the Warehouse area of the project site is bounded to the north by Cajalco Road, to the west by Decker Road, and to the east by Seaton Avenue within Assessor Parcel Numbers: 317-080-003, -004, -005, -006, -007, -008, -013, -014, -019, -020, -021, -022, -023, -027, -028, and -029.

The Park area is in the southwestern portion of the project site and is separated from the Warehouse development area at its northern boundary by a Metropolitan Water District (MWD) owned parcel. The Park area is bounded to the east, west, and south by undeveloped, vacant and residential land within 317-090-002, -003, -004, -005, -006, -007, and -008. Off-site street improvement areas associated with the project include areas along existing portions of Cajalco Road, Seaton Avenue, Rider Street, and Decker Road, and a new terminus for Decker Road in the southwest portion of the site (Exhibit 3, *Project Site*).

A full list of all the APNs within the four project components areas (i.e., Warehouse Facility, Public Park, Street Improvements, and Stream Impact Area) are provided below:

317050024	317050041	317080007	317080023	317090006	317150021
317050025	317050045	317080008	317080027	317090007	317150033
317050028	317050052	317080013	317080028	317090008	317150041
317050029	317050053	317080014	317080029	317090009	317150051
317050034	317080002	317080016	317080030	317090023	317150052
317050035	317080003	317080019	317090002	317100029	317150053
317050038	317080004	317080020	317090003	317140041	317150054
317050039	317080005	317080021	317090004	317140057	317150060
317050040	317080006	317080022	317090005	317150002	317180008

1.2 PROJECT DESCRIPTION

For this report, the term Project site and off-site street improvement areas are defined as that area proposed for direct impact by the proposed Project, including on-site development, and off-site (road improvement) areas (refer to Appendix B, *Site Plan*). Additionally, the southwest corner of the park site, where the drainage features flow onsite, are expected to be permanently impacted. The proposed project does not propose any temporary impacts. Staging for the project will occur onsite.

The Project consists of the following components:

- A warehouse facility (±50 acres) located south of Cajalco Road, west of Seaton Avenue and east of Decker Road.
- A public park (±13.6 acres) located south of a Metropolitan Water District (MWD) fee-owned parcel at the future terminus of Decker Road.
- Off-site street improvements (±21.8 acres) to portions of Cajalco Road, Seaton Avenue, and Decker Road.

- Within the public park, an onsite stream area has been depicted (±1.3 acres). The stream area consists of approximately 0.27 acre of riparian/riverine resources, and 1.03 acre of upland buffer. Refer to Attachment B, *Site Plan*.
- Fuel modification zones associated with the proposed project include a 100-foot Fuel Modification Buffer and On-site Fuel Modification Equivalent for the northern portion of the ±site and a 100-foot Fuel Modification Buffer, On-site Fuel Modification Equivalent, and Off-site Fuel Modification Equivalent for the southern portion of the project site. Refer to Appendix E, *Fuel Modification Plan*.

Table 1: Summary of Project Components

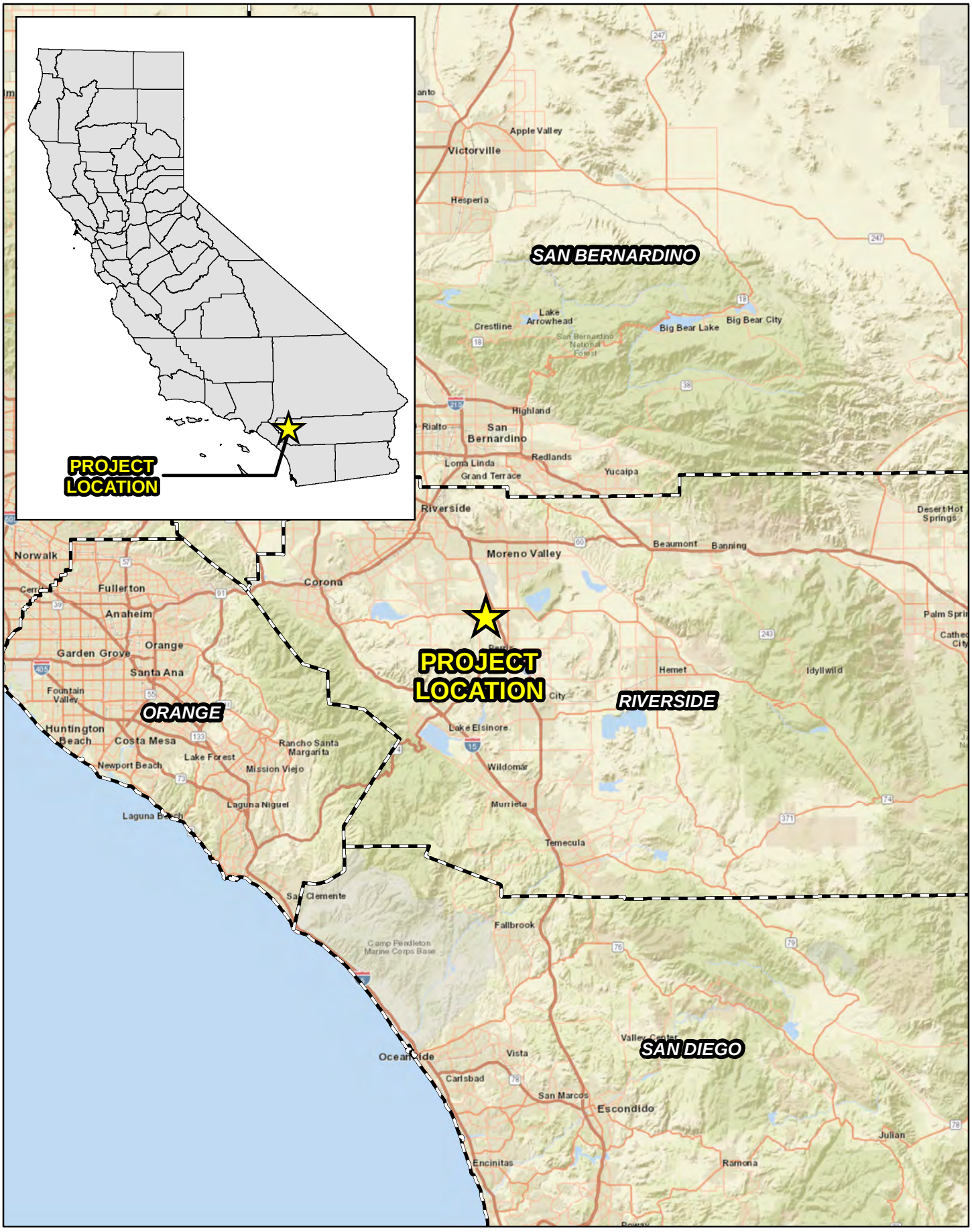
Project Component	Area (Acres)
Warehouse Facility	±50
Public Park	±13.6
Street Improvements	±21.8
Onsite Stream Area	±1.3
Total	**86.7**

Facilities fronting the proposed building will be maintained by Riverside County Transportation. Larger facilities (greater than 36") such as the Storm Drain within the project park boundary will require maintenance by Riverside County Flood Control. The proposed three-12'x12' RCB culvert and headwalls will require maintenance to maintain flow progression. This maintenance will be conducted by either Riverside County Flood Control or Riverside County Transportation via one or more access roads to the facilities.

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.



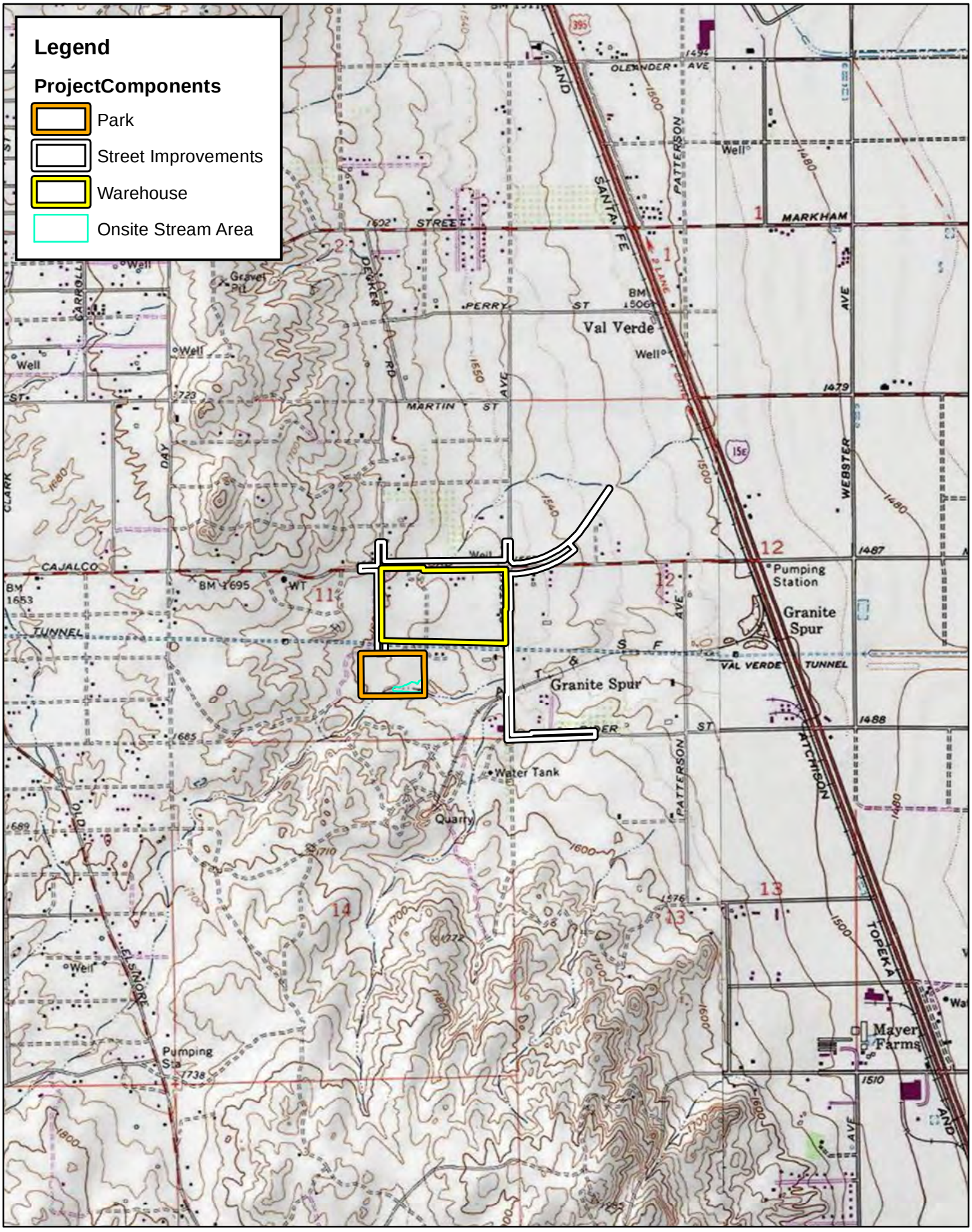
ELMT CONSULTING

Source: World Street Map, Riverside County

CAJALCO COMMERCE CENTER

Regional Vicinity

Exhibit 1



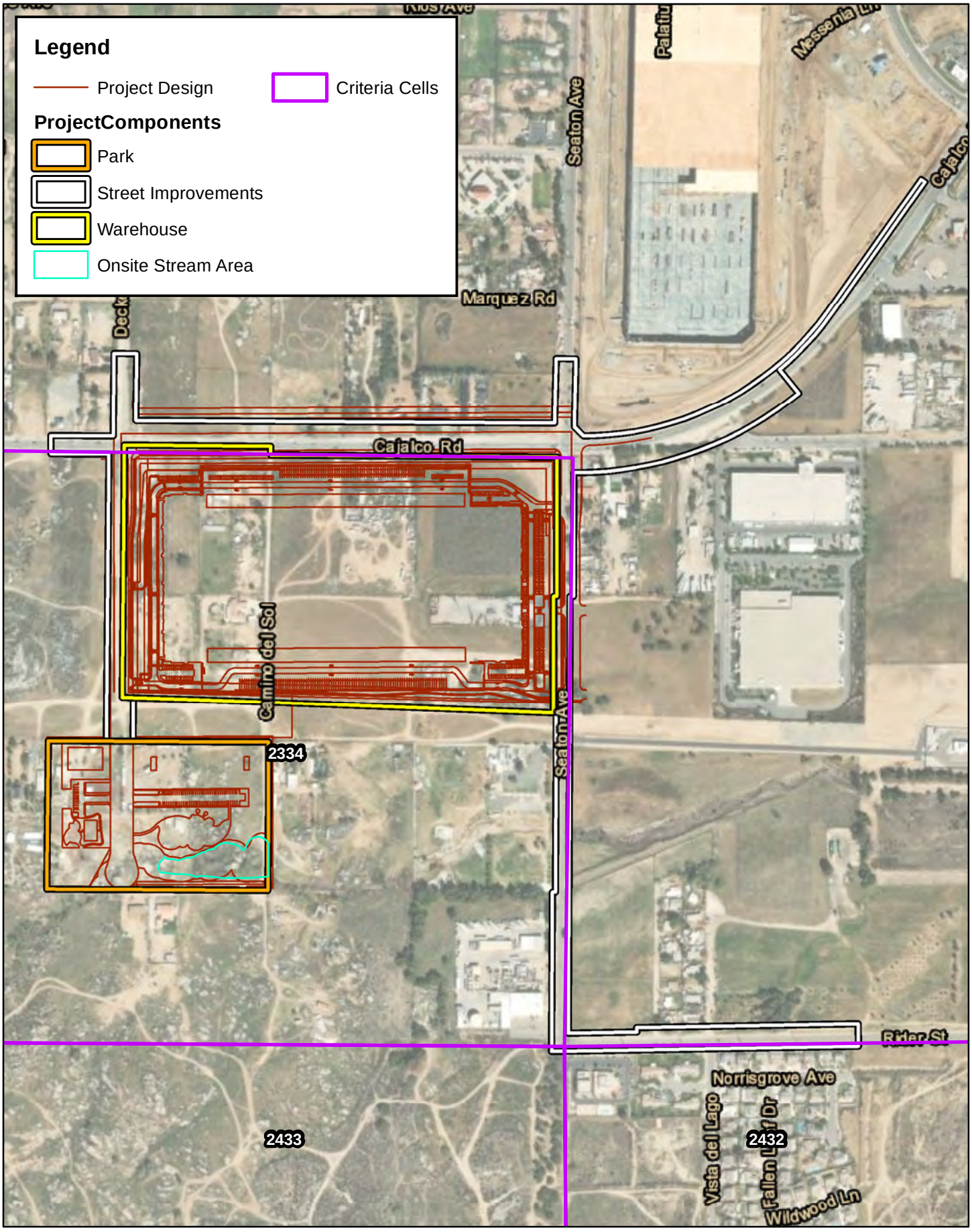
0 1,000 2,000 4,000 Feet

Source: USA Topographic Map, Riverside County

MEAD VALLEY COMMERCE CENTER

Site Vicinity

Exhibit 2



ELMT CONSULTING

0 125 250 500
Feet

Source: ESRI Aerial Imagery, Riverside County

CAJALCO COMMERCE CENTER

Project Site

Exhibit 3

Section 2 Methodology

A literature review and records search were conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site and off-site street improvement areas. In addition to the literature review, a biological 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 *Perris* 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
- GLA. 2023. *Biological Technical Report for the Mead Valley Commerce Center Project*.
- GLA. 2023. *Jurisdictional Delineation of the Mead Valley Commerce Center Site, and Approximately 84-acre Site Located in Unincorporated, Riverside County, California*.
- 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 and off-site street improvement areas. 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 and off-site street improvement areas.

[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 Megan E Peukert inventoried and evaluated the condition of the habitat within the project site on February 16, 2024, to confirm site conditions previously documented onsite. 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 burrowing owl and other 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 and off-site street improvement areas.

2.8 SUMMARY OF PREVIOUS BIOLOGICAL STUDIES

As part of the literature review, ELMT reviewed and summarized the findings and determinations presented in reports by GLA for surveys conducted in 2023. The survey types, dates, and contributing biologists are presented below in Table 1, Summary of Previous Biological Surveys.

Table 2: Summary of Previous Biological Surveys

Survey Type	Survey Dates	Biologist(s)
General Biological Survey	1/19, 3/8, 4/6 (2023)	CW, BL, SC, JG
Evaluation of MSHCP Riparian/Riverine Areas	3/8, 4/6 (2023)	CW, BL
Evaluation of MSHCP Vernal Pools and Fairy Shrimp Habitat	3/8, 4/6 (2023)	CW, BL
Delineation of Federal and State Jurisdictional Waters	5/19 (2023)	CW, BL
Focused Burrowing Owl Surveys	4/6, 6/20, 7/7, 7/14 (2023)	CW, BL, AB
Dry Season Fairy Shrimp Surveys (Soil Collection)	10/19 (2023)	CW, SC, BL, DM
Wet Season Fairy Shrimp Surveys	12/22, 12/29 (2023) 1/5, 1/12, 1/18, 1/26, 2/8, 2/15, 2/22, 2/28, 3/7, 3/15, 3/20, 3/28, 4/4, 4/12, 4/18 (2024)	Bl, CW, DS, SC, VP

CW = Chris Waterston, BL = Brinna Lee, AB = Amy Black, SC = Stephanie Cashin, JG = John Gardner, DM = David Moskovitz, VP = Velvet Park

2.8.1 Burrowing Owl

GLA biologists conducted focused surveys for burrowing owl within all suitable habitat supported within the project site and off-site street improvement areas in 2023. Surveys were conducted in accordance with survey guidelines described in the 2006 MSHCP Burrowing Owl Survey Instructions. The guidelines stipulate that four focused survey visits be conducted on separate dates between March 1 and August 31. Within areas of suitable habitat, the MSHCP first requires a focused burrow survey to map all potentially suitable burrows. The focused burrow survey was conducted on April 6, 2023. Focused burrowing owl surveys were conducted on April 6, June 20, July 7, and July 14, 2023. The results of the burrowing owl surveys are documented in Section 4.0 of this report.

The burrowing owl survey visits need to be conducted from one hour prior to sunrise to two hours after sunrise or two hours before sunset to one hour after sunset. Both the burrow and owl surveys were conducted during weather that was conducive to observing owls outside their burrows and detecting burrowing owl sign and not during rain, high winds (> 20 mph), dense fog, or temperatures over 90 °F. Additionally, all work was performed more than 5 days after a rain event. Refer to Table 2-2 below for survey condition details. Surveys were conducted by walking meandering transects throughout areas of suitable habitat. Exhibit 6, within the burrowing owl focused survey report (prepared under separate cover) identifies the burrowing owl survey areas at the Project site. Transects were spaced between 22 feet and 65 feet apart, adjusting for vegetation height and density, in order to provide adequate visual coverage of the survey areas. At the start of each transect, and at least every 320 feet along transects, the survey area was scanned for burrowing owls using binoculars. All suitable burrows were inspected for diagnostic owl sign (e.g., pellets, prey remains, whitewash, feathers, bones, and/or decoration) in order to identify potentially occupied burrows. Transect locations are provided on Exhibit 6, along with the 500-foot buffer area. As

depicted on Exhibit 6, areas identified as non-suitable habitat (i.e. lack of suitable burrows) during the focused burrow survey were noted and not assessed further during the focused surveys. Areas of non-suitable habitat contained previous development, dirt/paved roads, and other non-suitable areas not utilized by burrowing owl. In areas of suitable habitat outside of the Project site, biologists scanned with binoculars for a distance up to 500 feet, as feasible. Table 2-2 summarizes the burrowing owl survey visits. The results of the burrowing owl surveys are documented in Section 4.0 of this report.

2.8.2 Fairy Shrimp

During general site surveys in January and March 2023, GLA observed 22 road-rut features that exhibited ponding and might have potential to support listed fairy shrimp (refer to Exhibit 6). These features require protocol surveys (dry season and wet season) to determine the presence or absence of listed fairy shrimp.

Dry and Wet Season Surveys

Soil sample collection followed the USFWS Survey Guidelines for the Listed Large Branchiopods (Survey Guidelines[3]). GLA biologist David Moskovitz (PER0010680-0) supervised the collection of soil samples along with GLA biologists Stephanie Cashin and Chris Waterston on October 19, 2023. Soil samples were collected when the pools were dry using a hand trowel to collect intact chunks of soil from the top 1–3 cm of pool sediment. The number of soil samples collected from each of features was based on feature size according to the Survey Guidelines. Samples were mainly taken from the deepest part of each feature and then spread out evenly across the feature.

Soil samples of approximately 100 milliliters (ml) each were removed at each sub-sample location using a hand trowel and were combined into a labeled bag for each feature with the collection date, location and feature ID, and name of collector for future processing. Samples were stored in a dry location out of direct sunlight until delivery to a permitted soil processing consultant. The results of the soil processing are pending and will be detailed in Appendix F.

A USFWS protocol wet season (2024) vernal pool branchiopod (fairy shrimp) focused survey was conducted. No listed fairy shrimp were identified onsite, only common Lindahl's fairy shrimp (*Branchinecta lindahli*) have been documented onsite. [Wet season FS survey report will be subsequently provided].

[3] USFWS. *Survey Guidelines for the Listed Large Branchiopods*, Revised: November 13, 2017..

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 chilly to cold morning temperatures with frost common. Climatological data obtained for the City of Riverside indicates the annual precipitation averages 11.11 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 May and September. The wettest months are January and February, with monthly average totals precipitation of 2.24 and 3.29 inches, respectively, and the driest months are June and July, both with monthly average total precipitation of 0.04 inches. The average maximum and minimum temperatures are 86- and 46-degrees Fahrenheit (°F), respectively, with July and August (monthly average high 100°F) being the hottest months and December and January (monthly average lows 34 and 35°F) being the coldest. The temperature during the site visit was in the low-60s°F with partly cloudy skies and calm winds.

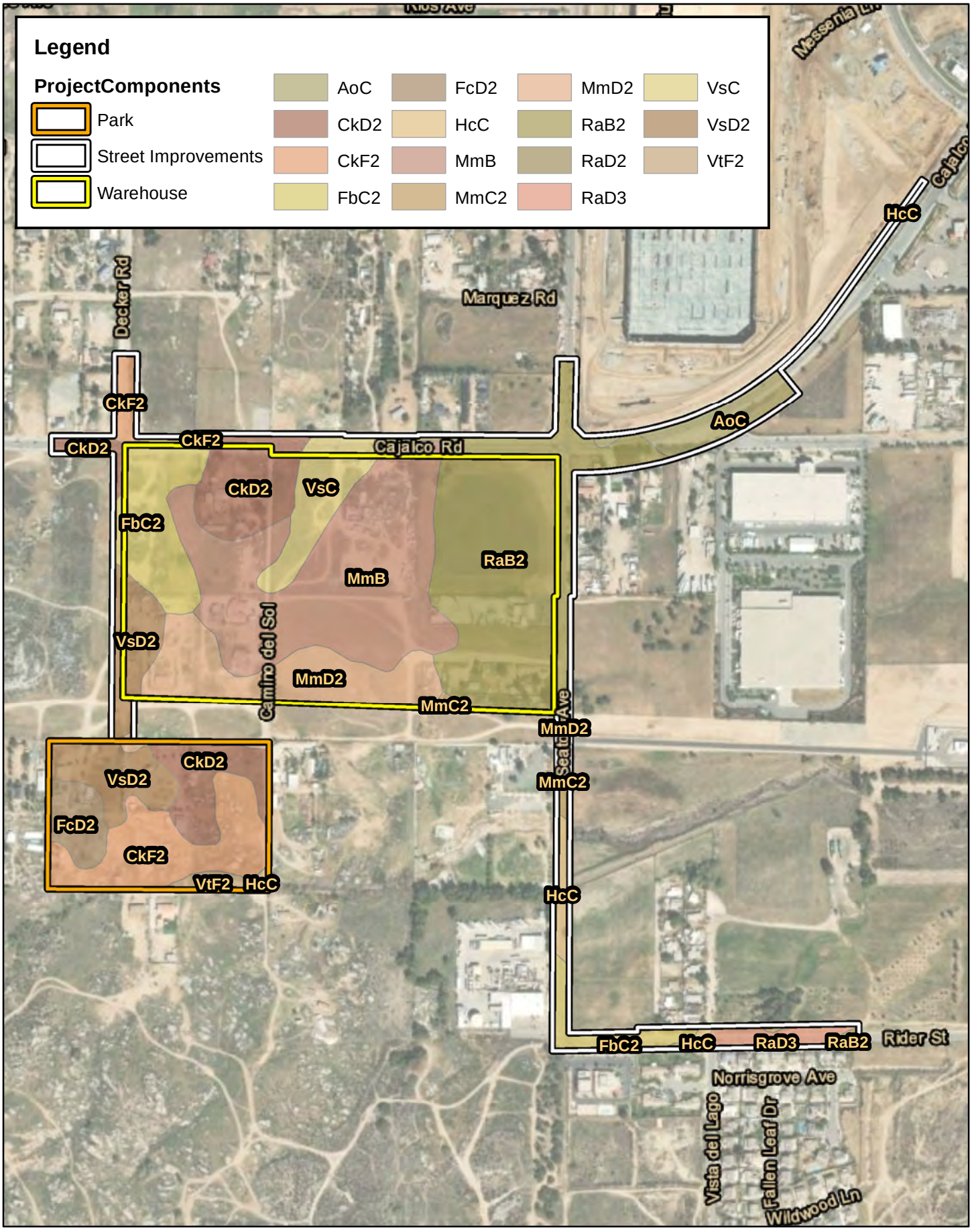
3.2 TOPOGRAPHY AND SOILS

On-site topography is uniformly flat with minor variations in topography, which slope in a general west to east direction at elevation of 1,600 to 1,550 feet above mean sea level. Based on the NRCS USDA Web Soil Survey, the project site and off-site street improvement areas are underlain by Hanford coarse sandy loam (2 to 8 percent slopes), Monserate sandy loam (0 to 5 percent slopes), Monserate sandy loam (8 to 15 percent slopes), Vista rocky coarse sandy loam (2 to 35 percent slopes), Vista coarse sandy loam (2 to 8 percent slopes), Vista coarse sandy loam (8 to 15 percent), Fallbrook sandy loam (5 to 8 percent slopes), Cieneba rocky sandy loam (8 to 15 percent slopes), Cieneba rocky sandy loam (15 to 50 percent slopes), and Ramona sandy loam (2 to 5 percent slopes). Refer to Exhibit 4, *Soils*. Soils on-site have been mostly 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 and off-site street improvement areas occur in a gradually urbanizing area that supports some commercial and residential development and undeveloped parcels. The site is bounded to the south by residential development and conserved open space associated with the Motte-Rimrock State Reserve. Historically, the area supported agricultural practices and residential land. At present, the Warehouse area of the project site is bounded to the north by Cajalco Road with residential and undeveloped, vacant land beyond; to the east by Seaton Avenue with commercial and undeveloped, vacant land beyond; to the south by undeveloped, vacant land with the southern parcels, residential land, and the Huong Sen Buddhist Temple beyond; and to the west by undeveloped, vacant land with residential and commercial land beyond. The Park portion of the project site is bounded to the north by undeveloped, vacant land with the northern parcels beyond; to the east by residential land and Huong Sen Buddhist Temple beyond; to the south by residential and undeveloped, vacant land with undeveloped, vacant land beyond; and to the west by

residential and commercial land with undeveloped, vacant land beyond. Off-site street improvement areas are bounded primarily by undeveloped, vacant land with scattered commercial, industrial, and residential developments throughout.



ELMT CONSULTING

0 250 500 1,000 Feet

Source: ESRI Aerial Imagery, Riverside County

CAJALCO COMMERCE CENTER

Soils

Exhibit 4

Section 4 Discussion

4.1 SITE CONDITIONS

The Warehouse area consists of previously disturbed/developed areas bisected by moderately maintained dirt roads, and several non-native grassland fields. The developed areas consist of a mechanical equipment yard, a tenant occupied recreational vehicle (RV) parking lot, and several residential homes. The northwestern portion of the Park area supports a residential home with farm animals and stock infrastructure. The remaining Park area supports mostly undeveloped, vacant land including rocky outcrops and disturbed sage scrub. The majority of the project site supports developed/disturbed land and has been subject to a variety of anthropogenic disturbances associated with current development, historic agricultural activities, routine weed abatement, and illegal dumping. Historic aerials show these activities have been ongoing since at least 1959. Prior to conducting the field investigation, aerial photography was reviewed to document existing site conditions and changes to the project site and surrounding area.

1959: The Warehouse area supports active agricultural fields and two residential homes. The Park area supports primarily non-agricultural undeveloped, vacant land. The site and off-site street improvement areas are surrounded by additional agricultural plots as well as undeveloped, vacant land to the south and west. Cajalco Road and Seaton Avenue are present but unpaved.

1967: Disturbance to the Park area has occurred as well as development in the northern portion of the project site and off-site street improvement areas.

1959-1978: Cajalco Road to the north and Seaton Avenue to the east were paved. Development to the north and east of the site has occurred.

1978-1994: Additional disturbance to the site and surrounding land occurred including multiple unpaved roads.

1994-2005: Increased development scattered on-site as well as in the north and east of the site. Grading occurred in the northwestern portion of the Park area.

2005-Present: No major changes have occurred on the site since 2005.

The disturbances outlined above have eliminated fully intact natural plant communities that historically occurred on the project site and surrounding area. As a result, only disturbed native plant communities occur on-site, and only disturbed native plant communities will be impacted from implementation of the proposed project. Refer to Appendix B, *Site Photographs*, for representative site photographs of the project site and off-site street improvement areas.

4.2 VEGETATION AND LAND USE TYPES

Due to historic land uses and ongoing disturbances, only disturbed native plant communities occur within the boundaries of the project site and off-site street improvement areas. The project site supports two (2) land cover types that would be classified as Disturbed/Developed and Ornamental, one (1) non-native plant community that would be classified as Non-native Grassland, and two (2) native plant communities that would be classified as Disturbed Southern Willow Scrub and Disturbed Riversidian Sage Scrub. Refer to Exhibit 5, *Vegetation*. The plant communities and land cover types are summarized in Table 4-1 and described in further detail below. For a complete list of plant species observed during the field investigation, refer to Appendix D, *Observed Flora and Fauna Compendium*.

Table 3: Vegetation/Land Use Types

Vegetation/Land Used Type	Inside Criteria Cells (Acres)	Outside Criteria Cells (Acres)	Total (Acres)
Disturbed/Developed	**40.00**	**12.09**	**52.09**
Non-native Grassland	**26.60**	**2.88**	**29.48**
Ornamental	**0.39**	**0.73**	**1.12**
Disturbed Southern Willow Scrub	**0.21**	**0.00**	**0.21**
Disturbed Riversidean Sage Scrub	**3.80**	**0.00**	**3.80**
Total	**71**	**15.7**	**86.7**

4.2.1 Disturbed/Developed

The majority of the project site and entirety of off-site street improvement areas support disturbed and developed land that previously supported agricultural land uses. These areas consist of residential single-family homes, paved driveways, equestrian and sock facilities, a heavy equipment business, and an RV storage lot. The project site and off-site street improvement areas are also interweaved with dirt roads, adjacent open lots, and debris piles (e.g., trash, concrete refuse, etc.). Most dirt roads and lots are routinely maintained but do include areas of non-native vegetation and several depressions/ road ruts that inundate with water during wet season. Non-native vegetation observed on-site include London rocket (*Sisymbrium irio*), red-stemmed filaree (*Erodium cicutarium*), cheeseweed (*Malva parviflora*), common fiddleneck (*Amsinckia intermedia*), ripgut grass (*Bromus diandrus*), and Russian thistle (*Salsola australis*). These plant species were also dominant in the adjacent open fields (nonnative grasslands). The developed portions of the project site also include ornamental plant species adjacent to paved boulevards and sidewalks near Cajalco Road, within the heavy equipment rental business, and along Rider Street in the southern off-site improvements.

4.2.2 Ornamental

The project site supports non-native ornamental landscaping in association with existing road fronts and commercial developments. Ornamental landscaping supported by the project site includes Peruvian pepper (*Schinus molle*) and Mexican fan palm (*Washingtonia robusta*) along paved boulevards and sidewalks near

Cajalco Road in the northern portion of the site, a row of Italian cypress (*Cupressus sempervirens)* within the heavy equipment rental business, and a group of European olive (*Olea europaea*) along Rider Street in the southern off-site road improvement areas

4.2.3 Non-native Grassland

The project site supports non-native grassland communities within the northern and central portions of the site between the disturbed and developed areas as well as along the dirt access roads. This plant community is dominated by non-native species including common fiddleneck, foxtail brome (*Bromus madritensis susp. rubens*), ripgut grass, Russian thistle, bare barley (*Hordeum murinum*), Mediterranean grass (*Schismus barbatus*), slender wild oat (*Avena barbata*), stink net (*Oncosiphon piluliferum*), summer mustard (*Hirschfeldia incana*), and red-stemmed filaree (*Erodium cicutarium*).

4.2.4 Disturbed Southern Willow Scrub

The project site supports a disturbed southern willow scrub plant community in the southern portion of the project site within a remnant portion of an unnamed ephemeral stream. This area is dominated by a mix of native and non-native vegetation and has been impacted and disturbed by surrounding development, encampments, and hydrology modifications. Native species observed in this plant community include black willow (*Salix gooddingii*), mule fat (*Baccharis salicifolia*), California sagebrush (*Artemesia californica*), deerweed (*Acmispon glaber*), miniature lupine (*Lupinus bicolor*), and California buckwheat (*Eriogonum fasciculatum*). Non-native trees were also dominate within this portion of the project site, which included tree tobacco (*Nicotiana glauca*), castor bean (*Ricinus communis*), and tamarisk (*Tamarix ramosissima*).

4.2.5 Disturbed Riversidean Sage Scrub

The project site supports a disturbed Riversidian sage scrub plant community within the southwest portion of the site. These areas were historically left un-maintained due to the rocky outcrops that occur sporadically throughout this community and have prevented historic agricultural and/or grazing activities. Native sage scrub species observed in between the rocky areas were California sagebrush, California buckwheat, deerweed, scarlet monkeyflower (*Erythranthe cardinalis*), coastal prickly pear (*Opuntia littoralis*), and annuals such as miniature lupine, Pomona milk vetch (*Astragalus pomensis*), ripgut grass, stink-net, and common fiddleneck.

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 and off-site street improvement areas. 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. For a complete list of wildlife species observed during the field investigation, refer to Appendix D.

4.3.1 Fish

No fish were observed during the field investigation. Due to the ephemeral nature of the drainages supported by the project site and the lack of suitable habitats upstream, no native fish species are expected to occur.

4.3.2 Amphibians

The project supports an unnamed ephemeral stream that provides limited habitat for a few amphibian species adapted to a high degree of human disturbances. The only amphibian species detected on site was western toad (*Anaxyrus boreas*). Other common amphibian species that could be expected to occur include American bullfrog (*Lithobates catesbeianus*), Baja California tree frog (*Pseudacris hypochondriaca hypochondriaca*), and garden slender salamander (*Batrachoseps major major*).

4.3.3 Reptiles

The project site provides limited habitat for a few reptile species adapted to a high degree of human disturbances. The only reptile species observed on-site were western fence lizard (*Sceloporus occidentalis*) and granite spiny lizard (*Sceloporus orcutti*). Other common reptilian species that could be expected to occur include western side-blotched lizard (*Uta stansburiana elegans*) and southern alligator lizard (*Elgaria multicarinata*).

4.3.4 Birds

The project site provides suitable foraging habitat and limited nesting habitat for bird species adapted to a high degree of human disturbance. Avian species detected during the field survey include Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), bushtit (*Psaltriparus minimus*), Eurasian collared-dove (*Streptopelia decaocto*), common raven (*Corvus corax*), song sparrow (*Melospiza melodia*), American crow (*Corvus brachyrynchos*), American kestrel (*Falco sparverius*), house finch (*Haemorhous mexicanus*), lesser goldfinch (*Spinus psaltria*), hooded oriole (Icterus cucullatus), western meadowlark (*Sturnella meglecta*), northern mockingbird (*Mimus polyglottus*), California towhee (*Melozone crissalis*), savannah sparrow (Zonotrichia leucophrys), house sparrow (Passer domesticus), Anna's hummingbird (*Calypte anna*), house wren (*Troglodytes aedon*), Say's phoebe (*Sayornis saya*), European starling (*Sturnus vulgaris*), Cassin's kingbird (*Tyrannus vociferans*), mourning dove (*Zenaida macroura*), and white-crowned sparrow (*Zonotrichia leucophrys*).

4.3.5 Mammals

The project provides suitable foraging and denning habitat for mammalian species adapted to degraded conditions and routine anthropogenic disturbance. Mammalian species observed/detected during the field investigation included California ground squirrel (*Otospermophilus beecheyi*), desert cottontail (*Sylvilagus audubonii*), and California mouse (*Peromyscus californicus*). In addition, free-roaming domestic dog (*Canis familiaris*) and cat (*Felis catus*) were observed in association with the existing development. Other common mammalian species expected to occur include opossum (*Didelphis virginiana*) and raccoon (*Procyon lotor*). No bat species are expected to occur due to a lack of suitable roosting habitat (i.e., suitable

trees, crevices, abandoned structures) within and surrounding the project site and off-site street improvement areas.

4.4 NESTING BIRDS

No active nests or nesting behaviors were directly observed on-site during the field survey, which was conducted during the breeding season. The project site has the potential to provide nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area that are adapted to a high degree of disturbance. Additionally, the undeveloped vacant areas have the potential to support birds that nest on the open ground such as killdeer.

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 and off-site street improvement areas have not been identified as occurring in a wildlife corridor or linkage. As mapped by the MSHCP, the nearest defined linkage occurs approximately 270 feet to the south within Noncontiguous Habitat Block 4, which is comprised of the Motte-Rimrock Reserve. As a Noncontiguous Habitat Block, the Motte-Rimrock Reserve is not connected to other Habitat Blocks or Core habitat areas by any existing or proposed Linkages or Constrained Linkages. Since the project site and off-site street improvement areas primarily support developed/disturbed land and non-native habitats, the site and off-site street improvement areas do not contribute meaningfully to wildlife movement opportunities within Noncontiguous Habitat Block 4.

4.6 STATE AND FEDERAL JURISDICTIONAL AREAS

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

CDFW regulates alterations to streambed and associated plant communities pursuant to Section 1602 of the California Fish and Game Code.

The project site supports two jurisdictional drainage features (Drainage A and Tributary A-1) in the Park area located in the southwestern portion of the site. Drainage A generally flows eastward in the southern limits of the Park area and Tributary A-1 generally flows southwest from an unnamed access road to its confluence with Drainage A. After flowing off-site, Drainage A flows east, eventually terminating at a Metropolitan Water District facility approximately 0.25 miles to the east.

The on-site ephemeral drainage features are not relatively permanent, standing, or continuously flowing bodies 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, both features will qualify as waters of the State and fall under the regulatory authority of the Regional Board and CDFW.

Regional Board jurisdiction within the project site totals approximately 0.06 acre (985 linear feet), none of which consists of State wetlands. A Regional Board Report of Waste Discharge will be required prior to project implementation.

CDFW jurisdiction within the project site totals approximately 0.27 acres, of which approximately 0.21 acre consists of riparian habitat, and 0.06 supports streambed. Impacts to the on-site jurisdictional areas will require a CDFW Section 1602 Lake and Streambed Alteration Agreement prior to Project implementation.

4.7 SPECIAL-STATUS BIOLOGICAL RESOURCES

A records search was conducted for reported locations of special-status plant and wildlife species as well as natural communities of special concern in the *Steele Peak* and *Perris* USGS 7.5-minute quadrangles. Two quadrangles were used due to the proximity of the site to quadrangle boundaries and regional topography. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability, and quality of suitable habitat, and known distributions. Twenty-four (24) special status plant species, seventy-eight (78) special-status wildlife species, and three (3) special-status plant communities have been recorded in the *Steele Peak* and *Perris* USGS 7.5-minute quadrangles. 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, twenty-four (24) special-status plant species have been recorded in the *Steele Peak* and *Perris* quadrangles (refer to Appendix C). No special-status plant species were observed on the project site during the field investigation. The project site and off-site street improvement areas have been subject to decades of anthropogenic disturbances which have removed quality 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 paniculate tarplant (*Deinandra paniculata*). It was further determined that the site and off-site street

improvement areas do not have potential to support the remainder of special-status plant species known to occur in the vicinity of the site and are all presumed to be absent.

Paniculate tarplant is not federally or state listed as endangered or threatened, nor is it a covered species under the MSHCP. It is designated by the CNPS are a Rare Plant Rank 4.2 species. Paniculate tarplant is adapted to degraded conditions and routine disturbance and occurs commonly in former agricultural land in western Riverside County and was determined to have a low potential to be supported within the project site. Due to limited suitable habitat available for this species and isolation of the site from known occupied areas, no meaningful impacts to this species are expected to occur from project implementation, if present.

4.7.2 Special-Status Wildlife

According to the CNDDB, seventy-eight (78) special-status wildlife species have been reported in the *Steele Peak* and *Perris* quadrangles (refer to Appendix C). One (1) special-status wildlife species was observed during the field investigation, Cooper's hawk. 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 Western spadefoot (*Spea hammondii*), California glossy snake (*Arizona elegans occidentalis*), coast horned lizard (*Phrynosoma blainvillii*), coast patch-nosed snake (*Salvadora hexalepsis*), San Diegan whiptail (*Aspidoscelis tigris stejnegeri*), red-diamond rattlesnake (*Crotalus ruber*), California horned lark (*Eremophila alpestris actia*), Lawrence's goldfinch (*Spinus lawrencei*), Loggerhead shrike (*Lanius ludovicianus*), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), and White-tailed kite (*Elamus lecurus*). It was determined that the project site has a low potential to support California gnatcatcher (*Polioptila californica*), Stephen's kangaroo rat (*Dipodomys stephensi*), western mastiff bat (*Eumops perotis californicus*), and western yellow bat (*Lasirus xanthius*). It was further determined that the project site does not have the potential to support any of the other special-status wildlife species known to occur in the vicinity of the site and all are presumed to be absent.

Stephen's kangaroo rat is federally, and state listed as threatened. None of the remaining aforementioned species are federally or state listed as threatened or endangered. In addition, western spadefoot, coast horned lizard, San Diegan whiptail, red-diamond rattlesnake, California horned lark, Lawrence's goldfinch, loggerhead shrike, northern harrier, Southern California rufous-crowned sparrow, white-tailed kite, and Stephen's kangaroo rat are covered species under the MSHCP. Of the aforementioned avian species, only California horned lark and Cooper's hawk might be expected to nest on-site; the remaining avian species are not expected to nest on-site due to the lack of suitable nesting habitat or opportunities.

Due to regional significance and pending listing status, the potential occurrence of Crotch bumblebee (*Bombus crotchii*) is discussed in further detail below.

Crotch Bumblebee

The Crotch bumblebee is a candidate species for listing status by the 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.

The limited plant species diversity supported within the non-native grassland and disturbed Riversidean sage scrub plant communities provide at best minimal foraging habitat for Crotch bumblebee. Further, the density of available vegetation and thoroughly mixed and compacted soils do not provide suitable burrowing conditions for this species. Therefore, the project site and off-site street improvement areas were determined not to have potential to support Crotch bumblebee.

4.7.3 Special-Status Plant Communities

The CNDDB lists three (3) special-status habitats as being identified within the *Steele Peak* and *Perris* quadrangles: Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, and Southern Sycamore Alder Riparian Woodland. None of these special-status plant communities occur within the boundaries of the project site and off-site street improvement areas.

4.8 CRITICAL HABITAT

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

The project site and off-site street improvement areas are not located with federally designated Critical Habitat. The nearest designated Critical Habitats are located approximately 5 miles southeast for spreading navarretia (*Navarretia fossallis*) and thread-leaved brodiaea (*Brodiaea filifolia*) (Exhibit 7, *Critical Habitat*). No impacts to federally designated Critical Habitat will occur from project implementation.

4.9 FOCUSED SURVEY RESULTS

GLA conducted focused surveys for burrowing owl and fairy shrimp within all suitable habitats in 2023. Survey dates, conditions, and results are presented below.

4.9.1 Burrowing Owl

No burrowing owls or sign (e.g., whitewash, pellets, burrow decoration) were observed during the April 6, June 20, July 7, and July 14, 2023, surveys. Therefore, burrowing owls are considered absent from the Project site. Section 5.4 of this report provides more detail on the results of the focused burrowing owl surveys.

4.9.2 Fairy Shrimp

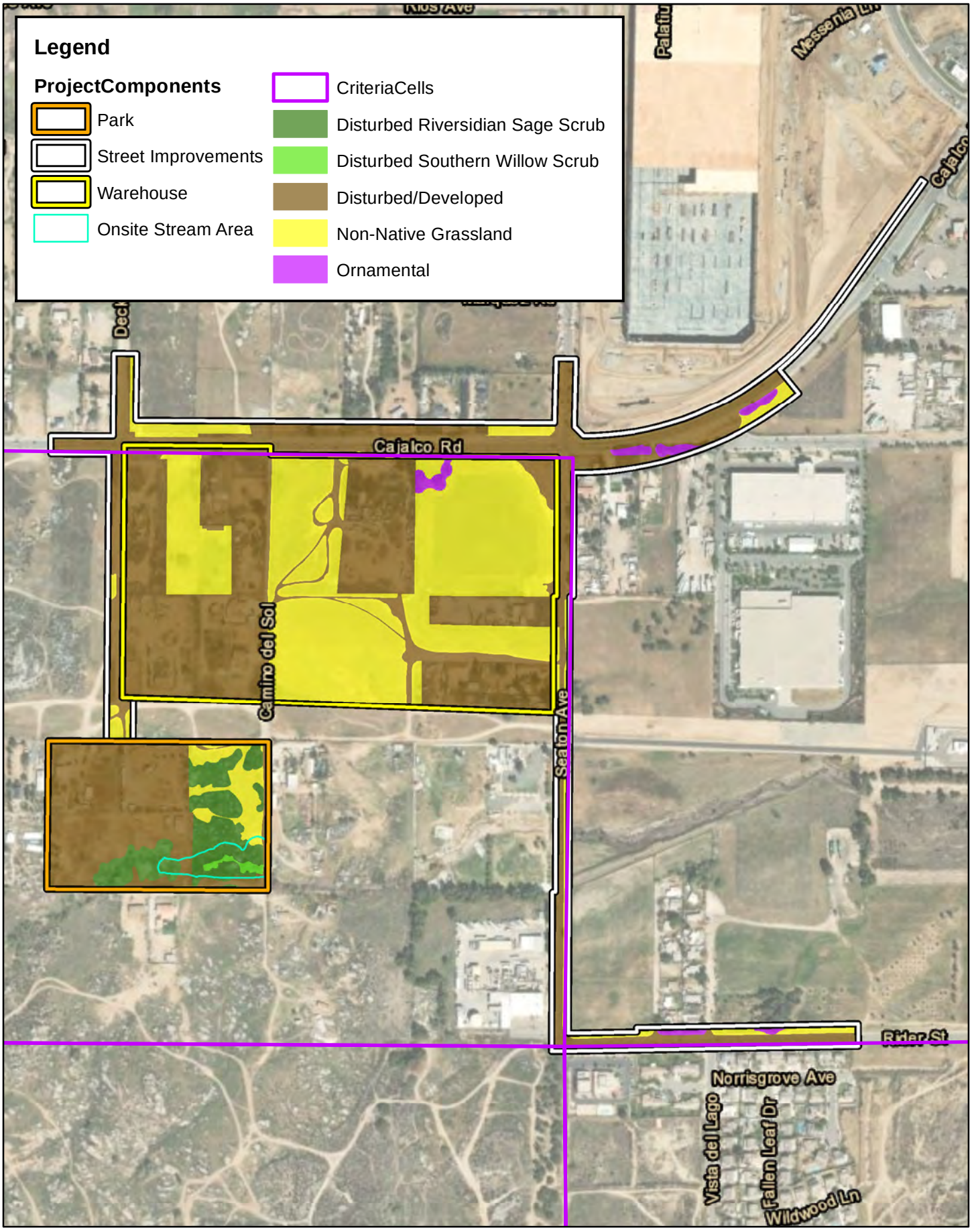
During general site surveys in January and March 2023, GLA observed 22 road-rut features that exhibited ponding and might have potential to support listed fairy shrimp (refer to Exhibit 6). These features require protocol surveys (dry season and wet season) to determine the presence or absence of listed fairy shrimp.

Dry Season Surveys

No vernal pool branchiopods of any kind were recovered from the soil samples. The samples contained large amounts of grass seeds and only eight pools had any aquatic invertebrate artifacts at all, and these were limited to turbellarian (flat worm) cocoons.

Wet Season Surveys

No listed fairy shrimp have not been identified onsite, only common Lindahl's fairy shrimp (*Branchinecta lindahli*) have been documented onsite.



ELMT CONSULTING

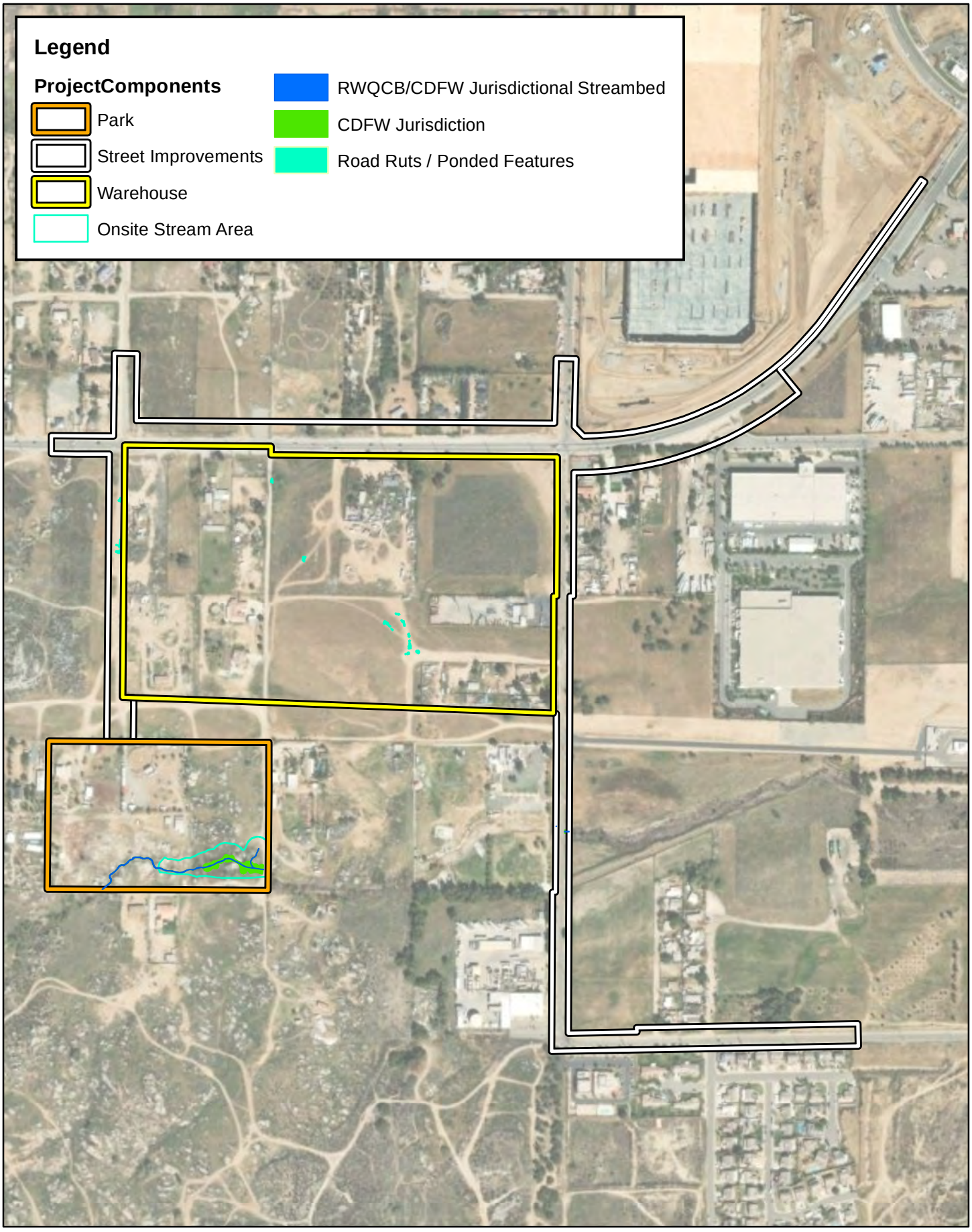
0 125 250 500
Feet

Source: ESRI Aerial Imagery, Riverside County

MEAD VALLEY COMMERCE CENTER

Vegetation

Exhibit 5



ELMT CONSULTING

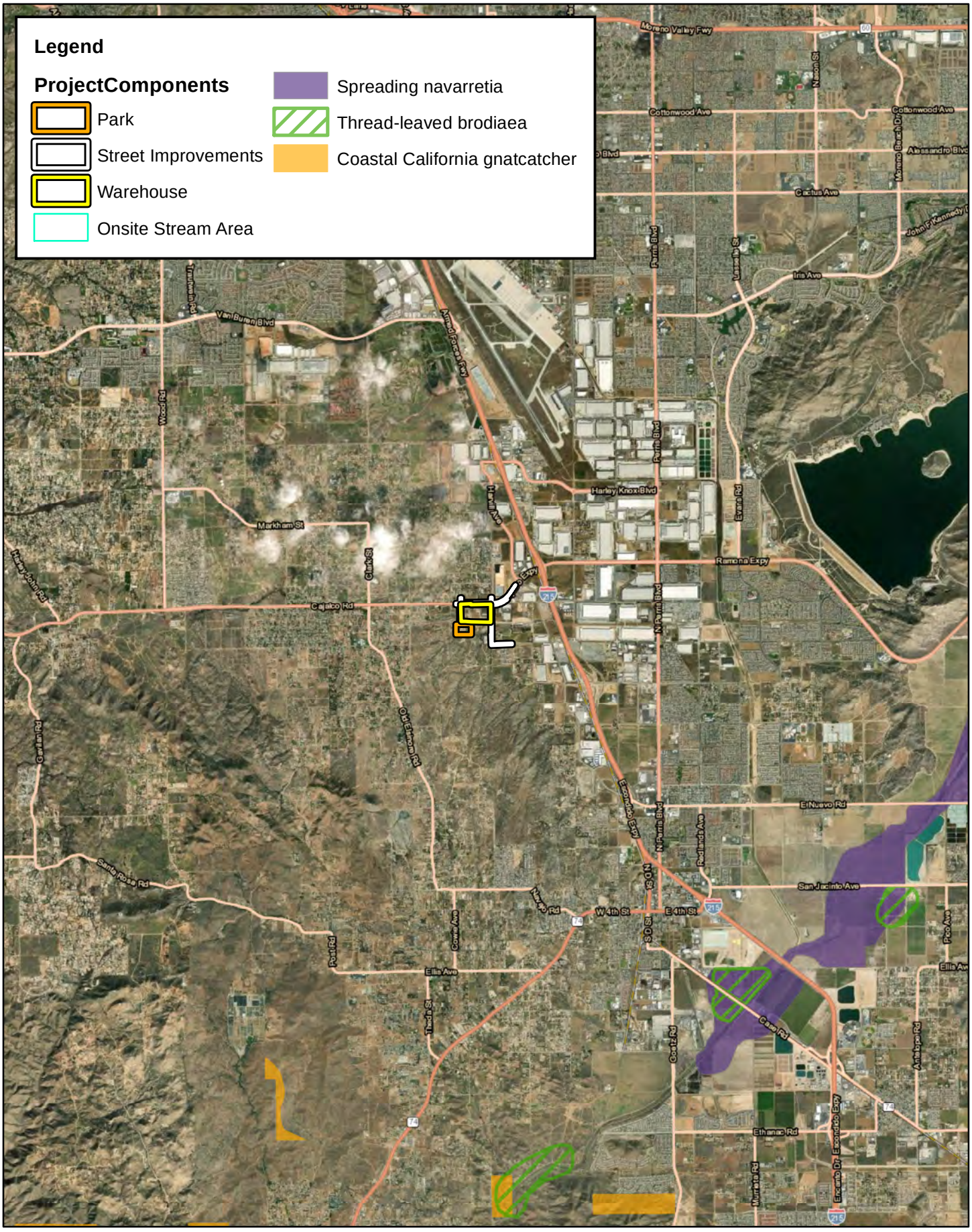
0 250 500 1,000 Feet

Source: ESRI Aerial Imagery, Riverside County

CAJALCO COMMERCE CENTER

Jurisdictional Areas

Exhibit 5



ELMT CONSULTING

0 1 2 4 Miles

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

CAJALCO COMMERCE CENTER

Critical Habitat

Exhibit 7

Section 5 MSHCP Consistency Analysis

The project site and off-site street improvement areas are located in the Sun City/Menifee Valley Area Plan of the MSHCP located within Criteria Cell 2334 (Exhibit 8, *MSHCP Conservation Areas*). Additionally, the project site and off-site street improvement areas are located within the MSHCP designated survey area for burrowing owl.

The County of Riverside is a permittee under the MSHCP and, while the project is not specifically identified as a Covered Activity in the MSHCP, under Section 7.3.1, *Public and Private Development Consistent with MSHCP Criteria*, public and private development within the Criteria Areas that is determined to be consistent with the Criteria is considered to be a Covered Activity. 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.

Within the public park, an onsite stream area has been depicted (±1.3 acres). The stream area consists of approximately 0.27 acre of riparian/riverine resources, and 1.03 acre of upland buffer. Refer to Exhibit 9, *Riparian/Riverine Habitat.*

The 0.27 acre of mapped MSHCP Riparian/Riverine habitat, consists of 0.21 acre of disturbed southern willow scrub riparian, and 0.06 acre of riverine habitat. Project activities are expected to permanently impact approximately 0.27 acre of mapped riparian/riverine habitat, within the 1.3 acre onsite stream area. While stands of black willow and mulefat are present, the majority of the canopy layer of this plant community is comprised of tree tobacco, castor bean, and tamarisk, which diminishes the suitability of the site for special-status wildlife species dependent upon riparian plant communities.

The composition of the disturbed southern willow scrub supported on-site has been degraded by these dominant species such that contiguous willow canopies are no longer present. In addition, these plant species have reduced the availability of suitable habitats for native riparian understory species, and the understory of the disturbed southern willow scrub supported by the project site consists almost of native upland species and non-native herbaceous species with no native wetland obligate species present. Due to incomplete canopy, limited acreage, and lack of riparian plant species diversity of the disturbed southern willow scrub supported on-site, the habitat associated with the on-site drainages features does not provide suitable habitat for any of the riparian obligate species listed under the MSHCP that may occur within the regional vicinity, including the State- and federally-listed as endangered least Bell's Vireo (*Vireo bellii pusillus* [LBVI]), southwestern willow flycatcher (*Empidonax traillii extimus*), or yellow-billed cuckoo (*Coccyzus americanus*).

The highly degraded and inconsistent canopy of the disturbed southern willow scrub precludes nesting by LBVI, southwestern willow flycatcher, and yellow-billed cuckoo, as these species require dense, sprawling canopies to obscure nests from predators. Further, LBVI and southwestern willow flycatcher each require minimum nesting territories of 0.5 acres, which exceeds the available riparian habitats supported on-site. In addition, the lack of native plant diversity reduces the availability of insect prey for these species. As a result, no focused surveys were conducted or recommended, and no impacts to this species will occur from project implementation.

In accordance with Section 6.1.2 of the MSHCP, a DBESP was prepared for the proposed project. The applicant proposes to mitigate via off-site through the purchase of re-establishment and/or enhancement mitigation credits through the Riverpark Mitigation Bank and/or other approved bank (i.e., Skunk Hollow), or combination thereof at an agreed upon ratio of 3:1. Preservation credits would be purchased out of the Skunk Hollow Mitigation bank if no other mitigation credits are available at a 4:1 ratio. The applicant will be responsible for the purchase of mitigation credits to compensate for impacts to riparian/riverine habitat. The above actions would result in a net increase in the function and ecological value of riparian/riverine habitat (biologically equivalent or superior) within the region by preserving/enhancing high quality habitat in Riverside County.

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 and off-site street improvement areas. Exeter sandy loam (0 to 2 percent slopes), and Madera fine sandy loam (0 to 2 percent slopes) are mapped as historically underlying the project site and off-site street improvement areas. 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.

The project site contains several road rut features that pond seasonally. Although these features exhibit hydrology, the features are compacted and lack hydric soils, and the features do not support any vegetation. 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. However, these depressions features/ponded areas have the potential to provide suitable fairy shrimp habitat within the proposed project site and off-site street improvement areas.

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 soils that are known to support Riverside fairy shrimp occur on the project site and off-site street improvement areas. While ponding was observed during the field investigation, this was due to recent storm

events and heavy soil compaction caused by recent disturbances. 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 and off-site street improvement areas are not located within the known area where Santa Rosa Plateau fairy shrimp have been documented, and no indicators of historic 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.

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 and off-site street improvement areas are not located within or adjacent to the four known populations, and no indicators of historic 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.

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 and off-site street improvement areas are 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 (MSHCP, p 6-42). Portions of the proposed project site and off-site street improvement areas are located within Criteria Cell 2334 which contributes to the Noncontiguous Habitat Block 4, which is comprised of the Motte-Rimrock Reserve. As a result, the Urban/Wildlands Interface Guidelines, as described below, will be incorporated into the project to ensure that project-related impacts including drainage, toxics, lighting, noise, invasive plant species, barriers, and grading/land development, are avoided or minimized to the fullest extent possible.

Drainage

The project's stormwater will be directed to a stormwater basin onsite, away from the MSCHP Conservation Area. The basin will be designed in accordance with all federal, state, regional, and local standards and regulations concerning water quality. These measures will assure that the project stormwater discharges are no greater in volume and velocity than current conditions and that the water leaving the site complies with all applicable water quality standards.

Toxics

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

Lighting

The proposed project is not anticipated to significantly increase lighting and glare. However, light sources will be designed with internal baffles to direct the lighting towards the ground and the developed areas and have a zero-side angle cut off to the horizon.

Noise

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

Invasive Plant Species

Plant species acceptable for the Project's landscaping must not be considered an invasive species pursuant to Table 6-2 of the MSHCP. To ensure this, the final landscape plans will be reviewed and verified by the City for consistency with the plant species list in Table 6-2 of the MSHCP. Allowable use of invasive species on a project site is based on the proximity of the plantings to the Conservation Area, the sensitivity of resources in the Conservation Area to invasion, and barriers to plant and seed dispersal. If the site is sufficiently contained such that invasive plantings would not be able to spread outside of the developed Project footprint, invasive plantings may be allowed on the site. However, the County will make the final decision on the suitability of this species for the Project's landscape plan.

Barriers

Barriers would restrict direct access to the MSHCP Conservation Area from the project site by unauthorized public access or domestic animals. Under the MSHCP, suitable barriers include native landscaping, rocks/boulders, fencing, walls, signage, and/or other appropriate mechanisms. The barriers would and should be placed within the boundaries of the development and will be outside of the confines of the open space/MSHCP Conservation Area.

Grading/Land Development

Manufactured slopes associated with proposed site development will not extend into the MSHCP Conservation Area. No manufactured slopes are anticipated to be constructed within the MSHCP Conservation Area. Should manufactured slopes be necessary, they will be kept within the boundaries of the development footprint and not encroach into the MSHCP Conservation Area.

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

Under the MSHCP burrowing owl is considered an adequately conserved covered species that may still require focused surveys in certain areas as designated in Figure 6-4 of the MSHCP. The project site 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. The habitat assessment was conducted on January 19, March 8, and April 6, 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 and off-site street improvement areas. Accordingly, if suitable habitat is documented on-site or within adjacent habitats, both Step II, focused surveys and the 30-day preconstruction surveys are required in order to comply with the MSHCP guidelines.

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

    - Part A – Focused Burrow Survey: A systematic survey for burrows, including burrowing owl sign, was conducted concurrently with the January 19, March 8, and April 6, 2023, habitat assessments by walking across all suitable habitats within the project site and off-site street improvement areas. 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 Burrow Survey: 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 Chris Waterston, Brinna Lee, and Amy Black who are knowledgeable in the habitats and behavior of burrowing owls.

Four focused burrowing owl surveys were conducted by GLA on April 6, June 20, July 7, and July 14, 2023. All surveys were completed between 0600 and 1030. The surveys were conducted to document the presence/absence of burrowing owl on the project site and off-site street improvement areas. Refer to Table 3, *Survey Data*, for a summary of the survey dates and times, personnel, weather conditions, and general findings.

Table 4: Survey Data

Survey No.	Survey Date	Surveyor	Time	Temperature (˚F)	Cloud Cover	Wind Speed (mph)	Burrowing Owl Detected On-Site
1	04/06/2023	CW, BL	0600-0815	49-65	0%	0-10	No
2	06/20/2023	AB	0600-0815	53-59	0%	0-1	No
3	07/07/2023	AB, BL	0600-0810	54-56	0%	0-1	No
4	07/14/2023	AB	0600-0830	70-75	0%	0-1	No

GLA Biologists: CW = Chris Waterston, BL = Brinna Lee, AB = Amy Black

Based on the results of the 2023 burrowing owl focused surveys, no burrowing owls or evidence of recent or historic use by burrowing owls were observed on the project site and off-site street improvement areas. As a result, burrowing owls are presumed to be absent from the project site and off-site street improvement areas.

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.

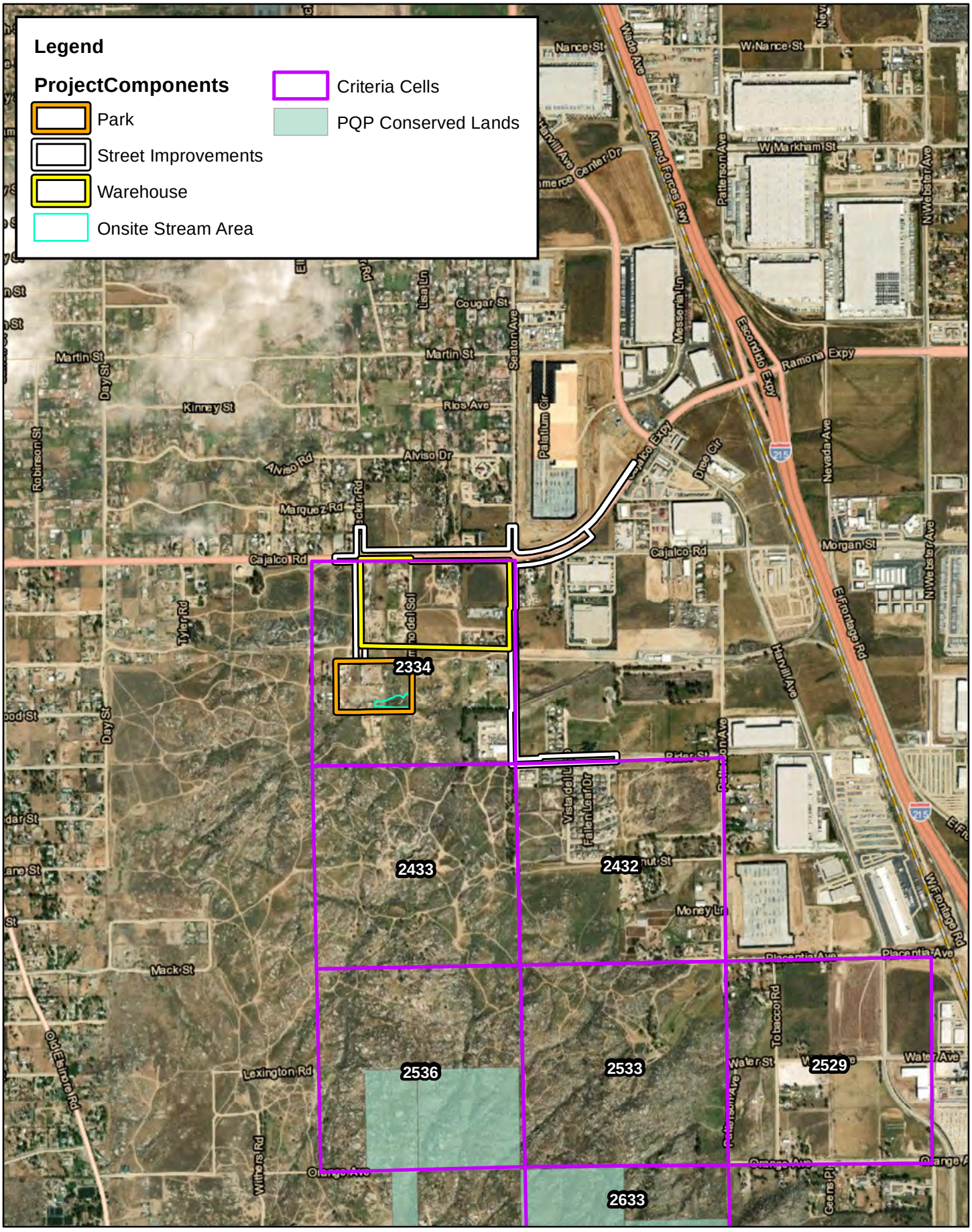
5.5 FUELS MANAGEMENT

In accordance with Section 6.4 of the MSHCP, *Fuels Management*, fuels management focuses on hazard reduction for humans and their property. Fuels management for human hazard reduction involves reducing fuel loads in areas where fire may threaten human safety or property, suppressing fires once they have

started, and providing access for fire suppression equipment and personnel. Per the MSHCP, new Development (i.e., what this project is proposing), that is planned adjacent to a MSHCP Conservation Area or other undeveloped areas, brush management shall be incorporated in the project footprint boundaries and shall not encroach into the MSHCP Conservation Area.

According to the Fire Protection Plan prepared for the project by DUDEK in 2024, a typical fuel modification installation requires a 100-foot-wide fuel modification zone (FMZ) consisting of a 5- foot-wide ignition resistant Zone 0, a 25-foot-wide irrigated Zone 1 and a 70-foot wide thinning Zone 2 measured from the exterior of the building extending outwards towards undeveloped areas. Based on modeling and analysis of the project area to assess its unique fire risk and fire behavior, it was determined that the Riverside County and CAL FIRE standard of a minimum 100-foot-wide FMZs would help considerably to set the project's structures back from off-site fuels, however, this project proposes to convert all of the land within the project boundary to an FMZ equivalent condition consisting of irrigated and maintained landscape, as well as noncombustible pavement and hardscape areas. This area will amount up to approximately 220 feet of on-site fuel modification from the exterior of the proposed warehouse building to the property line and a minimum of 100 feet of on- and off-site equivalent FMZ around the proposed public park recreational structure. The up to 220-foot-wide FMZ, when properly maintained, along with other fire hazard reducing features, will effectively minimize the potential for structure ignition from direct flame impingement or radiant heat within the project area. Assembly Bill 3074, passed into law in 2020, requires a third zone for defensible space. This law requires the Board of Forestry and Fire Protection to develop the regulation for a new ember-resistant zone (Zone 0) within 0 to 5 feet of the home by January 1, 2023, however, changes to the Zone 0 requirements are still being made and final approval and adoption of Zone 0 are likely to occur in 2024. The intensity of wildfire fuel management for a traditional FMZ varies within the 100-foot perimeter of a structure, with more intense fuels' reduction occurring closer to a structure. A Fuel Modification Plan shall be reviewed and approved by a RCFD Fire Safety Specialist for consistency with defensible space and fire safety guidelines. The Project's Conceptual Fuel Modification Plan conceptually displays a non-combustible/fully-irrigated FMZ area for the Project site. Refer to Appendix E, *Fuel Modification Plan*.

The fuel modification planned as part of the Project will be code-exceeding in its widths and characteristics. Both portions of the Project, commercial and park, from the exterior of the buildings to the property lines will be either irrigated landscaping or non-combustible paved surfaces in the form of roads, walkways, parking areas, and loading and unloading areas. These paved surfaces will vary in their distance from the structures but meet the requirements for Zone 0 and exceed the requirements for Zones 1 and 2 given their non-combustible nature. These standards are pursuant to the codes referenced above and spacing requirements are also well described in the General Guidelines for Creating Defensible Space published by CAL FIRE in 2006. Therefore, the project is consistent with Section 6.4 of the MSHCP.



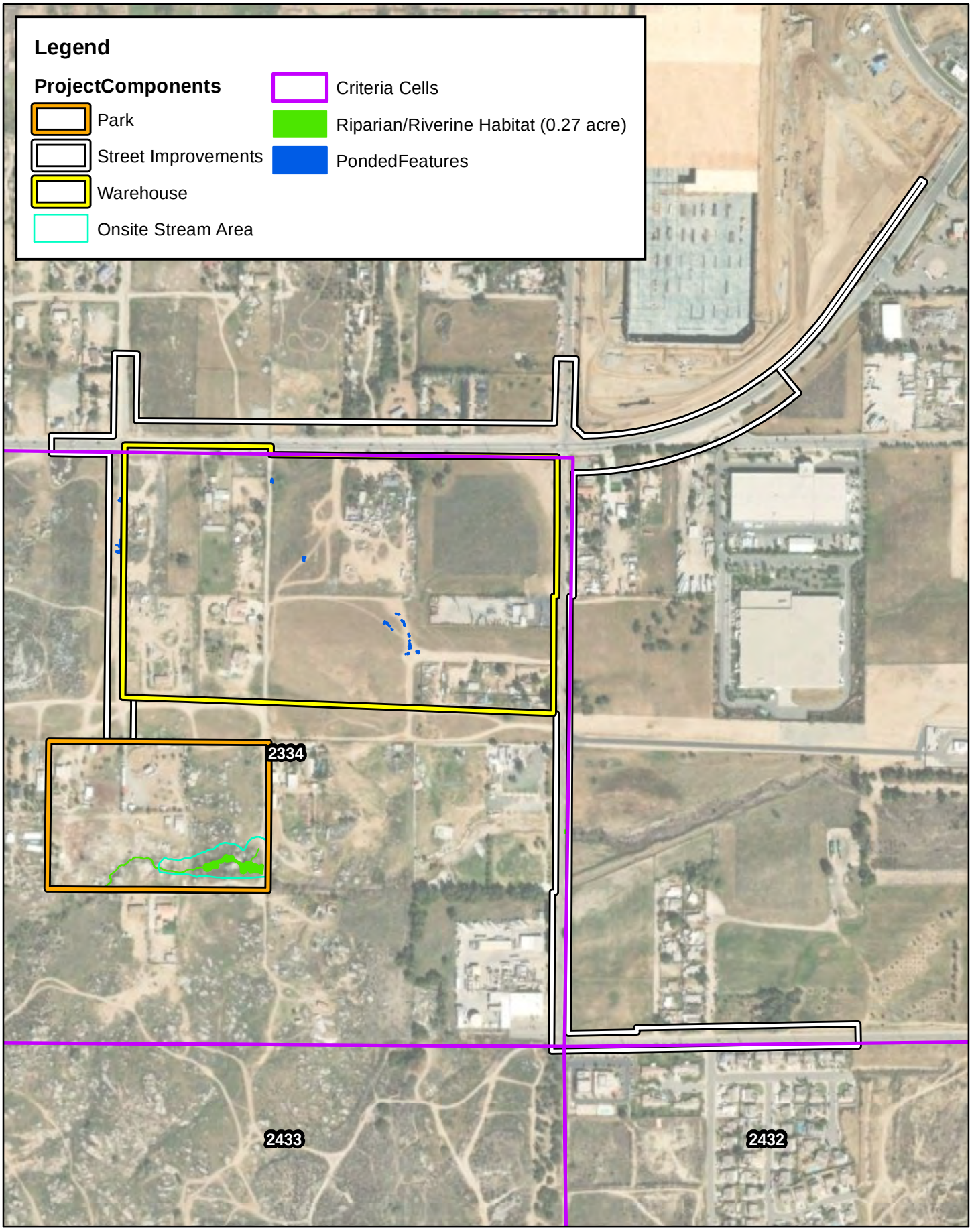
ELMT CONSULTING

Source: ESRI Aerial Imagery, Riverside County

CAJALCO COMMERCE CENTER

MSHCP Criteria Area

Exhibit 7



ELMT CONSULTING

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Source: ESRI Aerial Imagery, Riverside County

CAJALCO COMMERCE CENTER

Riparian/Riverine Habitat

Exhibit 4

Section 6 Habitat Acquisition and Negotiation Strategy

6.1 THE HANS PROCESS

Proposed development within a Criteria Cell is subject to review under the HANS process under Section 6.1.1 of the MSHCP. Project applicants whose site's fall within Criteria Areas are required to file a habitat assessment of their project site to determine if all or part of the property is necessary for inclusion in any MSHCP Conservation Areas.

If it is determined by the Western Riverside County RCA and/or the Joint Project Review, the County, Cities, or various State and Federal Agencies that all or part of the property is needed for inclusion in the MSHCP Conservation Area, the property owner will enter into negotiations with such agencies to determine the extent of development allowed within the project site that will not significantly impact the function of the conservation areas in question.

6.2 THE RELATIONSHIP OF THE PROPOSED PROJECT TO THE MSHCP CONSERVATION CRITERIA

Exhibit 8, *MSHCP Conservation Areas*, shows the location of the project site within Criteria Cell 2334 that contributes to the assembly of Proposed Noncontiguous Habitat Block 4. Criteria Cell 2334 is an independent Cell.

6.2.1 Proposed Noncontiguous Habitat Block 4

Proposed Noncontiguous Habitat Block 4 is comprised of the Motte Rimrock Reserve. It provides Habitat for a number of Planning Species, including Quino checkerspot butterfly, coastal California gnatcatcher, and Stephens' kangaroo rat. Maintenance of large intact interconnected habitat blocks is important for these species. As shown in the table below, areas not affected by edge total approximately 920 acres of the total 1,150 acres occupied by this habitat block. Since this habitat block may be affected by edge, treatment and management of edge conditions will be necessary to ensure that it provides Habitat and movement functions for species using this habitat block as planned adjacent land uses are developed along the edge. Activities associated with proposed adjacent land uses such as fire, fire suppression, off-road vehicle use and landscaping with exotic invasive species may be harmful to Stephens' kangaroo rat.

6.2.2 Criteria Cell 2334

The western half of the project site, approximately 10 acres, is located within Criteria Cell 4648, which is an independent Cell that is not affiliated with any Cell Group. Conservation within Criteria Cell 4648 will support the assembly of Proposed Linkage 8. Conservation within this Cell focuses on riparian scrub, woodland and forest habitat associated with the San Jacinto River and adjacent grassland, coastal sage scrub and chaparral habitat to the north.

Conservation within this Cell will be approximately 5% of the Cell focusing on the southern portion of the Cell. Areas conserved within this Cell will be connected to coastal sage scrub habitat proposed for conservation in Cell Group A to the south.

6.3 RESERVE ASSEMBLY ANALYSIS

Criteria Cell 2334 is an independent cell totaling approximately 160 acres in size. Using the 5% conservation for Criteria Cell 2334, approximately 8 acres are described for conservation within this approximate 160-acre cell.

The project site is located along the northern boundary of Criteria Cell 2334, outside of the targeted conservation area for this Cell. Since the location of the project site is outside of the areas described for conservation, and would not functionally contribute to Proposed Noncontiguous Habitat Block 4, impacts from project implementation will not impeded the conservation goals for this Criteria Cell. Potential indirect impacts to Proposed Noncontiguous Habitat Block 4 (i.e., noise, lighting, etc.) will be minimized with implementation of the MSHCP Urbans Wildlands Guidelines described in Section 5.3 above and with implementation of the mitigation measures listed in Section 8 below.

6.4 COVERED ROADS

The project proposes off-site improvements within several roadways including Cajalco Road, Decker Road, Seaton Avenue, and Rider Street. Under the MSHCP, Cajalco Road is considered an Expressway with a 184 foot right-of-way, both Decker Road and Seaton Avenue are considered Secondary Roads with a 100 foot right-of-way, and Rider Street is considered a Major Road with a 118 foot right-of-way.

The proposed Covered Road impact footprint will include all project components (e.g., landscaping, safety requirements, curb and gutter, manufactured slopes, fuel modification zones, etc.). However, only permanent impacts associated with the roadway, shoulders, and median are required to remain within the allowable width; cut and fill slopes or other construction activities required for the roadway construction do not need to be confined to the allowable width. All road improvements will occur within the respective road rights-of-way for the aforementioned roads. Further, off-site improvements will be consistent with Sections 7.5.1 and 7.5.3 of the MSHCP.

Section 7 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 and off-site street improvement areas are 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 and off-site street improvement areas are 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 and off-site street improvement areas are 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 and off-site street improvement areas.

Section 8 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 paniculate tarplant. The proposed project will be confined to existing developed and heavily disturbed areas that have been subject to several decades of agricultural activities and industrial/commercial land uses, and the site and off-site street improvement areas are isolated from known occupied areas. As such, any paniculate tarplant supported on-site and off-site street improvement areas are not expected to make a meaningful contribution to the conservation of the species, if present. No additional surveys are recommended.

Special-Status Wildlife Species

One (1) special-status wildlife species was observed during the field investigation, Cooper's hawk. 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 Western spadefoot, California glossy snake, coast horned lizard, coast patch-nosed snake, San Diegan whiptail, red-diamond rattlesnake, California horned lark, Lawrence's goldfinch, Loggerhead shrike, Southern California rufous-crowned sparrow, and White-tailed kite. It was determined that the project site has a low potential to support Stephen's kangaroo rat (*Dipodomys stephensi*), western mastiff bat, and western yellow bat. It was further determined that the project site does not have the potential to support any of the other special-status wildlife species known to occur in the vicinity of the site and all are presumed to be absent.

Stephen's kangaroo rat is federally, and state listed as threatened. None of the remaining aforementioned species are federally or state listed as threatened or endangered. In addition, western spadefoot, coast horned lizard, San Diegan whiptail, red-diamond rattlesnake, California horned lark, Lawrence's goldfinch, loggerhead shrike, northern harrier, Southern California rufous-crowned sparrow, white-tailed kite, and Stephen's kangaroo rat are covered species under the MSHCP. Of the aforementioned avian species, only California horned lark and Cooper's hawk might be expected to nest on-site; the remaining avian species are not expected to nest on-site due to the lack of suitable nesting habitat or opportunities.

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.

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 clearance survey will need to focus on the presence/absence of California gnatcatcher to ensure not impacts to California gnatcatcher occur from project implementation.

   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.

      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. To ensure that no impacts to Crotch bumble bee occur from the proposed project, focused surveys for Crotch bumblebee are recommended to be conducted prior to project implementation. If no active Crotch bumblebee nests are observed during the focused surveys, then impacts to this species will be less than significant and no further mitigation will be required. However, if Crotch bumble bee are observed onsite, coordination with CDFW will need to occur to determine if an Incidental Take Permit will needed to be prepared and processed.

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 (2) ephemeral drainage features, Drainage A and associated Tributary A-1, were observed in the southern portion of the project site during the field investigation. The on-site ephemeral drainage features are not relatively permanent, standing, or continuously flowing bodies of water and, therefore, will not qualify as waters of the United States under the regulatory authority of the Corps. However, both features will qualify as waters of the State and fall under the regulatory authority of the Regional Board and CDFW. Regional Board jurisdiction within the project site totals approximately 0.06 acre (985 linear feet), none of which consists of State wetlands; a Report of Waste Discharge permit from the Regional Board will be required prior to project implementation. CDFW jurisdiction within the project site totals approximately 0.27 acres, of which approximately 0.21 acre consists of riparian habitat, and 0.06 acre support streambed. Impacts to the on-site jurisdictional areas will require a CDFW Section 1602 Lake and Streambed Alteration Agreement prior to Project implementation.

The applicant proposes to mitigate via off-site preservation through the purchase of mitigation credits through the Riverpark Mitigation Bank and/or other approved bank (i.e., Skunk Hollow), or combination thereof at an agreed upon ratio of 3:1. The applicant will be responsible for the purchase of mitigation credits to compensate for impacts to riparian/riverine habitat. Due to the degraded conditions of the riparian/riverine habitat that will be impacted by the proposed project, the above action would result in a net increase in the function and ecological value of riparian/riverine habitat (biologically equivalent or superior) within the region by preserving/enhancing high-quality habitat in Riverside County.

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 linkage to project, as identified by the MSHCP, occurs approximately 270 feet to the south within Noncontiguous Habitat Block 4, which consists of the Motte-Rimrock Reserve. The proposed project will be confined to existing areas that have been heavily disturbed and are isolated from regional wildlife corridors. Therefore, the project site does not function as a major wildlife movement corridor or linkage. As such, implementation of the proposed project is not expected to have a significant impact to wildlife movement opportunities or prevent local wildlife movement through the area. Due to the lack of any identified impacts to wildlife movement, migratory corridors or linkages or native wildlife nurseries, no mitigation is required. Therefore, impacts to wildlife corridors or linkages are not 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 and off-site street improvement areas are located in the within the Sun City/Menifee Valley 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 and off-site street improvement areas are also

located within the fee area for the SKR HCP. With payment of the Stephen's kangaroo rat mitigation fee, development of the project will be consistent with the SKR HCP.

Recommendations for avoidance and minimization:

1. In order to comply with the conservation goals of the MSCHP, 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.

2. The project is within MSHCP Criteria Cells and within and adjacent to Public/Quasi-Public Lands. Therefore, applicable best management practices specified in Appendix C of the MSHCP will be followed (as RCWD would be a PSE for this project, references to "Permittee" herein are interpreted to refer to the RCA). These measures are as follows:

    a. A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.
    b. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
    c. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
    d. The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.
    e. Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.
    f. Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian species identified in MSHCP Global Species Objective No. 7.
    g. When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream.

Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.

h. Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project-related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, USFWS, CDFW, and RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
i. Erodible fill material shall not be deposited into watercourses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
j. The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.
k. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
l. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
m. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).
n. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.
o. The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.

Section 9 References

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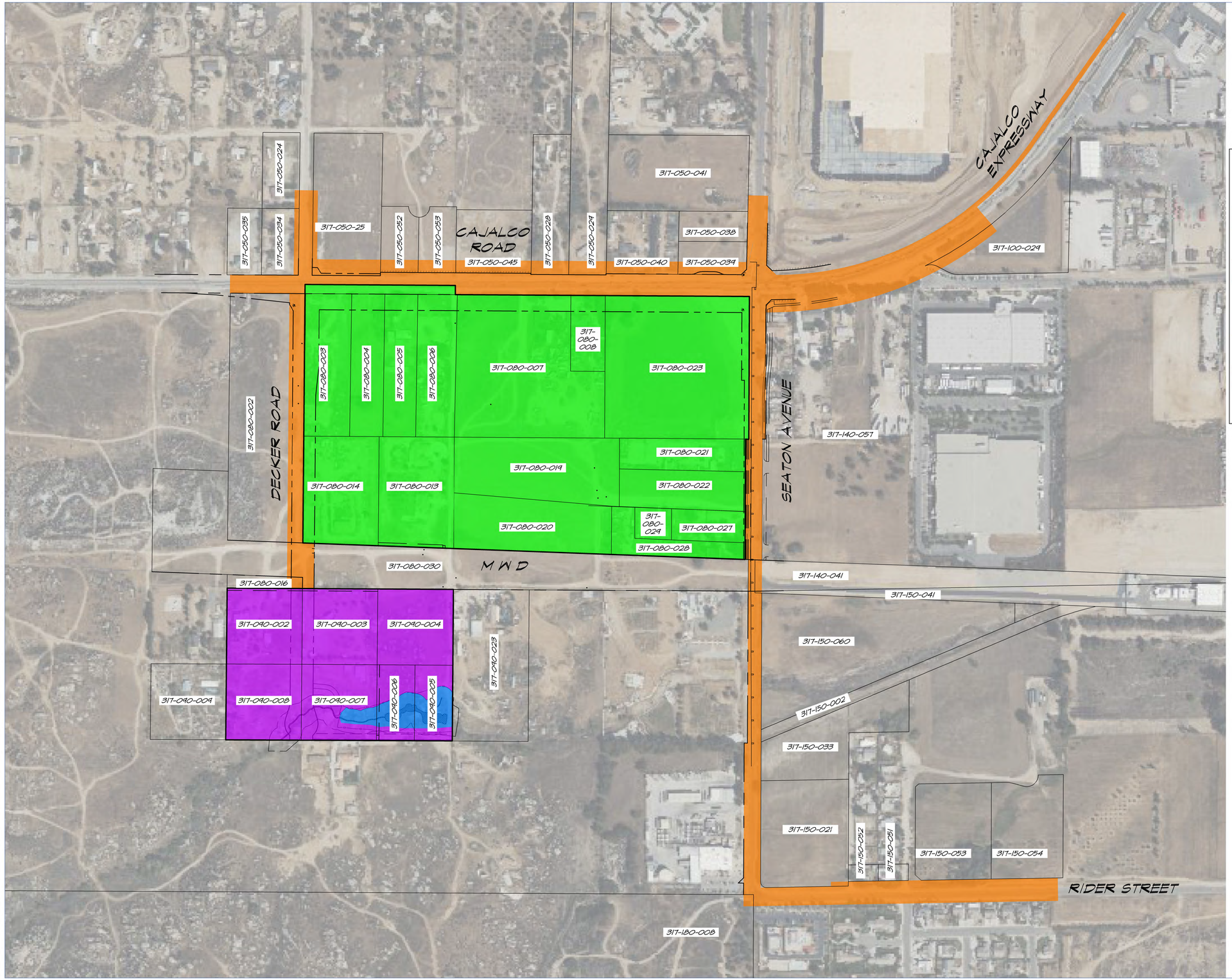
Appendix A Site Plan



LEGEND

- ONSITE WAREHOUSE PROJECT BOUNDARY
  ±50 AC (±2,179,769 SF)
- ONSITE PARK PROJECT BOUNDARY
  ±13.6 AC (±592,796 SF)
- OFFSITE STREET BOUNDARY
  ±21.8 AC (±950,666 SF)
- ONSITE STREAM AREA (ASSUMED TO BE IMPACTED)
  ±1.3 AC (±57,860 SF)

ALBERT A WEBB ASSOCIATES

1" = 200'

22-0192

BIO BOUNDARY - APN EXHIBIT

H:\2022\22-0192\DRAWINGS\EXHIBITS\22-0192 BIO BDRY – APN.DWG 6/27/2024 10:44:52 AM Adrianv

Appendix B Site Photographs

Photograph 1: From the northwest corner of the Warehouse area looking east along the northern boundary.

Photograph 2: From the northwest corner of the Warehouse area looking south along the western boundary.

Photograph 3: From the northeast corner of the Warehouse area looking west along the northern boundary.

Photograph 4: From the northeast corner of the Warehouse area looking south along the eastern boundary.

Photograph 5: From the southeast corner of the Warehouse area looking north along the eastern boundary.

Photograph 6: From the southeast corner of the Warehouse area looking west along the southern boundary.

Photograph 7: From the southwest corner of the Warehouse area looking north along the western boundary.

Photograph 8: From the southwest corner of the Warehouse area looking east along the southern boundary.

Photograph 9: From the middle of the northern boundary of the Park area looking east.

Photograph 10: From the middle of the northern boundary of the Park area looking west.

Photograph 11: From the middle of the southern boundary of the Park area looking northwest.

Photograph 12: From the middle of the southern boundary of the Park are looking west

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	Yes	**Present** Suitable foraging habitat and nesting opportunities are present within and surrounding 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	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Agelaius tricolor tricolored blackbird	Fed: CA: None **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), and either flooded or thorny or spiny vegetation and suitable foraging space providing adequate insect prey.	Yes	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	Fed: None CA: WL	Typically found between 3,000 and 6,000 feet in elevation. Breed in sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (Artemisia californica), but they can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.	Yes	No	**High** Suitable foraging habitat is present 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**
Ammodramus savannarum grasshopper sparrow	Fed: None CA: SSC	Occurs in grassland, upland meadow, pasture, hayfield, and old field habitats. Optimal habitat contains short- to medium-height bunch grasses interspersed with patches of bare ground, a shallow litter layer, scattered forbs, and few shrubs. May inhabit thickets, weedy lawns, vegetated landfills, fence rows, open fields, or grasslands.	Yes (e)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Anniella stebbinsi southern California legless lizard	Fed: None CA: SSC	Occurs primarily in areas with sandy or loose loamy soils under sparse vegetation of beaches, chaparral, or pine-oak woodland; or near sycamores, oaks, or cottonwoods that grow on stream terraces. Often found under or in the close vicinity of logs, rocks, old boards, and the compacted debris of woodrat nests.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Aquila chrysaetos golden eagle	Fed: None CA: FP; WL	Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.	Yes	No	**Presumed Absent** 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	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Ardea herodias great blue heron	Fed: None CA: None	Fairly common all year throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains about foothills. Nests colonially in tall trees (typically Eucalyptus sp.), on cliffsides, or in isolated spots in marshes.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Arizona elegans occidentalis California glossy snake	Fed: None CA: SSC	Occurs in a wide variety of habitat types including open desert, grasslands, shrublands, chaparral, and woodlands. Prefers areas where the soil is loose and sandy which allows for burrowing.	No	No	**High** Suitable habitat is present within and surrounding 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.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Asio otus long-eared owl	Fed: None CA: SSC	Hunts mostly at night over grasslands and other open habitats. Nesting occurs in dense trees such as oaks and willows where it occupies stick nests of other species, particularly raptors or corvids.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Aspidoscelis hyperythra orangethroat whiptail	Fed: None CA: WL	Semi-arid brushy areas typically with loose soil and rocks, including washes, stream sides, rocky hillsides, and coastal chaparral. They are typically found in hot, dry, flat open spaces. Typically, they are seen on the ground running in open spots from bush to bush, but rarely climbing on rocks or vegetation.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Aspidoscelis tigris stejnegeri coastal whiptail	Fed: None CA: SCC	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage such as chaparral, woodland, and riparian areas.	Yes	No	**High** Suitable habitat is present within and surrounding the project site.
Athene cunicularia burrowing owl	Fed: None CA: SSC	Prefers habitat with short, sparse vegetation with few shrubs and well-drained soils in grassland, shrub steppe, and desert habitats. Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.	Yes (c)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Aythya americana redhead	Fed: None CA: SSC	Typically found in shallow freshwater lakes, ponds, and marshes.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Bombus crotchii Crotch bumblebee	Fed: None CA: CE	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. 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 usually nests underground, often in abandoned rodent dens.	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**
Bombus pensylvanicus American bumblebee	Fed: None CA: None	Prefers farmlands, meadows, grasslands, and open fields. Nests below grass or underground. Feeds on pollen of a wide variety of flowering plants including vetches, clovers, goldenrods, and many crop species.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
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, rock outcrops, and artificial pools such as those created by roadside ditches.	Yes	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
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** No suitable habitat is present within or adjacent to the project site.
Buteo regalis ferruginous hawk	Fed: None CA: WL	Occurs primarily in open grasslands and fields, but may be found in sagebrush flats, desert scrub, low foothills, or along the edges of pinyon-juniper woodland. Feeds primarily on small mammals and typically found in agricultural or open fields.	Yes	No	**Presumed Absent** 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	Yes	**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: None	Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters above msl. 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.
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.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Charadrius montanus mountain plover	Fed: None CA: SSC	Found in short grasslands, freshly plowed fields, newly-sprouting grain fields, and sometimes in sod farms. Prefers short vegetation or bare ground with flat topography, particularly grazed areas or areas with fossorial rodents.	Yes	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Circus hudsonius northern harrier	Fed: None CA: SSC	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Mostly found in flat, or hummocky, open areas of tall, dense grasses moist or dry shrubs, and edges for nesting, cover, and feeding.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Coleonyx variegatus abbotti San Diego banded gecko	Fed: None CA: SCC	Occurs in coastal and cismontane southern California from interior Ventura County south, although it is absent from the extreme outer coast. It is uncommon in coastal scrub and chaparral, most often occurring in granite or rocky outcrops in these habitats.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Crotalus ruber red-diamond rattlesnake	Fed: None CA: SSC	It can be found from the desert, through dense chaparral in the foothills (it avoids the mountains above around 4,000 feet), to warm inland mesas and valleys, all the way to the cool ocean shore. It is most commonly associated with heavy brush with large rocks or boulders. Dense chaparral in the foothills, cactus or boulder associated coastal sage scrub, oak and pine woodlands, and desert slope scrub associations are known to carry populations of the northern red-diamond rattlesnake; however, chamise and red shank associations may offer better structural habitat for refuges and food resources for this species than other habitats.	Yes	No	**High** Suitable habitat is present within and surrounding the project site.
Diadophis punctatus modestus San Bernardino ringneck snake	Fed: None CA: None	Most often found under cover of bark, logs, stones, or boards, although it is not an active burrower. Common in open, relatively rocky areas within woodland, chaparral, forest, and grassland habitats. Also found on farms and in gardens. Restricted to springs and watercourses in arid regions.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Dipodomys merriami parvus San Bernardino kangaroo rat	Fed: **END** CA: CE; 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.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Dipodomys simulans Dulzura kangaroo rat	Fed: None CA: None	Relatively common in chaparral, coastal sage scrub, Riversidean alluvial fan sage scrub, and peninsular juniper woodland habitats.	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	**Low** Limited habitat is present within and surrounding the project site.
Egretta thula snowy egret	Fed: None CA: None	Widespread in California along shores of coastal estuaries, fresh and saline emergent wetlands, ponds, slow-moving rivers, irrigation ditches, and wet fields. In southern California, common yearlong in the Imperial Valley and along the Colorado River.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Elanus leucurus white-tailed kite	Fed: None CA: FP	Common in savannas, open woodlands, marshes, desert grasslands, partially cleared lands, and cultivated fields. Tend to avoid heavily cleared or grazed areas. Breeds in lowland grasslands, agricultural wetlands, oak-woodland and savannah habitats.	Yes	No	**High** Suitable foraging habitat is present within and surrounding the project site. No suitable nesting opportunities are present.
Empidonax traillii willow flycatcher	Fed: None CA: **END**	A rare to locally uncommon, summer resident in wet meadow and montane riparian habitats (2,000 to 8,000 ft) in the Sierra Nevada and Cascade Range. Most often occurs in broad, open river valleys or large mountain meadows with lush growth of shrubby willows.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Empidonax traillii extimus southwestern willow flycatcher	Fed: **END** CA: **END**	Occurs in riparian woodlands in southern California. Typically requires large areas of willow thickets in broad valleys, canyon bottoms, or around ponds and lakes. These areas typically have standing or running water or are at least moist.	Yes (a)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Emys marmorata western pond turtle	Fed: None CA: SSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Found at elevations from sea level to over 5,900 feet (1,800 m).	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**
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 and shrubs are usually scarce or absent. Generally rare in montane, coniferous, or chaparral habitats. Forms large flocks outside of the breeding season. Nests in hollows/scrapes on ground near hummocks or other raised earthen features.	Yes	No	**High** Suitable foraging and nesting habitat are present within and surrounding 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	**Low** Limited foraging habitat is present within and surrounding 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** No suitable habitat is present within or adjacent to the project site.
Falco mexicanus prairie falcon	Fed: None CA: WL	Commonly occur in arid and semiarid shrubland and grassland community types. Also occasionally found in open parklands within coniferous forests. During the breeding season, they are found commonly in foothills and mountains which provide cliffs and escarpments suitable for nest sites.	Yes	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Falco peregrinus anatum American peregrine falcon	Fed: DL CA: DL	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**
Haliaeetus leucocephalus bald eagle	Fed: DL CA: **END**; FP	Occur primarily at or near seacoasts, rivers, swamps, and large lakes. Need ample foraging opportunities, typically near a large water source.	Yes	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Hydroprogne caspia Caspian tern	Fed: None CA: None	Occurs near large lakes, coastal waters, beaches, and bays. Found on both fresh and salt water, favoring protected waters such as bays and lagoons, rivers, not usually foraging over open sea. Nests on open ground on islands, coasts.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Icteria virens yellow-breasted chat	Fed: None CA: SSC	Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Breeding habitat must be dense to provide shade and concealment. It winters south the Central America.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Lanius ludovicianus loggerhead shrike	Fed: None CA: SSC	Prefers open habitats with bare ground, scattered shrubs, and areas with low or sparse herbaceous cover including open-canopied valley foothill hardwood, riparian, pinyon-juniper, desert riparian, creosote bush scrub, and Joshua tree woodland. Requires suitable perches including trees, posts, fences, utility lines, or other perches.	Yes	No	**High** Suitable foraging habitat is present within and surrounding the project site. No suitable nesting opportunities are present.
Larus californicus California gull	Fed: None CA: WL	Require isolated islands in rivers, reservoirs and natural lakes for nesting, where predations pressures from terrestrial mammals are diminished. Uses both fresh and saline aquatic habitats at variable elevations and degrees of aridity for nesting and for opportunistic foraging.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Lasiurus xanthinus western yellow bat	Fed: None CA: SSC	Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.	No	No	**Low** Limited habitat is present within and surrounding the project site.
Lepus californicus bennettii San Diego black-tailed jackrabbit	Fed: None CA: None	Found in diverse habitats, but primarily is found in arid regions supporting shortgrass habitats. Openness of open scrub habitat is preferred over dense chaparral.	Yes	No	**Presumed Absent** 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**
Lynx rufus pallescens pallid bobcat	Fed: None CA: None	Found on the western edge of the great basin habitat in extreme northeast California. Live in a variety of habitats including forests, deserts, mountains, swamps and farmland.	Yes	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Myotis yumanensis Yuma myotis	Fed: None CA: None	Found in forests and woodlands near water. Roosts in caves, buildings, mines, and crevices.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
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 is present within or adjacent to the project site.
Neolarra alba white cuckoo bee	Fed: None CA: None	Live in urban areas, forests, and woodlands. Typically found where other bee species are common, as this species is cleptoparasitic and a brood parasite.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Neotoma lepida intermedia San Diego desert woodrat	Fed: None CA: SSC	Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Prefers moderate to dense canopies, and especially rocky outcrops.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Numenius americanus long-billed curlew	Fed: None CA: WL	Preferred winter habitats include large coastal estuaries, upland herbaceous areas, and croplands. On estuaries, feeding occurs mostly on intertidal mudflats.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
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.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Nyctinomops femorosaccus pocketed free-tailed bat	Fed: None CA: SSC	Prefers open lowland areas near water in arid or semi-arid habitats including deserts and scrublands including pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis. Colonial roosting sites include caves, mines, and rock crevices, and to a lesser extent, buildings, bridges, and trees.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Onychomys torridus ramona southern grasshopper mouse	Fed: None CA: SSC	Inhabits alkali desert scrub and other desert scrub habitats, and to a lesser extent succulent shrubs, desert washes, desert riparian, coastal scrub, mixed chaparral, and sagebrush habitats. Generally rare in valley foothill and montane riparian habitats. Prefers low to moderate shrub cover and requires friable soils.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Pandion haliaetus osprey	Fed: None CA: WL	Associated strictly with large, fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats. Uses large trees, snags, and dead-topped trees in open forest habitats for cover and nesting. Requires open, clear waters for foraging and uses rivers, lakes, reservoirs, bays, estuaries, and surf zones.	Yes	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Pelecanus erythrorhynchos American white pelican	Fed: None CA: SSC	Locally common winter resident of southern California. Typically forage in shallow inland waters, such as open areas in marshes and along lake or river edges. Also occur in shallow coastal marine habitats.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Pelecanus occidentalis californicus California brown pelican	Fed: DL CA: DL	Coastal areas, with nesting occurring on islands. Species found occasionally along Arizona's lakes and rivers. This species inhabits shallow inshore waters, estuaries and bays, avoiding the open sea. Its diet is comprised mostly of fish, causing great congregations in areas with abundant prey. Prey species include sardines and anchovies, but has been seen to take shrimps and carrion, and even nestling egrets. It regularly feeds by plunge-diving and is often the victim of kleptoparasites.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Perognathus longimembris brevinasus Los Angeles pocket mouse	Fed: None CA: SSC	Occurs in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows, but may instead seek refuge under weeds and dead leaves.	Yes (c)	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**
Phrynosoma blainvillii coast horned lizard	Fed: None CA: SSC	Found 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	**High** Suitable habitat is present within and surrounding 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** No suitable habitat is present within or adjacent to the project site.
Pyrocephalus rubinus vermillion flycatcher	Fed: None CA: SSC	Can be found in any open country in the American Southwest, including arid scrublands, farmlands, deserts, parks, and canyon mouths. In more arid areas, species prefers areas near streams or other sources of water. Nests in trees usually 6 to 20 feet aboveground along stream corridors.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Salvadora hexalepis virgultea coast patch-nosed snake	Fed: None CA: SSC	Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains. Requires friable soils for burrowing.	No	No	**High** Suitable habitat is present within and surrounding the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Setophaga petechia yellow warbler	Fed: None CA: SSC	Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Spea hammondii western spadefoot	Fed: None CA: SSC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washed, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rainpools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	Yes	No	**High** Suitable habitat is present within and surrounding the project site.
Spinus lawrencei Lawrence's goldfinch	Fed: None CA: None	Typical habitats include valley foothill hardwood, valley foothill hardwood-conifer, and, in southern California, desert riparian, palm oasis, pinyon-juniper, and lower montane habitats. Nearby herbaceous habitats often used for feeding. Open woodlands, chaparral, and weedy fields. Closely associated with oaks. Nests in open oak or other arid woodland and chaparral near water.	No	No	**High** Suitable foraging habitat is present within the project site. Suitable nesting habitat likely occurs to the south.
Spizella breweri Brewer's sparrow	Fed: None CA: None	Habitats include sagebrush scrub and brushy plains with a strong sagebrush component. Prefers open areas for foraging.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Streptocephalus woottoni Riverside fairy shrimp	Fed: **END** CA: None	Freshwater crustacean that is found in vernal pools in the coastal California area.	Yes (a)	No	**Presumed Absent** 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** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Vireo bellii pusillus least Bell's vireo	Fed: **END** CA: **END**	Primarily occupy Riverine riparian habitat that typically feature dense cover within 1 -2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.	Yes (a)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Xanthocephalus xanthocephalus yellow-headed blackbird	Fed: None CA: SSC	Uncommon yearlong resident of southern California throughout freshwater emergent wetlands, and moist, open areas along agricultural areas, and mudflats of lacustrine habitats. Prefers to nest in dense wetland vegetation characterized by cattails, tules, or other similar plant species along the border of lakes and ponds.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
PLANT SPECIES					
Abronia villosa* var. *aurita chaparral sand-verbena	Fed: None CA: None CNPS: 1B.1	Sandy microhabitats within Chaparral, Coastal scrub, Desert dunes. Found at elevations ranging from 245 to 5250 feet. Blooms in (January)March-September.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Allium munzii Munz's onion	Fed: **END** CA: **THR** CNPS: 1B.1	Clay, Mesic microhabitats within Chaparral, Cismontane woodland, Coastal scrub, Pinyon and juniper woodland, Valley and foothill grassland. Found at elevations ranging from 975 to 3510 feet. Blooms in March-May.	Yes (b)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Arctostaphylos rainbowensis rainbow manzanita	Fed: None CA: None CNPS: 1B.1	Chaparral. Found at elevations ranging from 675 to 2200 feet. Blooms in December-March.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Atriplex coronata* var. *notatior San Jacinto Valley crownscale	Fed: **END** CA: None CNPS: 1B.1	Alkaline microhabitats within Playas, Valley and foothill grassland (mesic), Vernal pools. Found at elevations ranging from 455 to 1640 feet. Blooms in April-August.	Yes (d)	No	**Presumed Absent** There is no suitable habitat is present within or adjacent to the project site.
Atriplex parishii Parish's brittlescale	Fed: None CA: None CNPS: 1B.1	Alkaline microhabitats within Chenopod scrub, Playas, Vernal pools. Found at elevations ranging from 80 to 6235 feet. Blooms in June-October.	Yes (d)	No	**Presumed Absent** There is no suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Atriplex serenana* var. *davidsonii Davidson's saltscale	Fed: None CA: None CNPS: 1B.2	Alkaline microhabitats within Coastal bluff scrub, Coastal scrub. Found at elevations ranging from 35 to 655 feet. Blooms in April-October.	Yes (d)	No	**Presumed Absent** There is no suitable habitat is present within or adjacent to the project site. The project site occurs outside of the known elevation range for this species.
Brodiaea filifolia thread-leaved brodiaea	Fed: **THR** CA: **END** CNPS: 1B.1	Clay (often) microhabitats within Chaparral (openings), Cismontane woodland, Coastal scrub, Playas, Valley and foothill grassland, Vernal pools. Found at elevations ranging from 80 to 3675 feet. Blooms in March-June.	Yes (d)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Caulanthus simulans Payson's jewelflower	Fed: None CA: None CNPS: 4.2	Granitic, Sandy microhabitats within Chaparral, Coastal scrub. Found at elevations ranging from 295 to 7220 feet. Blooms in (February)March-May(June).	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Centromadia pungens ssp. laevis smooth tarplant	Fed: None CA: None CNPS: 1B.1	Alkaline microhabitats within Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland. Found at elevations ranging from 0 to 2100 feet. Blooms in April-September.	Yes (d)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Chorizanthe leptotheca Peninsular spineflower	Fed: None CA: None CNPS: 4.2	Granitic microhabitats within Chaparral, Coastal scrub, Lower montane coniferous forest. Found at elevations ranging from 985 to 6235 feet. Blooms in May-August.	Yes (e)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Chorizanthe parryi* var. *parryi Parry's spineflower	Fed: None CA: None CNPS: 1B.1	Openings, Rocky (sometimes), Sandy (sometimes) microhabitats within Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland. Found at elevations ranging from 900 to 4005 feet. Blooms in April-June.	Yes (e)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Chorizanthe polygonoides var. longispina long-spined spineflower	Fed: None CA: None CNPS: 1B.2	Clay (often) microhabitats within Chaparral, Coastal scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools. Found at elevations ranging from 100 to 5020 feet. Blooms in April-July.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Convolvulus simulans small-flowered morning-glory	Fed: None CA: None CNPS: 4.2	Clay, Seeps, Serpentinite microhabitats within Chaparral (openings), Coastal scrub, Valley and foothill grassland. Found at elevations ranging from 100 to 2430 feet. Blooms in March-July.	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**
Deinandra paniculata paniculate tarplant	Fed: None CA: None CNPS: 4.2	Sandy (sometimes), Vernally Mesic (usually) microhabitats within Coastal scrub, Valley and foothill grassland, Vernal pools. Found at elevations ranging from 80 to 3085 feet. Blooms in (March)April-November.	No	No	**Low** Marginal habitat is present within the project site. This species often occurs in disturbed areas.
Harpagonella palmeri Palmer's grapplinghook	Fed: None CA: None CNPS: 4.2	Clay, Openings microhabitats within Chaparral, Coastal scrub, Valley and foothill grassland. Elevation range is unknown; known from 65 feet. Blooms in March-May.	Yes	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Hordeum intercedens vernal barley	Fed: None CA: None CNPS: 3.2	Coastal dunes, Coastal scrub, Valley and foothill grassland (depressions, saline flats), Vernal pools. Elevation range is unknown; known from 15 feet. Blooms in March-June.	Yes	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Lasthenia glabrata* ssp. *coulteri Coulter's goldfields	Fed: None CA: None CNPS: 1B.1	Marshes and swamps (coastal salt), Playas, Vernal pools. Elevation range is unknown; known from 5 feet. Blooms in February-June.	Yes (d)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Lepidium virginicum var. robinsonii Robinson's pepper-grass	Fed: None CA: None CNPS: 4.3	Chaparral, Coastal scrub. Elevation range is unknown; known from 5 feet. Blooms in January-July.	No	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Myosurus minimus ssp. apus little mousetail	Fed: None CA: None CNPS: 3.1	Valley and foothill grassland, Vernal pools (alkaline). Elevation range is unknown; known from 65 feet. Blooms in March-June.	Yes (d)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Navarretia fossalis spreading navarretia	Fed: **THR** CA: None CNPS: 1B.1	Chenopod scrub, Marshes and swamps (shallow freshwater), Playas, Vernal pools. Elevation range is unknown; known from 100 feet. Blooms in April-June.	Yes (b)	No	**Presumed Absent** There is no suitable habitat present within or adjacent to the project site.
Romneya coulteri Coulters Matilija poppy	Fed: None CA: None CNPS: 4.2	Burned areas (often) microhabitats within Chaparral, Coastal scrub. Elevation range is unknown; known from 65 feet. Blooms in March-July(August).	Yes(e)	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.

Scientific Name Common Name	**Status**	**Habitat**	**Covered by MSHCP**	**Observed On-site**	**Potential to Occur**
Texosporium sancti-jacobi woven-spored lichen	Fed: None CA: None CNPS: 3	Chaparral (openings). Elevation range is unknown; known from 195 feet.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Tortula californica California screw moss	Fed: None CA: None CNPS: 1B.2	Sandy microhabitats within Chenopod scrub, Valley and foothill grassland. Elevation range is unknown; known from 35 feet.	No	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
Trichocoronis wrightii* var. *wrightii Wright's trichocoronis	Fed: None CA: None CNPS: 2B.1	Alkaline microhabitats within Marshes and swamps, Meadows and seeps, Riparian forest, Vernal pools. Elevation range is unknown; known from 15 feet. Blooms in May-September.	Yes (b)	No	**Presumed Absent** No suitable habitat is present within or adjacent to the project site.
CDFW SENSITIVE HABITATS					
Southern Coast Live Oak Riparian Forest	CDFW Sensitive Habitat	Open to locally dense evergreen riparian woodlands dominated by *Quercus agrifolia*. This type appears to be richer in herbs and poorer in understory shrubs than other riparian communities. Bottomlands and outer floodplains along larger streams, on fine-grained, rich alluvium. Canyons and valleys of coastal southern California.	NA	No	**Absent**
Southern Cottonwood Willow Riparian Forest	CDFW Sensitive Habitat	Dominated by cottonwood (*Populus* sp.) and willow (*Salix* sp.) trees and shrubs. Considered to be an early successional stage as both species are known to germinate almost exclusively on recently deposited or exposed alluvial soils.	NA	No	**Absent**
Southern Sycamore Alder Riparian Woodland	CDFW Sensitive Habitat	Occurs below 2,000 meters in elevation, sycamore and alder often occur along seasonally-flooded banks; cottonwoods and willows are also often present. Poison oak, mugwort, elderberry and wild raspberry may be present in understory.	NA	No	**Absent**

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

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

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

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

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

Appendix D Observed Flora and Fauna Compendium

Table D – 1: Plant Species Observed

PLANT SPECIES	
Scientific Name	**Common Name**
Amaranthaceae	**Amaranth Family**
Salsola tragus	Russian-thistle
Anacardiaceae	**Sumac Family**
Schinus molle	Peruvian pepper tree
Arecaceae	**Palm Family**
Washingtonia robusta	Mexican fan palm
Asteraceae	**Sunflower Family**
Artemisia californica	California sagebrush
Baccharis salicifolia	mulefat
Corethrogyne filaginifolia var. virgata	virgate sand aster
Dimorphotheca sinuata	African daisy
Encelia farinosa	brittlebush
Lactuca serriola	prickly lettuce
Lasthenia californica	coastal goldfields
Oncosiphon piluliferum	stink-net
Boraginaceae	**Borage**
Amsinckia menziesii var. intermedia	common fiddleneck
Cryptantha intermedia	common cryptantha
Heliotropium curassavicum	salt heliotrope
Phacelia ramosissima	branching phacelia
Plagiobothrys canescens	valley popcorn
Plagiobothrys tenellus	slender popcorn flower
Brassicaceae	**Mustard Family**
Hirschfeldia incana	summer mustard
Lepidium nitidum var. nitidum	shining peppergrass
Sisymbrium irio	London rocket
Cactaceae	**Cactus Family**
Cylindropuntia bernardina	valley cholla
Opuntia littoralis	coastal prickly pear
Crassulaceae	**Stonecrop Family**
Crassula connata	sand pygmy-stonecrop
Cucurbitaceae	**Gourd Family**
Marah macrocarpus	wild cucumber
Cupressaceae	**Cypress Family**
Cupressus sempervirens	Italian cypress
Euphorbiaceae	**Spurge Family**

Ricinis communis	castor bean
Fabaceae	**Legume Family**
Acmispon glaber	coastal deerweed
Astragalus pomonensis	Pomona milkvetch
Lupinus bicolor	miniature lupine
Lupinus sparsiflorus	Coulter's lupine
Melilotus indicus	annual yellow sweetclover
Parkinsonia florida	blue paloverde
Geraniaceae	**Geranium Family**
Erodium cicutarium	coastal heron's bill
Erodium moschatum	white-stem filaree
Lamiaceae	**Mint Family**
Marrubium vulgare	horehound
Malvaceaee	**Mallow Family**
Malva parviflora	cheeseweed
Nyctaginaceae	**Four O'clock Family**
Mirabilis laevis var. crassifolia	California wishbone bush
Oleaceae	**Olive Family**
Olea europaea	European olive
Phrymaceae	**Monkeyflower Family**
Erythranthe cardinalis	scarlet monkey flower
Poaceae	**Grass Family**
Avena barbata	slender wild oat
Bromus diandrus	ripgut grass
Bromus madritensis subsp. rubens	foxtail chess
Hordeum murinum subsp. leporinum	bare barley
Schismus barbatus	Mediterranean grass
Polygonaceae	**Buckwheat Family**
Eriogonum fasciculatum	California buckwheat
Portulacaeae	**Purslane Family**
Calandrinia menziesii	red maids
Salicaceae	**Willow Family**
Salix lasiolepis	arroyo willow
Solanaceae	**Nightshade Family**
Nicotiana glauca	tree tobacco
Solanum parishii	Parish's purple nightshade
Tamaricaceae	**Tamarisk Family**
Tamarix ramosissima	Mediterranean tamarisk
Themidaceae	**Brodiaea Family**

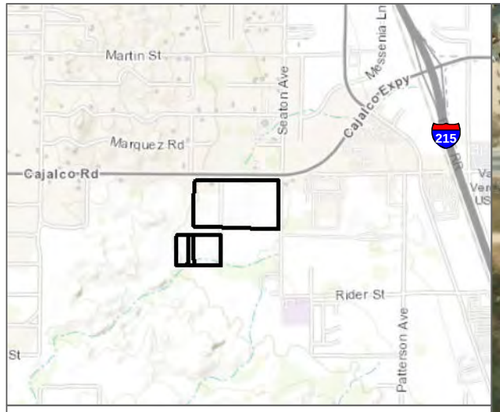
Dichelostemma capitatum	blue dicks

Table D – 2: Wildlife Species Observed

WILDLIFE SPECIES	
Scientific Name	**Common Name**
Amphibia	
Bufonidae	**True Toads**
Pseudacris hypochondriaca	Baja California tree frog
Aves	
Accipitridae	**Hawks, Eagles, Kites**
Accipiter cooperii	Cooper's hawk
Buteo jamaicensis	red-tailed hawk
Aegithalidae	**Bushtits**
Psaltriparus minimus	Bushtits
Columbidae	**Pigeons, Doves**
**Streptopelia decaocto*	Eurasian collared-dove
Zenaida macroura	mourning dove
Corvidae	**Crows, Jays**
Corvus brachyrhynchos	American crow
Corvus corax	common raven
Falconidae	**Falcons**
Falco sparverius	American kestrel
Fringillidae	**Finches**
Haemorhous mexicanus	house finch
Spinus psaltria	lesser goldfinch
Icteridae	**Blackbirds**
Icterus cucullatus	hooded oriole
Sturnella neglecta	western meadowlark
Mimidae	**Mockingbirds, Thrashers**
Mimus polyglottos	northern mockingbird
Passerellidae	**New World Sparrows**
Melospiza melodia	song sparrow
Melozone crissalis	California towhee
Passerculus sandwichensis	savannah sparrow
Zonotrichia leucophrys	white-crowned sparrow
Passeridae	**Old World Sparrows**
Passer domesticus	house sparrow

Sturnidae	**Starlings**
Sturnus vulgaris	European starling
Trochilidae	**Hummingbirds**
Calypte anna	Anna's hummingbird
Turdidae	**Thrushes**
Troglodytes aedon	house wren
Tyrannidae	**Tyrant Flycatchers**
Sayornis saya	Say's phoebe
Tyrannus vociferans	Cassin's kingbird
Mammalia	
Canidae	**Foxes, Jackals, Dogs, and Wolves**
Canis familiaris	feral dog
Cricetidae	**True Hamsters, Voles, Lemmings, Muskrats, New World Rats and Mice**
Peromyscus californicus	California mouse
Felidae	**Cats, Bobcat, Lion**
Felis catus	feral cat
Leporidae	**Rabbits and Hares**
Sylvilagus audubonii	desert cottontail
Sciuridae	**Squirrels, Chipmunks, Marmots**
Otospermophilus beecheyi	California ground squirrel
Reptilia	
Phrynosomatidae	**Phrynosomatid Lizards**
Sceloporus occidentalis	western fence lizard
Sceloporus orcutti	granite spiny lizard

Appendix E Fuel Modification Plan



Property Site

Land Use

- Development
- Building Footprint
- Park
- Roadway/Parking Lot
- 100-Ft Buffer
- FireLane_24ftwide

Fuel Modification Zone

- Zone 0
- On-site Fuel Modification Equivalent

SOURCE: AERIAL-ESRI IMAGERY SERVICE 2023; DEVELOPMENT-HPA ARCHITECTURE 2023

DUDEK

0 125 250 Feet

FIGURE 7

Fuel Modification Plan

Fire Protection Plan for the Mead Valley Commerce Center Project

Appendix F Dry and Wet Season Fairy Shrimp Surveys

GLENN LUKOS ASSOCIATES
Regulatory Services

July 9, 2024

Stacey Love
U.S. Fish and Wildlife Service
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

SUBJECT: Report of Findings for 2023-2024 Wet-Season Survey for Listed Branchiopods Conducted for the Mead Valley Commerce Center Project, an Approximately 84-Acre Site Located in Mead Valley, Riverside County, California

Dear Ms. Love:

Glenn Lukos Associates, Inc. (GLA) conducted wet-season surveys for listed branchiopods (fairy shrimp) within 21 seasonally ponded features at the Mead Valley Commerce Center Project Site (Property), located in Mead Valley, Riverside County, California. The Project name was changed to Cajalco Commerce Center and all references in this report naming Mead Valley Commerce Center are synonymous with Cajalco Commerce Center.

GLA biologists Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694) along with GLA biologists David Smith and Velvet Park, as supervised trainees, conducted the 2023-2024 wet season survey with the objective of determining the presence or absence of federally-listed Riverside fairy shrimp (*Streptocephalus woottoni*), San Diego fairy shrimp (*Branchinecta sandiegonensis*), and vernal pool fairy shrimp (*Branchinecta lynchi*).

The versatile fairy shrimp (*Branchinecta lindahli*) was detected in three of the 21 features surveyed. No listed branchiopods were detected on site.

I. SITE LOCATION AND DESCRIPTION

The Project site comprises approximately 83.78 acres in the Community of Mead Valley, Riverside County, California [Exhibit 1 – Regional Map] and is located within Section(s) 11, 12, 13, and 14 of Township 4 South, Range 4 West, of the U.S. Geological Survey (USGS) 7.5-minute quadrangle map Steele Peak, California (dated 2021) [Exhibit 2 – Vicinity Map]. The Project site is bordered by Cajalco Road to the north, Decker Road to the west, Seaton Avenue to

the east, Rider Street in the south, with open space and small residential lands to the west and south. Universal Transverse Mercator (UTM) coordinates approximately corresponding to the Property are 475583 mE and 3743891 mN.

The fairy shrimp survey area [Exhibit 3 – Fairy Shrimp Survey Area Map] is generally flat with elevations ranging from approximately 1,600 feet above mean sea level (AMSL) at the northwestern boundary to 1,550 feet AMSL at the southeastern limits of the Project site. All features within the site were unvegetated and located in areas of road ruts and roadway depressions, which were subject to heavy disturbances from off-road vehicle use and residential vehicle access. Depressional features are present throughout the Property, primarily within areas that are heavily disturbed. Although the majority of these features inundated long enough to support suitable habitat for fairy shrimp, most of the features were small in size/depth and were subject to drying down quickly during periods of dry weather (i.e., no significant precipitation) during the 2023-24 wet season.

II. METHODOLOGY

GLA biologist David Moskovitz provided a written notification to commence wet and dry season surveys to the U.S. Fish and Wildlife Service (USFWS), Carlsbad Field Office on September 15 and revised notification on September 20, 2023. One rain event at the end of November 2023, initiated mapping of features on November 20, 2023. No precipitation was recorded between November 20 and the week of December 18, 2023. Storms in late December 2023 and early January 2024, sustained the majority of features through January 12, 2024. All features were observed to be dry on January 18, 2024. A small storm the week of January 22, 2024 inundated the majority of the features again. After heavy rain (4-5 inches) within the site during February 2024, all features were inundated to their maximum extent and inundation continued until March 15, 2024, with only four features (1, 3, 20 and 21) inundated. On March 20, 2024, only one feature (Feature 21) was inundated. All features dried-down again by March 28 and stayed dry until a majority of the features were inundated again on April 4. All features quickly dried down again by April 12, 2024, and remined dry for the rest of the year.

In accordance with the USFWS *Survey Guidelines for the Listed Large Branchiopods* (Survey Guidelines) dated November 13, 2017[1], site visits were conducted within 24 hours of rain events to determine whether features contained a minimum of three centimeters (cm) of ponding. Under typical conditions, sampling commences within seven days of initial ponding. Sampling continued weekly until the feature was dry or had been inundated continuously for 120 days. If dried features were re-inundated, sampling would begin again as above. Sampling for the presence of fairy shrimp was performed using a dip net within representative portions of the

[1] USFWS. *Survey Guidelines for the Listed Large Branchiopods*, Revised: November 13, 2017.

depression bottom, edges, and vertical water column when there was adequate ponding. Specimens were placed into vials, with unique depression information, containing 95% ethanol solution. Specimens were identified through microscopy and using the "Key to California Fairy Shrimps" found in Eriksen and Belk (1999, Revised 2016).[2] Datasheets are attached as Appendix A.

IV. RESULTS

A total of 21 features were sampled during the 2023-2024 wet season. Of the 21 features sampled, three features supported fairy shrimp. The common, versatile fairy shrimp (*Branchinecta lindahli*) was detected in the three features. No listed species were detected. Table 1 includes the wet season fairy shrimp survey results. Exhibit 4 depicts the fairy shrimp wet season survey results map. Site photographs are depicted in Exhibit 5.

Table 1 Wet Season Fairy Shrimp Survey Results

Pool ID	FAIRY SHRIMP DETECTED	SURFACE AREA MAX (MxM)	DEPTH MAX (cm)	EASTING	NORTHING
1	Yes	7x4	12.0	475190.69	3744079.46
2	Yes	10x4	8.0	475190.20	3744020.22
3	Yes	5x4	12.0	475188.80	3744009.05
4	No	3x4	9.0	475209.79	3743799.46
5	No	7x3	12.0	475210.02	3743795.35
6	No	10x2.5	10.0	475395.97	3744107.33
7	No	2x1.5	12.0	475439.78	3744000.81
8	No	5x4	9.0	475554.40	3743914.01
9	No	2x1	6.0	475560.92	3743906.13
10	No	1x1	9.0	475567.92	3743926.98
11	No	1x1	8.0	475575.19	3743917.36
12	No	1.5x2	7.0	475577.58	3743913.02
13	No	1x1.5	7.0	475583.69	3743899.98
14	No	1x1.5	8.0	475584.21	3743897.30
15	No	1x1	6.0	475584.90	3743890.18
16	No	5x1	8.0	475585.80	3743884.41

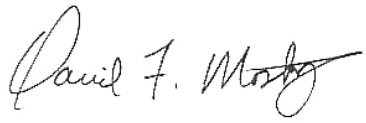
[2] *Eriksen, C. and D. Belk. 1999. Fairy Shrimps of California's Puddles, Pools, and Playas. Mad River Press, Inc. Eureka, California.*

Pool ID	FAIRY SHRIMP DETECTED	SURFACE AREA MAX (MxM)	DEPTH MAX (cm)	EASTING	NORTHING
17	No	4x2	8.0	475584.33	3743882.09
18	No	1x1	7.0	475579.92	3743872.86
19	No	2x2	10.0	475596.39	3743876.14
20	No	2x3	13.0	475583.48	3743873.84
21	No	5x2	15.0	475782.55	3744039.74

I certify that the information in this survey report and the attached exhibits fully and accurately represent my work. If you have any questions regarding this report, please contact us via email at dmoskovitz@wetlandpermitting.com, at scashin@wetlandpermitting.com, or at cwaterston@wetlandpermitting.com.

Sincerely,

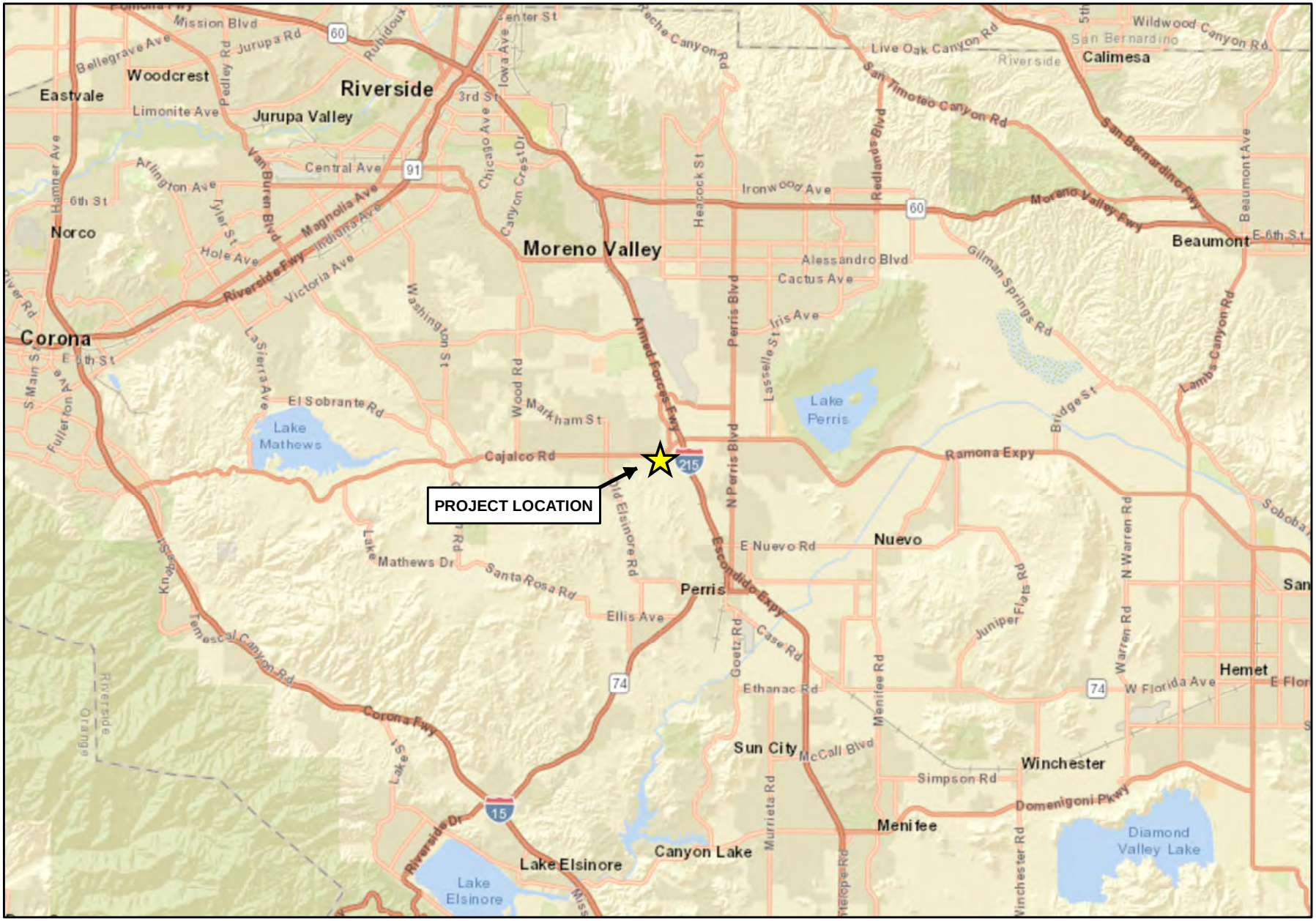
GLENN LUKOS ASSOCIATES, INC.



Dave Moskovitz
Senior Biologist (PER0010680-0)

Stephanie Cashin
Biologist (TE-20280D-0)

Chris Waterston
Biologist (ESPER-2380694)



Source: ESRI World Street Map

N

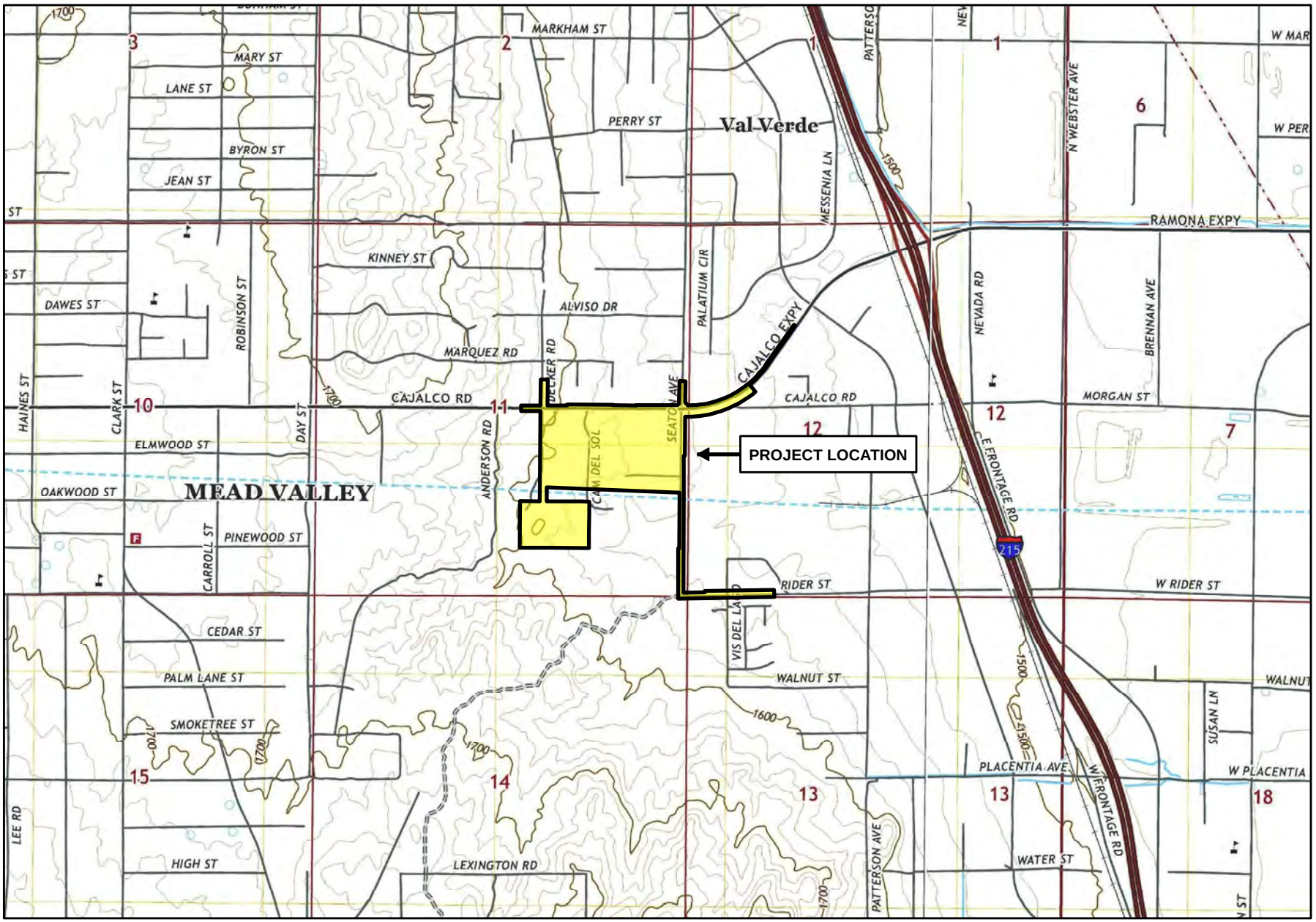
0 2 4 8 Miles

MEAD VALLEY COMMERCE CENTER

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1



Adapted from USGS Steele Peak, CA quadrangle

N

0 1,000 2,000 4,000 Feet

MEAD VALLEY COMMERCE CENTER

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2

Project - Onsite

Project - Offsite

N

0 225 450 900

Feet

1 inch = 450 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: B. Gale, GLA
Date Prepared: May 14, 2024

MEAD VALLEY COMMERCE CENTER

2023-2024 Fairy Shrimp Survey Area

GLENN LUKOS ASSOCIATES

Exhibit 3

X:\0363-THE REST\0849-94WARE\GIS\FairyShrimpGIS\0849-94_FS_SurveyArea.mxd

Project - Onsite

Project - Offsite

Ponded Features

Fairy Shrimp Detected

No Fairy Shrimp Detected

0 175 350
Feet

1 inch = 175 feet

N

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: B. Gale, GLA
Date Prepared: May 14, 2024

MEAD VALLEY COMMERCE CENTER

2023-2024 Wet Season Fairy Shrimp Survey Results

GLENN LUKOS ASSOCIATES

Exhibit 4

X:\0363-THE REST\0849-94WARE\GIS\FairyShrimpGIS\2023-2024_WetSeason\0849-94_FS_Wet2023-2024.mxd

Photograph 1: A view of the project site facing west adjacent to the intersection of Cajalco Road and Seaton Avenue.

Photograph 2: A view of the vehicle storage and residential lot within the north central portion of the project site.

Photograph 3: A view of the project site facing north within the southern portion of the project site.

Photograph 4: A view of the project site facing west within the southern portion of the project site.

Photograph 1: A view of Feature 2 and 3 facing north during the wet season sampling effort. (3744020.22 N, 475190.20 E, CW, February 15, 2024, *B. lindahli* present).

Photograph 2: A view of Features 16-20 facing south during the wet season sampling effort. (3743884.40 N, 475585.79 E, CW, February 15, 2024).

Photograph 3: A view of Features 16-20 facing north during the wet season sampling effort (3743884.40 N, 475585.79 E, SC, March 7, 2024).

Photograph 4: A view of Feature 21 (along Seaton Avenue) during the wet season sampling effort. (3744039.74 N, 475782.55 E CW, March 7, 2024).

Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 11/20/2023 | Time: | Weather Conditions: 8mph

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69	15.6	14.4		5.0		6 x 4											D, TT	Road rut
2	3744020.22, 475190.20	15.6	14.4		4.0		9 x 2											D, TT	Road rut
3	3744009.05, 475188.80	15.6	14.4		5.0		3 x 1.5											D, TT	Road rut
4	3743799.46, 475209.79				0.0		0												Road rut, Dry
5	3743795.35, 475210.02				0.0		0												Road rut, Dry
6	3744107.33, 475395.97	15.6	14.4		3.0		5 x 1.5											D, TT	
7	3744000.81, 475439.78	15.6	14.4		3.0		1.5 x 1											D, TT	
8	3743914.01, 475554.40	15.6	14.4		2.0		4 x 1											D, TT	
9	3743906.13, 475560.92				0.0		0												Road rut, Dry
10	3743926.98, 475567.92				0.0		0												Road rut, Dry
11	3743917.36, 475575.19				0.0		0												Road rut, Dry
12	3743913.02, 475577.58				0.0		0												Road rut, Dry
13	3743899.98, 475583.69				0.0		0												Road rut, Dry
14	3743897.30, 475584.21				0.0		0												Road rut, Dry
15	3743890.18, 475584.90				0.0		0												Road rut, Dry
16	3743884.41, 475585.80				0.0		0												Road rut, Dry
17	3743882.09, 475584.33	15.6	14.4		4.0		3 x 1											D, TT	
18	3743872.86, 475579.92				0.0		0												Road rut, Dry
19	3743876.14, 475596.39				0.0		0												Road rut, Dry
20	3743873.84, 475583.48	15.6	14.4		8.0		3 x 2											D, TT	
21	3744039.74, 475782.55				0.0		0												Road rut, Dry

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

For habitat conditions use two letter abbreviation as follows: NP = Natural Pool, CP = Constructed Pool; UD = undisturbed, D = disturbed: with TT = tire tracks, T = trash, P = plowed; G = grazed, UG = ungrazed by: C = cattle, H = horses, S = sheep; AB = Algal blooms present.

(Estimate grazing regime by height of grasses and forbs and density of hoof prints) LG = light grazing, MG = moderate grazing, HG = heavy grazing.

Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 12/22/2023 | Time: | Weather Conditions: 0-1mph, overcast

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69	13.3	14.4		9.0		4x6												Road rut
2	3744020.22, 475190.20	13.3	14.4		8.0		3x9												Road rut
3	3744009.05, 475188.80	13.3	14.4		9.0		4.5x3.5												Road rut
4	3743799.46, 475209.79	13.3	14.4		8.0		3x4												Road rut
5	3743795.35, 475210.02	13.3	14.4		6.0		7x3												Road rut
6	3744107.33, 475395.97	13.3	14.4		8.0		1.5x2.5												Road rut
7	3744000.81, 475439.78	13.3	14.4		7.0		2x1.5												Road rut
8	3743914.01, 475554.40	13.3	13.3		9.0		5x4												Road rut
9	3743906.13, 475560.92	13.3	13.3		6.0		2x1												Road rut
10	3743926.98, 475567.92	13.3	13.3		7.0		1x1												Road rut
11	3743917.36, 475575.19	13.3	13.3		8.0		.25x.25												Road rut
12	3743913.02, 475577.58	13.3	13.3		7.0		1.5x2												Road rut
13	3743899.98, 475583.69	13.3	13.3		4.0		.5x1												Road rut
14	3743897.30, 475584.21	13.3	13.3		4.0		1x1.5												Road rut
15	3743890.18, 475584.90	13.3	13.3		4.0		1x1												Road rut
16	3743884.41, 475585.80	13.3	13.3		8.0		5x1												Road rut
17	3743882.09, 475584.33	13.3	13.3		8.0		3x1												Road rut
18	3743872.86, 475579.92	13.3	14.4		5.0		1x1												Road rut
19	3743876.14, 475596.39	13.3	14.4		7.0		2x1												Road rut
20	3743873.84, 475583.48	13.3	14.4		13.0		3x2												Road rut
21	3744039.74, 475782.55	13.3	14.4		8.5		10x11												Road rut

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

For habitat conditions use two letter abbreviation as follows: NP = Natural Pool, CP = Constructed Pool; UD = undisturbed, D = disturbed: with TT = tire tracks, T = trash, P = plowed; G = grazed, UG = ungrazed by: C = cattle, H = horses, S = sheep; AB = Algal blooms present.

(Estimate grazing regime by height of grasses and forbs and density of hoof prints) LG = light grazing, MG = moderate grazing, HG = heavy grazing.

Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 01/05/2024 | Time: | Weather Conditions: 0-1mph, overcast

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69	10	10		8.0		3x3.2												Road rut
2	3744020.22, 475190.20	10	10.1		7.0		9x3												Road rut
3	3744009.05, 475188.80	10	10		5.0		.25x.2												Road rut
4	3743799.46, 475209.79	10	10		7.0		3x2								x				Road rut
5	3743795.35, 475210.02	10	10		9.0		4x3								x				Road rut
6	3744107.33, 475395.97	10	10.1		10.0		8x3												Road rut
7	3744000.81, 475439.78	10	10.1		5.0		2x 1.25												Road rut
8	3743914.01, 475554.40	10	10		5.0		2.5x1.5												Road rut
9	3743906.13, 475560.92	10	10		3.5		.5x.25												Road rut
10	3743926.98, 475567.92	10	10.7		3.0		2x1.5												Road rut
11	3743917.36, 475575.19	10	10.1		5.0		.25x.25												Road rut
12	3743913.02, 475577.58				0.0														Road rut, dry
13	3743899.98, 475583.69	8.9	10.1		4.0		.25x.25												Road rut
14	3743897.30, 475584.21	8.9	10.1		3.0		.25x.25												Road rut
15	3743890.18, 475584.90				0.0														Road rut, dry
16	3743884.41, 475585.80				0.0														Road rut, dry
17	3743882.09, 475584.33	8.9	10.1		5.0		1x2.5												Road rut
18	3743872.86, 475579.92	8.9	10.1		7.0		1x1												Road rut
19	3743876.14, 475596.39				0.0														Road rut, dry
20	3743873.84, 475583.48	8.9	10		11.0		1.5x 2.5												Road rut
21	3744039.74, 475782.55	8.9	10		2.0		1.5x.75												Road rut

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

For habitat conditions use two letter abbreviation as follows: NP = Natural Pool, CP = Constructed Pool; UD = undisturbed, D = disturbed: with TT = tire tracks, T = trash, P = plowed; G = grazed, UG = ungrazed by: C = cattle, H = horses, S = sheep; AB = Algal blooms present.

(Estimate grazing regime by height of grasses and forbs and density of hoof prints) LG = light grazing, MG = moderate grazing, HG = heavy grazing.

Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 01/12/2024 | Time: | Weather Conditions: 0-1mph, clear

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69	13.3	15.4		7.0		6x3												Road rut
2	3744020.22, 475190.20				0.0														Road rut, dry
3	3744009.05, 475188.80		15.6		3.0		.5x1												Road rut
4	3743799.46, 475209.79				0.0														Road rut, dry
5	3743795.35, 475210.02				0.0														Road rut, dry
6	3744107.33, 475395.97		11.6		4.0		4x1												Road rut
7	3744000.81, 475439.78				0.0														Road rut, dry
8	3743914.01, 475554.40				0.0														Road rut, dry
9	3743906.13, 475560.92				0.0														Road rut, dry
10	3743926.98, 475567.92				0.0														Road rut, dry
11	3743917.36, 475575.19				0.0														Road rut, dry
12	3743913.02, 475577.58				0.0														Road rut, dry
13	3743899.98, 475583.69				0.0														Road rut, dry
14	3743897.30, 475584.21				0.0														Road rut, dry
15	3743890.18, 475584.90				0.0														Road rut, dry
16	3743884.41, 475585.80				0.0														Road rut, dry
17	3743882.09, 475584.33				0.0														Road rut, dry
18	3743872.86, 475579.92				0.0														Road rut, dry
19	3743876.14, 475596.39				0.0														Road rut, dry
20	3743873.84, 475583.48		11.1		6.0		2x1												Road rut
21	3744039.74, 475782.55				0.0														Road rut, dry

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

For habitat conditions use two letter abbreviation as follows: NP = Natural Pool, CP = Constructed Pool; UD = undisturbed, D = disturbed: with TT = tire tracks, T = trash, P = plowed; G = grazed, UG = ungrazed by: C = cattle, H = horses, S = sheep; AB = Algal blooms present.

(Estimate grazing regime by height of grasses and forbs and density of hoof prints) LG = light grazing, MG = moderate grazing, HG = heavy grazing.

Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 01/18/2024 | Time: | Weather Conditions: 0-1mph, overcast

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69	10.5																	Road rut, dry
2	3744020.22, 475190.20																		Road rut, dry
3	3744009.05, 475188.80																		Road rut, dry
4	3743799.46, 475209.79																		Road rut, dry
5	3743795.35, 475210.02																		Road rut, dry
6	3744107.33, 475395.97																		Road rut, dry
7	3744000.81, 475439.78																		Road rut, dry
8	3743914.01, 475554.40																		Road rut, dry
9	3743906.13, 475560.92																		Road rut, dry
10	3743926.98, 475567.92																		Road rut, dry
11	3743917.36, 475575.19																		Road rut, dry
12	3743913.02, 475577.58																		Road rut, dry
13	3743899.98, 475583.69																		Road rut, dry
14	3743897.30, 475584.21																		Road rut, dry
15	3743890.18, 475584.90																		Road rut, dry
16	3743884.41, 475585.80																		Road rut, dry
17	3743882.09, 475584.33																		Road rut, dry
18	3743872.86, 475579.92																		Road rut, dry
19	3743876.14, 475596.39																		Road rut, dry
20	3743873.84, 475583.48																		Road rut, dry
21	3744039.74, 475782.55																		Road rut, dry

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

For habitat conditions use two letter abbreviation as follows: NP = Natural Pool, CP = Constructed Pool; UD = undisturbed, D = disturbed: with TT = tire tracks, T = trash, P = plowed; G = grazed, UG = ungrazed by: C = cattle, H = horses, S = sheep; AB = Algal blooms present.

(Estimate grazing regime by height of grasses and forbs and density of hoof prints) LG = light grazing, MG = moderate grazing, HG = heavy grazing.

Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 01/26/2024	Time:	Weather Conditions: 0-4mph, overcast to clear

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69	14.0	14.0		11.0		4x6												Road rut
2	3744020.22, 475190.20	16.7	14.0		6.5		10x4												Road rut
3	3744009.05, 475188.80	16.7	14.0		5.0		5x3.5												Road rut
4	3743799.46, 475209.79	14.0	14.0		6.0		1x2.5												Road rut
5	3743795.35, 475210.02	17.0	14.0		7.0		4x1.25												Road rut
6	3744107.33, 475395.97	16.7	14.0		7.0		8x1												Road rut
7	3744000.81, 475439.78	16.7	14.0		8.0		1x2.5												Road rut
8	3743914.01, 475554.40	16.7	13.5		5.0		2x.5												Road rut
9	3743906.13, 475560.92	0.0	0.0		0.0														Road rut, dry
10	3743926.98, 475567.92	16.7	13.7		3.0		1 X.25												Road rut
11	3743917.36, 475575.19	16.7	14.0		3.0		.25x.25												Road rut
12	3743913.02, 475577.58	16.7	14.0		5.0		2x.5												Road rut
13	3743899.98, 475583.69	16.7	14.0		3.0		.25x.25												Road rut
14	3743897.30, 475584.21	16.7	14.0		5.0		1x1, 1x.25												Road rut, 2 small pools
15	3743890.18, 475584.90	14.0	14.0		3.0		1x0.25												Road rut
16	3743884.41, 475585.80	14.0	14.0		4.0		1x0.5, 0.25x0.2, 0.2x0.1												Road rut, now 3 small pools
17	3743882.09, 475584.33	14.0	14.0		6.0		4x1												Road rut
18	3743872.86, 475579.92	14.0	14.0		3.5		0.2x0.2												Road rut
19	3743876.14, 475596.39	0.0	0.0		0.0														Road rut, dry
20	3743873.84, 475583.48	14.0	14.0		10.5		2.25x1.25												Road rut
21	3744039.74, 475782.55	14.6	13.0		12.0		5x2												Road rut

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

For habitat conditions use two letter abbreviation as follows: NP = Natural Pool, CP = Constructed Pool; UD = undisturbed, D = disturbed: with TT = tire tracks, T = trash, P = plowed; G = grazed, UG = ungrazed by: C = cattle, H = horses, S = sheep; AB = Algal blooms present.

(Estimate grazing regime by height of grasses and forbs and density of hoof prints) LG = light grazing, MG = moderate grazing, HG = heavy grazing.

Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 02/08/2024 | Time: | Weather Conditions: 0-2mph, part to clear

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69	19.0	16.0		8.0		6.5x4	x											Road rut, single female detected, no sample
2	3744020.22, 475190.20	19.0	16.0		7.0		3x8												Road rut
3	3744009.05, 475188.80	19.0	16.0		9.0		4x3												Road rut
4	3743799.46, 475209.79																		Road rut, dry
5	3743795.35, 475210.02																		Road rut, dry
6	3744107.33, 475395.97																		Road rut, dry
7	3744000.81, 475439.78																		Road rut, dry
8	3743914.01, 475554.40																		Road rut, dry
9	3743906.13, 475560.92																		Road rut, dry
10	3743926.98, 475567.92																		Road rut, dry
11	3743917.36, 475575.19																		Road rut, dry
12	3743913.02, 475577.58																		Road rut, dry
13	3743899.98, 475583.69																		Road rut, dry
14	3743897.30, 475584.21																		Road rut, dry
15	3743890.18, 475584.90																		Road rut, dry
16	3743884.41, 475585.80	16.0	10.0		3.0		1x0.5, 0.25x0.25												Road rut, now 3 small pools
17	3743882.09, 475584.33	16.0	10.0		4.0		3x0.75												Road rut
18	3743872.86, 475579.92				0.0														Road rut, dry
19	3743876.14, 475596.39																		Road rut, dry
20	3743873.84, 475583.48	16.0	10.0		7.5		2x1												Road rut
21	3744039.74, 475782.55	16.0	10.0		5.0		4x1												Road rut

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

For habitat conditions use two letter abbreviation as follows: NP = Natural Pool, CP = Constructed Pool; UD = undisturbed, D = disturbed: with TT = tire tracks, T = trash, P = plowed; G = grazed, UG = ungrazed by: C = cattle, H = horses, S = sheep; AB = Algal blooms present.

(Estimate grazing regime by height of grasses and forbs and density of hoof prints) LG = light grazing, MG = moderate grazing, HG = heavy grazing.

Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 02/15/2024	Time:	Weather Conditions: 0-2mph, part to clear

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69	19.0	16.0		8.0		6.5x4	x											Road rut, single female detected, no sample
2	3744020.22, 475190.20	19.0	15.0		4.0		8x1	x											Road rut, 1 male, *B. lindahli*
3	3744009.05, 475188.80	19.0	14.9		7.0		4x2												Road rut
4	3743799.46, 475209.79		0.0		0.0														Road rut, dry
5	3743795.35, 475210.02		0.0		0.0														Road rut, dry
6	3744107.33, 475395.97	19.0	16.0		6.0		6x1												Road rut
7	3744000.81, 475439.78	18.0	16.0		6.0		.25x1												Road rut
8	3743914.01, 475554.40		0.0		0.0														Road rut, dry
9	3743906.13, 475560.92		0.0		0.0														Road rut, dry
10	3743926.98, 475567.92		0.0		0.0														Road rut, dry
11	3743917.36, 475575.19		0.0		0.0														Road rut, dry
12	3743913.02, 475577.58		0.0		0.0														Road rut, dry
13	3743899.98, 475583.69		0.0		0.0														Road rut, dry
14	3743897.30, 475584.21		0.0		0.0														Road rut, dry
15	3743890.18, 475584.90		0.0		0.0														Road rut, dry
16	3743884.41, 475585.80	16.0	14.3		0.1		0.1x0.1												Road rut, now 1 small pool
17	3743882.09, 475584.33	16.0	14.3		3.0		1x0.5												Road rut
18	3743872.86, 475579.92		0.0		0.0														Road rut, dry
19	3743876.14, 475596.39		0.0		0.0														Road rut, dry
20	3743873.84, 475583.48	16.0	14.3		6.0		1x1												Road rut
21	3744039.74, 475782.55	16.0	10.0		5.0		4x1												Road rut

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

For habitat conditions use two letter abbreviation as follows: NP = Natural Pool, CP = Constructed Pool; UD = undisturbed, D = disturbed: with TT = tire tracks, T = trash, P = plowed; G = grazed, UG = ungrazed by: C = cattle, H = horses, S = sheep; AB = Algal blooms present.

(Estimate grazing regime by height of grasses and forbs and density of hoof prints) LG = light grazing, MG = moderate grazing, HG = heavy grazing.

Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 02/22/2024 | Time: | Weather Conditions: 0-2mph, foggy to overcast, rained last 3 days

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69	14.0	14.3		12.0		7x2.5	x											Road rut, water mites, too small to sample
2	3744020.22, 475190.20	14.0	14.6		8.0		9x2.25												Road rut
3	3744009.05, 475188.80	14.0	14.6		8.0		5x4												Road rut
4	3743799.46, 475209.79	14.0	14.6		9.0		3x3.5												Road rut
5	3743795.35, 475210.02	14.0	14.6		9.0		5x4.5												Road rut
6	3744107.33, 475395.97	13.8	14.0		10.0		10x2.5												Road rut
7	3744000.81, 475439.78	14.0	14.3		12.0		1x1.25												Road rut
8	3743914.01, 475554.40	13.8	14.3		7.0		2x.25												Road rut
9	3743906.13, 475560.92	13.8	14.3		6.0		.5x.25												Road rut
10	3743926.98, 475567.92	13.8	14.3		6.0		1x.3												Road rut
11	3743917.36, 475575.19	13.8	14.3		6.0		1x.25												Road rut
12	3743913.02, 475577.58	13.8	14.3		5.0		1.5x1.5												Road rut
13	3743899.98, 475583.69	13.8	14.3		7.0		1x1.5												Road rut
14	3743897.30, 475584.21	13.8	14.3		8.0		1x0.5												Road rut
15	3743890.18, 475584.90	13.8	14.3		6.0		.75x.25												Road rut
16	3743884.41, 475585.80	13.8	14.6		6.9		3x1, 2x1, 1x0.5												Road rut
17	3743882.09, 475584.33	13.8	14.6		7.0		4x2												Road rut
18	3743872.86, 475579.92	13.8	14.6		7.0		1x0.5												Road rut
19	3743876.14, 475596.39	13.8	14.3		10.0		2x2												Road rut
20	3743873.84, 475583.48	13.8	14.6		12.0		2x3												Road rut
21	3744039.74, 475782.55	14.0	13.2		15.0		3x1.5												Road rut

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

For habitat conditions use two letter abbreviation as follows: NP = Natural Pool, CP = Constructed Pool; UD = undisturbed, D = disturbed: with TT = tire tracks, T = trash, P = plowed; G = grazed, UG = ungrazed by: C = cattle, H = horses, S = sheep; AB = Algal blooms present.

(Estimate grazing regime by height of grasses and forbs and density of hoof prints) LG = light grazing, MG = moderate grazing, HG = heavy grazing.

Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 02/28/2024 | Time: | Weather Conditions: 0-1mph, foggy to clear

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69	13.3	9.2		7.0		4x5.5	1s											Road rut, 1 small male, *B. lindahli*
2	3744020.22, 475190.20	0.0	10.5		3.0		8x1	1s											Road rut, small males, too small to identify
3	3744009.05, 475188.80	0.0	10.3		9.0		2.25x4	1s											Road rut, small males, too small to identify
4	3743799.46, 475209.79	0.0	0.0		0.0														Road rut, dry
5	3743795.35, 475210.02	12.0	12.3		4.0		.5x.5												Road rut
6	3744107.33, 475395.97	11.7	12.0		6.0		7.5x.5												Road rut
7	3744000.81, 475439.78	11.7	12.0		5.0		.2x.5												Road rut
8	3743914.01, 475554.40	0.0	0.0		0.0														Road rut, dry
9	3743906.13, 475560.92	12.0	10.8		3.0		1x.25												Road rut
10	3743926.98, 475567.92	0.0	0.0		0.0														Road rut, dry
11	3743917.36, 475575.19	0.0	0.0		0.0														Road rut, dry
12	3743913.02, 475577.58	0.0	0.0		0.0														Road rut, dry
13	3743899.98, 475583.69	0.0	0.0		0.0														Road rut, dry
14	3743897.30, 475584.21	0.0	0.0		0.0														Road rut, dry
15	3743890.18, 475584.90	0.0	0.0		0.0														Road rut, dry
16	3743884.41, 475585.80	11.8	11.0		0.0		0.5 x 0.5												Road rut
17	3743882.09, 475584.33	11.8	11.0		3.0		0.5 x 0.5												Road rut
18	3743872.86, 475579.92	0.0	0.0		0.0														Road rut, dry
19	3743876.14, 475596.39	0.0	0.0		0.0														Road rut, dry
20	3743873.84, 475583.48	11.8	10.5		10.0		2 x 1												Road rut
21	3744039.74, 475782.55	11.7	10.5		8.0		2.5x1												Road rut

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

For habitat conditions use two letter abbreviation as follows: NP = Natural Pool, CP = Constructed Pool; UD = undisturbed, D = disturbed: with TT = tire tracks, T = trash, P = plowed; G = grazed, UG = ungrazed by: C = cattle, H = horses, S = sheep; AB = Algal blooms present.

(Estimate grazing regime by height of grasses and forbs and density of hoof prints) LG = light grazing, MG = moderate grazing, HG = heavy grazing.

Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 03/07/2024	Time:	Weather Conditions: 0-2mph, part cloud, rained yesterday 0.5-0.75in

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69	20.5	19.5		12.0		7x2.5	1s											Road rut, 2 males collected, *B. lindahli*
2	3744020.22, 475190.20	20.3	19.3		8.0		3x10												Road rut
3	3744009.05, 475188.80	0.0	0.0		12.0		5x4	1s											Road rut, 1 male, *B. lindahli*
4	3743799.46, 475209.79	19.3	20.3		9.0		4x4												Road rut
5	3743795.35, 475210.02	0.0	19.3		12.0		5x3												Road rut
6	3744107.33, 475395.97	20.5	19.5		10.0		10x2.5												Road rut
7	3744000.81, 475439.78	20.5	19.4		12.0		1x1.25												Road rut
8	3743914.01, 475554.40	20.6	19.5		6.0		2x.25												Road rut
9	3743906.13, 475560.92	20.5	19.5		5.0		.5x.25												Road rut
10	3743926.98, 475567.92	20.6	19.5		9.0		1x.3												Road rut
11	3743917.36, 475575.19	20.6	19.4		8.0		1x.25												Road rut
12	3743913.02, 475577.58	20.6	19.5		7.0		1.5x1.5												Road rut
13	3743899.98, 475583.69	20.6	19.5		6.0		1x1.5												Road rut
14	3743897.30, 475584.21	20.6	19.8		5.0		1x0.5												Road rut
15	3743890.18, 475584.90	20.6	19.6		6.0		.75x.25												Road rut
16	3743884.41, 475585.80	20.6	19.3		6.0		3x1, 2x1, 1x0.5												Road rut
17	3743882.09, 475584.33	20.6	19.5		6.0		4x2												Road rut
18	3743872.86, 475579.92	20.4	19.6		5.0		1x0.5												Road rut
19	3743876.14, 475596.39	20.4	19.6		8.0		2x2												Road rut
20	3743873.84, 475583.48	20.6	19.3		10.0		2x3												Road rut
21	3744039.74, 475782.55	20.4	19.3		14.0		3x1.5												Road rut

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

For habitat conditions use two letter abbreviation as follows: NP = Natural Pool, CP = Constructed Pool; UD = undisturbed, D = disturbed: with TT = tire tracks, T = trash, P = plowed; G = grazed, UG = ungrazed by: C = cattle, H = horses, S = sheep; AB = Algal blooms present.

(Estimate grazing regime by height of grasses and forbs and density of hoof prints) LG = light grazing, MG = moderate grazing, HG = heavy grazing.

Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 03/15/2024 | Time: | Weather Conditions: 0-5mph, part cloud

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69	15.0	17.0		7.5		3X3	1s											Road rut, *B. lindahli*
2	3744020.22, 475190.20	0.0	0.0		0.0														Road rut, dry
3	3744009.05, 475188.80	0.0	17.0		4.0		1X3	1s											Road rut, *B. lindahli*
4	3743799.46, 475209.79																		Road rut, dry
5	3743795.35, 475210.02																		Road rut, dry
6	3744107.33, 475395.97																		Road rut, dry
7	3744000.81, 475439.78	0.0	0.0		0.0														Road rut, dry
8	3743914.01, 475554.40																		Road rut, dry
9	3743906.13, 475560.92																		Road rut, dry
10	3743926.98, 475567.92																		Road rut, dry
11	3743917.36, 475575.19																		Road rut, dry
12	3743913.02, 475577.58																		Road rut, dry
13	3743899.98, 475583.69																		Road rut, dry
14	3743897.30, 475584.21																		Road rut, dry
15	3743890.18, 475584.90																		Road rut, dry
16	3743884.41, 475585.80																		Road rut, dry
17	3743882.09, 475584.33																		Road rut, dry
18	3743872.86, 475579.92																		Road rut, dry
19	3743876.14, 475596.39																		Road rut, dry
20	3743873.84, 475583.48	15.5	17.0		4.0		.25x.25												Road rut
21	3744039.74, 475782.55	15.5	17.4		8.0		4X2												Road rut

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

For habitat conditions use two letter abbreviation as follows: NP = Natural Pool, CP = Constructed Pool; UD = undisturbed, D = disturbed: with TT = tire tracks, T = trash, P = plowed; G = grazed, UG = ungrazed by: C = cattle, H = horses, S = sheep; AB = Algal blooms present.

(Estimate grazing regime by height of grasses and forbs and density of hoof prints) LG = light grazing, MG = moderate grazing, HG = heavy grazing.

Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 03/20/2024	Time:	Weather Conditions: 0-1mph, clear

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69	0.0	0.0		0.0		0	1s											Road rut,mud,1 male collected,*B. lindahli*
2	3744020.22, 475190.20																		Road rut, dry
3	3744009.05, 475188.80	0.0	0.0		0.0		0												Road rut, dry
4	3743799.46, 475209.79																		Road rut, dry
5	3743795.35, 475210.02																		Road rut, dry
6	3744107.33, 475395.97																		Road rut, dry
7	3744000.81, 475439.78																		Road rut, dry
8	3743914.01, 475554.40																		Road rut, dry
9	3743906.13, 475560.92																		Road rut, dry
10	3743926.98, 475567.92																		Road rut, dry
11	3743917.36, 475575.19																		Road rut, dry
12	3743913.02, 475577.58																		Road rut, dry
13	3743899.98, 475583.69																		Road rut, dry
14	3743897.30, 475584.21																		Road rut, dry
15	3743890.18, 475584.90																		Road rut, dry
16	3743884.41, 475585.80																		Road rut, dry
17	3743882.09, 475584.33																		Road rut, dry
18	3743872.86, 475579.92																		Road rut, dry
19	3743876.14, 475596.39																		Road rut, dry
20	3743873.84, 475583.48	0.0	0.0		0.0														Road rut, dry
21	3744039.74, 475782.55	17.2	22.5		5.0		1x2								x				Road rut

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

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(Estimate grazing regime by height of grasses and forbs and density of hoof prints) LG = light grazing, MG = moderate grazing, HG = heavy grazing.

Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 03/28/2024 | Time: | Weather Conditions: 0-1mph, clear

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69																		Road rut, dry
2	3744020.22, 475190.20																		Road rut, dry
3	3744009.05, 475188.80																		Road rut, dry
4	3743799.46, 475209.79																		Road rut, dry
5	3743795.35, 475210.02																		Road rut, dry
6	3744107.33, 475395.97																		Road rut, dry
7	3744000.81, 475439.78																		Road rut, dry
8	3743914.01, 475554.40																		Road rut, dry
9	3743906.13, 475560.92																		Road rut, dry
10	3743926.98, 475567.92																		Road rut, dry
11	3743917.36, 475575.19																		Road rut, dry
12	3743913.02, 475577.58																		Road rut, dry
13	3743899.98, 475583.69																		Road rut, dry
14	3743897.30, 475584.21																		Road rut, dry
15	3743890.18, 475584.90																		Road rut, dry
16	3743884.41, 475585.80																		Road rut, dry
17	3743882.09, 475584.33																		Road rut, dry
18	3743872.86, 475579.92																		Road rut, dry
19	3743876.14, 475596.39																		Road rut, dry
20	3743873.84, 475583.48																		Road rut, dry
21	3744039.74, 475782.55																		Road rut, dry

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

For habitat conditions use two letter abbreviation as follows: NP = Natural Pool, CP = Constructed Pool; UD = undisturbed, D = disturbed: with TT = tire tracks, T = trash, P = plowed; G = grazed, UG = ungrazed by: C = cattle, H = horses, S = sheep; AB = Algal blooms present.

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Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 04/04/2024	Time:	Weather Conditions: 0-5mph, part cloud, rained >1in over weekend

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69	16.7	14.4		7.0		5x6.5												Road rut
2	3744020.22, 475190.20				0.0														Road rut, mud only
3	3744009.05, 475188.80	16.7	14.4		6.0		3x1.5												Road rut
4	3743799.46, 475209.79				0.0														Road rut, mud only
5	3743795.35, 475210.02	16.7	14.4		4.0		1x0.25												Road rut
6	3744107.33, 475395.97				0.0														Road rut, mud only
7	3744000.81, 475439.78	16.7	14.4		4.0		2x2												Road rut
8	3743914.01, 475554.40				0.0														Road rut, dry
9	3743906.13, 475560.92				0.0														Road rut, dry
10	3743926.98, 475567.92				0.0														Road rut, dry
11	3743917.36, 475575.19	16.7	14.4		4.0		2.5x2												Road rut
12	3743913.02, 475577.58				0.0														Road rut, dry
13	3743899.98, 475583.69				0.0														Road rut, dry
14	3743897.30, 475584.21	16.7	14.4		3.0		0.25x0.25												Road rut
15	3743890.18, 475584.90				0.0														Road rut, dry
16	3743884.41, 475585.80	16.7	14.4		1.0		0.1x0.1												Road rut
17	3743882.09, 475584.33	16.7	14.4		4.0		1x3												Road rut
18	3743872.86, 475579.92				0.0														Road rut, dry
19	3743876.14, 475596.39				0.0														Road rut, dry
20	3743873.84, 475583.48	16.7	14.4		5.0		2x2												Road rut
21	3744039.74, 475782.55	16.7	14.4		7.0		4x4												Road rut

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

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Appendix 1. U.S. Fish and Wildlife Service - Data Sheet for Wet Season Surveys for Listed Large Branchiopods

Site or Project Name: Mead Valley Commerce Center [Cajalco Commerce Center]	County: Riverside	Quad: Steele Peak	Township: 4S	Range: 4W	Section: 11, 12, 13, 14

SURVEYOR/Permit Number: Stephanie Cashin (TE-20280D-0) and Chris Waterston (ESPER-2380694)

Date: 04/12/2024	Time:	Weather Conditions: 2-3mph, part cloud to clear

Feature ID#	UTM (Northing, Easting, Datum)	Temp (˚C)		Depth (cm)		Surface Area (m x m)		Crustaceans					Insects				Platyhelminths (flatworms)	Habitat Condition	Notes / Voucher information
		Air	Water	Average	Est. Max.	Present	Est. Max.	Anostracans	Notostracans	Copepods	Ostracods	Cladocera	Coleoptera	Hemiptera	Diptera Culicidae	Diptera Chironomidae			
1	3744079.46, 475190.69	16.7																	Road rut, dry
2	3744020.22, 475190.20																		Road rut, dry
3	3744009.05, 475188.80																		Road rut, dry
4	3743799.46, 475209.79																		Road rut, dry
5	3743795.35, 475210.02																		Road rut, dry
6	3744107.33, 475395.97																		Road rut, dry
7	3744000.81, 475439.78																		Road rut, dry
8	3743914.01, 475554.40																		Road rut, dry
9	3743906.13, 475560.92																		Road rut, dry
10	3743926.98, 475567.92																		Road rut, dry
11	3743917.36, 475575.19																		Road rut, dry
12	3743913.02, 475577.58																		Road rut, dry
13	3743899.98, 475583.69																		Road rut, dry
14	3743897.30, 475584.21																		Road rut, dry
15	3743890.18, 475584.90																		Road rut, dry
16	3743884.41, 475585.80																		Road rut, dry
17	3743882.09, 475584.33																		Road rut, dry
18	3743872.86, 475579.92																		Road rut, dry
19	3743876.14, 475596.39																		Road rut, dry
20	3743873.84, 475583.48																		Road rut, dry
21	3744039.74, 475782.55																		Road rut, dry

Notes: Fill in abbreviated names of Anostracans and Notostracans, for all others indicate presence with a check mark. Anostracan and Notostracan Abbreviations: Use first two letters of genus and species name (e.g., LIOC = Linderiella occidentalis, BRLI = Branchinecta lindahli).

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(Estimate grazing regime by height of grasses and forbs and density of hoof prints) LG = light grazing, MG = moderate grazing, HG = heavy grazing.

GLENN LUKOS ASSOCIATES
Regulatory Services

June 28, 2024

Ms. Stacey Love
U.S. Fish and Wildlife Service
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

SUBJECT: Submittal Requirements for 2023 Dry Season Survey for Listed Branchiopods Conducted for the Mead Valley Commerce Center Project Site, an Approximately 84-Acre Property Located in the Community of Mead Valley, Riverside County, California.

Dear Ms. Love:

This letter report documents the results of a dry season survey conducted by Glenn Lukos Associates, Inc. (GLA) for 21 depressional features at the Mead Valley Commerce Center Project Site (Project) in the unincorporated community of Mead Valley, Riverside County. The 21 features included 15 that were observed inundated during general biological surveys conducted by GLA in the late winter/early spring of 2023, and another six features that were noted with a potential to pond for a sufficient period of time to support fairy shrimp. GLA notified the U.S. Fish and Wildlife Service (USFWS) on September 20, 2023 of the intent to perform the dry season surveys, and conducted the dry season soil collection on October 19, 2023.

GLA biologist David Moskovitz (PER0010680-0) performed the dry soil collection with assistance from GLA biologists Stephanie Cashin (TE-20280D-0), and under supervision GLA trainees: Chris Waterston, David Smith, and Velvet Park on October 19, 2023. Dr. D. Christopher Rodgers (TE- 796284-7) processed the soil samples to determine cyst presence/absence. The report from Dr. Rodgers summarizing the results of soil analysis is attached as Appendix A.

I. SITE LOCATION AND DESCRIPTION

The Project site comprises approximately 83.78 acres in the Community of Mead Valley, Riverside County, California [Exhibit 1 – Regional Map] and is located within Section(s) 11, 12, 13, and 14 of Township 4 South, Range 4 West, of the U.S. Geological Survey (USGS) 7.5-

minute quadrangle map Steele Peak, California (dated 2021) [Exhibit 2 – Vicinity Map]. The Project site is bordered by Cajalco Road to the north, Decker Road to the west, Seaton Avenue to the east, Rider Street in the south, with open space and small residential lands to the west and south. Universal Transverse Mercator (UTM) coordinates approximately corresponding to the Property are 475583 mE and 3743891 mN.

The fairy shrimp survey area [Exhibit 3 – Fairy Shrimp Survey Area Map] is generally flat with elevations ranging from approximately 1,600 feet above mean sea level (AMSL) at the northwestern boundary to 1,550 feet AMSL at the southeastern limits of the Project site. All features within the site were unvegetated and located in areas of road ruts and roadway depressions, which were subject to heavy disturbances from off-road vehicle use and residential vehicle access.

II. METHODOLOGY

A. Soil Collection

Soil sample collection followed the USFWS *Survey Guidelines for the Listed Large Branchiopods* (Survey Guidelines). [1] Soil sample collection for the 21 features identified was conducted by GLA biologist David Moskovitz on October 19, 2023 with assistance from Stephanie Cashin, Chris Waterston, David Smith, and Velvet Park that were being supervised for training.

Soil was collected when the pools were fully dry using a hand trowel to collect intact chunks of soil from the top 1–3 cm of pool sediment. The number of soil samples collected from each of the 21 features was based on feature size according to the Survey Guidelines as summarized in Table 1 below. Starting at the edge of each depression, samples were taken from equidistant points along the longest transect and widest transect of each depression. Additional samples were taken at the deepest part of each feature.

Soil samples of approximately 100 milliliters (ml) each were removed at each sub-sample location using a hand trowel and were combined into a labeled bag for each feature with the collection date, location and feature ID, and name of collector for future processing. Per the protocol, if a feature measured less than three meters (m) then the total soil sample did not exceed one-half liter in volume for the feature. Samples were stored in a dry location out of direct sunlight until delivery to Dr. Rodgers for processing. Dry Season Fairy Shrimp Survey results are depicted in Exhibit 4 [2023 Dry Season Fairy Shrimp Survey Results]. Representative site photographs are included as Exhibit 5.

[1] USFWS. *Survey Guidelines for the Listed Large Branchiopods*, Revised: November 13, 2017.

Table 1 – Soil Sample Summary

Feature Size (Sq. meters)	Number of Samples Collected per Pool	Number of Pools of Each Feature Size Class
< 2.5	2-5	5
2.5–24	10	13
25–235	25	3
236–2300	NA	NA
2300–23,225	NA	NA
Total Pools Sampled		21

B. Soil Processing and Analysis

According to the soil processing report, soil samples were prepared for analysis by dissolving the clumps of soil in water and sieving material through 300- and 150 micron (µm) pre sized screens. The portions of material that remained in the sieves was dissolved in a brine solution to separate the organic material fom the inorganic material. Retained soil was dried and examined under a microscope for large branchiopod cysts (embryonic eggs).

C. Soil Processing Results

No vernal pool branchiopod cyts were recovered from the soil samples. The Results of the Dry Season Soils Report [Appendix A] contains complete methodology for preparing soil samples collected from the Project site.

III. DESCRIPTION OF THE DEPRESSIONAL FEATURES

The Project site contains 21 features that have been documented to pond seasonally. The features can be characterized as either road ruts and/or unvegetated depressions within hard-compacted dirt access roads that meander throughout the Project site.

Road Ruts/Unvegetated Parking Areas

Depressional features are present throughout the Project site primarily within areas that are heavily disturbed, such as within and along earthen roads. Although these features are seasonally ponded, they include features such as road ruts that do not represent otherwise naturally occurring features and are subject to a level of disturbance that prohibits hydrophytic plants from establishing and do not meet the biological criteria to support wetland indicator or vernal pool species. These features consist primarily of bare ground with little to no emergent vegetation.

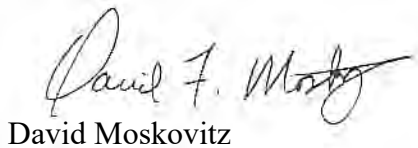
IV. RESULTS

Of the 21 features sampled, no fairy shrimp cysts were detected [Appendix A].

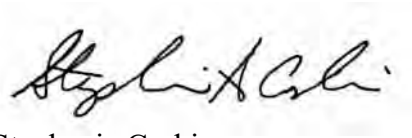
I certify that the information in this survey report and the attached exhibits fully and accurately represent my work. If you have any questions regarding this report, please contact me via email at dmoskovitz@wetlandpermitting.com.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

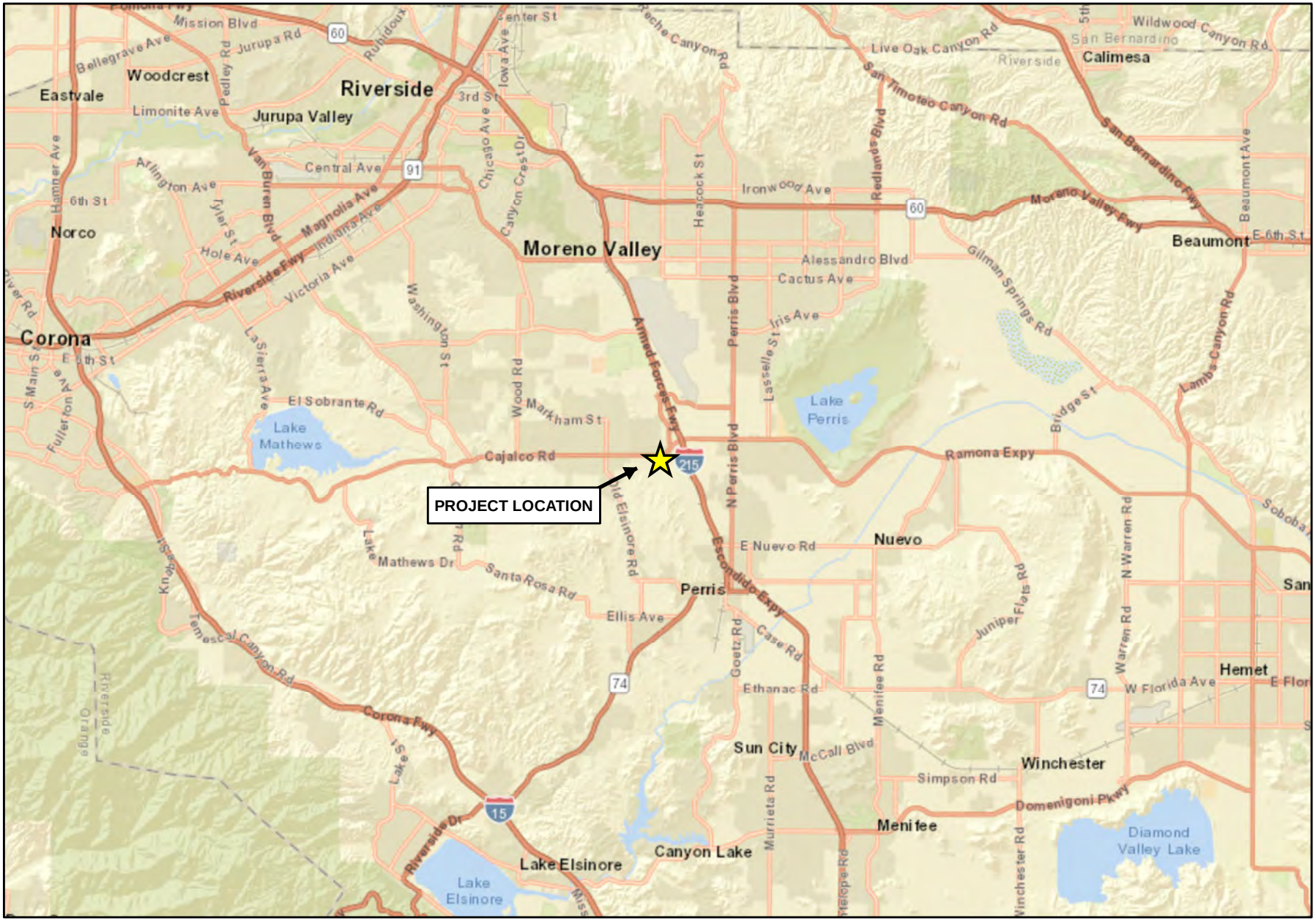


David Moskovitz
Biologist (PER0010680-0)



Stephanie Cashin
Biologist (TE-20280D-0)

P:0849-94a.FairyShrmip_dry2023.rpt



Source: ESRI World Street Map

N

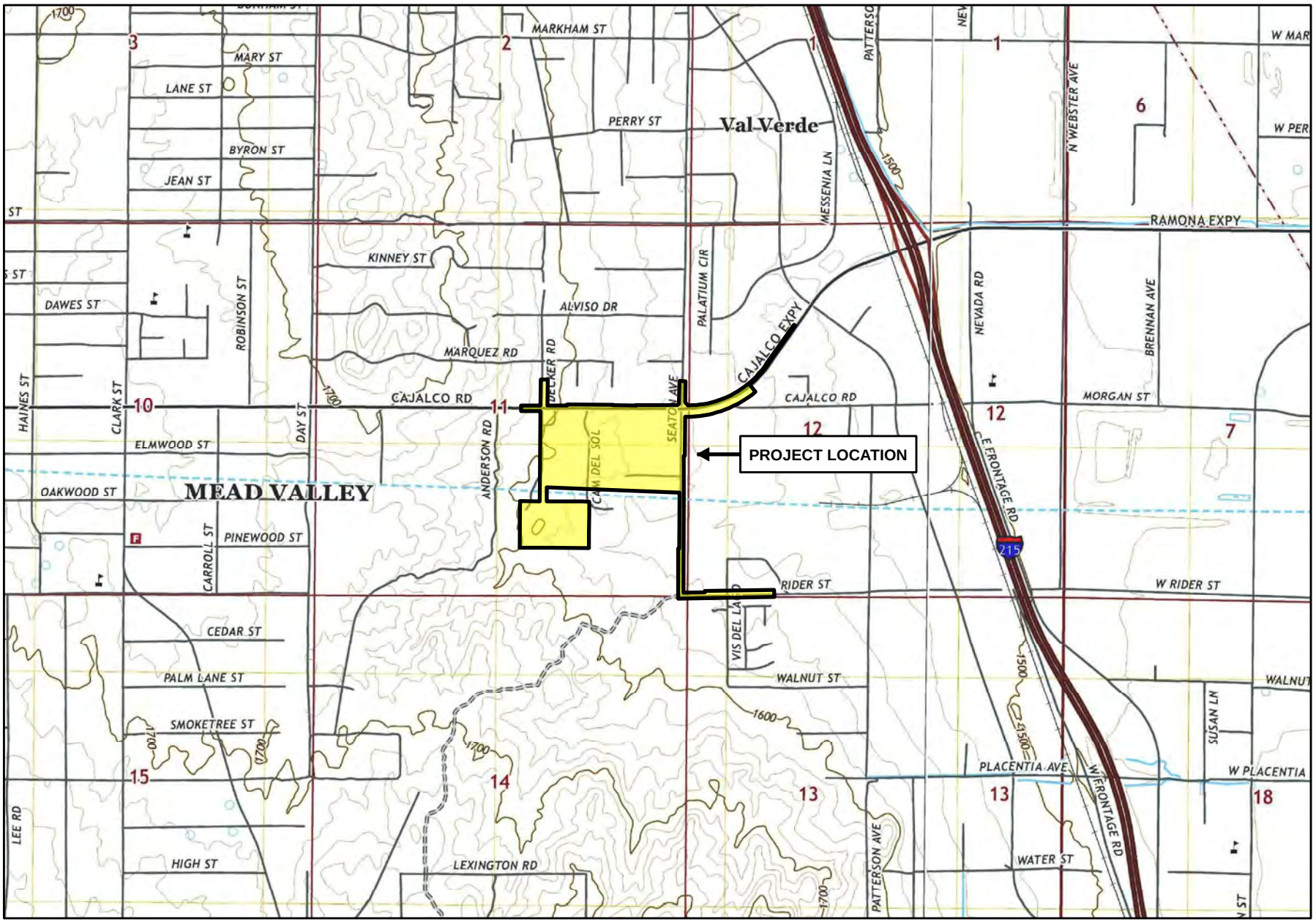
0 2 4 8 Miles

MEAD VALLEY COMMERCE CENTER

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1



Adapted from USGS Steele Peak, CA quadrangle

N

0 1,000 2,000 4,000 Feet

MEAD VALLEY COMMERCE CENTER

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2

Project - Onsite

Project - Offsite

N

0 225 450 900

Feet

1 inch = 450 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: B. Gale, GLA
Date Prepared: May 14, 2024

MEAD VALLEY COMMERCE CENTER

2023-2024 Fairy Shrimp Survey Area

GLENN LUKOS ASSOCIATES

Exhibit 3

X:\0363-THE REST\0849-94WARE\GIS\FairyShrimpGIS\0849-94_FS_SurveyArea.mxd

Project - Onsite

Project - Offsite

Ponded Feature
(No Fairy Shrimp
Cysts Detected)

0 175 350
Feet

1 inch = 175 feet

N

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD 1983 2011
Map Prepared by: B. Gale, GLA
Date Prepared: May 14, 2024

MEAD VALLEY COMMERCE CENTER

2023 Dry Season Fairy Shrimp Survey Results

GLENN LUKOS ASSOCIATES

Exhibit 4

X:\0363-THE REST\0849-94WARE\GIS\FairyShrimpGIS\0849-94_FS_Dry2023.mxd

Photograph 1: A view of Feature 2 during the dry season sampling effort. Photo taken on 10/19/23.

Photograph 2: A view of Feature 17 during the dry season sampling effort. Photo taken on 10/19/23.

Photograph 3: A view of Feature 21 during the dry season sampling effort. Photo taken on 10/19/23.

Photograph 4: A view of Feature 14 and 15 during the dry season sampling effort. Photo taken on 10/19/23.

APPENDIX A

Results of Dry Season Fairy Shrimp Soil Collection

21 March 2024

Thienan Pfeiffer
tly@wetlandpermitting.com
Glenn Lukos Associates, Inc.
1940 E Deere Avenue, Suite 250
Santa Ana, CA 92705, USA
Office 949.340.9088

SUBJECT: Results of Dry Season Special Status Crustacean Soil Samples Analyses from the Seaton Proposed Project Site, Riverside County, CA.

Dear Thienan:

Glenn Lukos Associates, Inc. (GLA) biologists sent soil samples to D. Christopher Rogers from 21 previously identified, potential, special status shrimp habitats within the proposed Seaton Proposed Project Site. This project site is in the City of Mead Valley (APNs: 317-080-002, -006, -007, -019, -023, and -030), in Riverside County, California. The samples were sent for examination and analysis for federally listed and petitioned vernal pool crustaceans.

Samples were sent by GLA staff from the previously identified habitats. No vernal pool branchiopods of any kind were recovered from the soil samples.

D. Christopher Rogers understands that GLA will submit this report and all other pertinent materials and information to the US Fish and Wildlife Service (USFWS), and the California Department of Fish and Wildlife (CDFW), as required by the USFWS guidelines for a protocol level survey.

Definitions

For this report, special status shrimp are defined to include shrimp species listed as threatened or endangered under the federal Endangered Species Act (ESA) (50 CFR 17.11 for listed animals and various Federal Register notices for proposed species). Three special status fairy shrimp species (*Branchinecta lynchi* Eng, Belk, & Eriksen, 1990, *Branchinecta sandiegonensis* Fugate, 1993, and *Streptocephalus woottoni* Eng, Belk, & Eriksen, 1990) are known to occur in the vicinity of the proposed project site. In addition, the nonlisted fairy shrimp species *Branchinecta lindahli* Packard, 1883 is known from the proposed site vicinity.

Methods

Soil samples from 21 potential special status shrimp habitats were received from GLA for analyses. The samples ranged in volume from 600 to 2600 ml in total volume. The soil samples arrived in plastic ziplock bags, labeled with the locality numbers, and submitted to Dr. Roger's

laboratory for analysis. All processing, analyses and culturing was conducted under USFWS Permit #TE796284-7.

Soil samples were labelled with the numbers on their respective bags and prepared for examination by dissolving the clumps of soil in water and sieving the material through 300- and 150- µm pore size screens. The small size of these screens ensures that the eggs from the shrimp species will be retained. The portion of each sample retained in the screens was dissolved in a brine solution to separate the organic material from the inorganic material. The organic fraction was then examined under a microscope.

Results

No vernal pool branchiopods of any kind were recovered from the soil samples. The samples contained large amounts of grass seeds and only eight pools (2, 3, 7, 8, 10, 12, 18, and 21) had any aquatic invertebrate artifacts at all, and these were limited to turbellarian (flat worm) cocoons.

These results are insufficient by themselves to determine the presence or absence of listed vernal pool crustaceans at the Seaton proposed project site and must be coupled with a USFWS protocol wet season survey before any determinations can be made.

Certification

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

If you have any questions, please call me.

Sincerely,

D. Christopher Rogers
785.925.7468
Crustacean Taxonomist and Ecologist

Literature Cited

Federal Register. 1994. 19 September: Fish & Wildlife Service, Interior. Endangered and Threatened Wildlife and Plants; Determination of Endangered Status and Withdrawal of Proposal to Give Endangered Status; Final Rule and Proposed Rule; Determination of Endangered Status for the Conservancy Fairy Shrimp, Longhorn Fairy Shrimp, and the Vernal

Pool Tadpole Shrimp; and Threatened Status for the Vernal Pool Fairy Shrimp. 59 CFR (17): 48153-48185.

Appendix G 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"; Conforming (September 8, 2023), "waters of the United Sates" are defined as follows:

(a) ***Waters of the United States*** means:

(1) Waters which are:
(i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(ii) The territorial seas; or
(iii) Interstate waters;

(2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;

(3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;

(4) Wetlands adjacent to the following waters:
(i) Waters identified in paragraph (a)(1) of this section; or
(ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;

(5) Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section

(b) The following are not "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(2) through (5) of this section:

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

(2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted

cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;

(3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;

(4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;
(5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
(6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and

(8) Swales and erosional features (*e.g.,* gullies, small washes) characterized by low volume, infrequent, or short duration flow.

(c) In this section, the following definitions apply:

(1) ***Wetlands*** means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(2) ***Adjacent*** means having a continuous surface connection

(3) ***High tide line*** means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

(4) ***Ordinary high water mark*** means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(5) ***Tidal waters*** means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.

Section 401 of the Clean Water Act

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

State Regulations

Fish and Game Code

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

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

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

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

Porter Cologne Act

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