

November 6, 2019

MY CALIFORNIA CAPITAL Attention: *Alex Espinoza* 1757 S. Euclid Avenue Ontario, California 91762

SUBJECT: Biological Due Diligence Survey for the Approximately 64-Acre Perris Highlands Project Located in the City of Perris, Riverside County, California

Introduction

This report contains the findings of ELMT Consulting's (ELMT) biological due diligence survey and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis for the approximately 64-acre Perris Highlands Project (project or project site) located on the City of Perris, Riverside County, California. The field investigation was conducted by biologists Travis J. McGill and Jacob H. Lloyd Davies on July 18, 2019 to document baseline conditions and assess the potential for special-status¹ plant and wildlife species to occur within the project site that could pose a constraint to implementation of the proposed project.

Special attention was given to the suitability of the on-site habitat to support burrowing owl (*Athene cunicularia*), and several other 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 on or within the general vicinity of the project site.

Project Location

The project site is generally located west of Interstate 215, south of State Route 74, east of Interstate 15 in the City of Perris, Riverside County, California. The project site is depicted on the Romoland quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map within Section 19 of Township 5 South, Range 3 West. Specifically, the approximately 64-acre project site is located south and east of Goetz Road, north of North Canyon Drive, and approximately 1 mile west of Murrieta Road within Assessor Parcel Numbers (APNs) 335-430-021, 335-020-032, 335-060-009, -046, and -047. Refer to Exhibits 1 and 2 in Attachment A.

Project Description

The proposed project consists of the development of single-family residential developments.

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.

Methodology

Western Riverside County MSHCP Consistency Analysis

The project site is located in the City of Perris within the Mead Valley Area Plan of the MSHCP. The City is a permittee under the MSHCP and, while the project is not specifically identified as a Covered Activity under Section 7.1 of the MSHCP, public and private development that are outside of Criteria Areas and Public/Quasi-Public (PQP) Lands are permitted under the MSHCP, subject to consistency with MSHCP policies that apply to area outside of Criteria Areas. As such, to achieve coverage, the project must be consistent with the following policies of the MSHCP:

- The policies for the protection of species associated with Riparian/Riverine areas and vernal pools as set forth in Section 6.1.2 of the MSHCP;
- The policies for the protection of Narrow Endemic Plant Species as set forth in Section 6.1.3 of the MSHCP;
- The requirements for conducting additional surveys as set forth in Section 6.3.2 of the MSHCP;
- Guidelines pertaining to the Urban/Wildlands Interface intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area as detailed in Section 6.1.4 of the MSHCP.

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

Riparian/Riverine Areas and Vernal Pools

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

Aerial photography was reviewed prior to conducting the habitat assessment. The aerials were used to locate and inspect any potential natural drainage features and water bodies that may be considered riparian/riverine habitat under the MSHCP. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory authorities.

Narrow Endemic Plant Species

Section 6.1.3 of the MSHCP, *Protection of Narrow Endemic Plant Species*, states that the MSHCP database does not provide sufficient detail to determine the extent of the presence/distribution of Narrow Endemic Plant Species within the MSHCP Plan Area. Additional surveys may be needed to gather information to determine the presence/absence of these species to ensure that appropriate conservation of these species occurs. Based on the Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map query and review of the MSHCP, it was determined that the project site is not located



within the designated survey area for Narrow Endemic Plant Species as depicted in Figure 6-1 within Section 6.1.3 of the MSHCP.

Additional Survey Needs and Procedures

In accordance with Section 6.3.2 of the MSHCP, *Additional Survey Needs and Procedures*, additional surveys may be needed for certain species in order to achieve coverage for these species. The query of the RCA MSHCP Information Map and review of the MSHCP determined that the project site is located within the designated survey area for burrowing owl as depicted in Figures 6-4, within Section 6.3.2 of the MSHCP. No other special-status wildlife species surveys were identified.

Urban/Wildlands Interface Guidelines

Section 6.1.4 of the MSHCP, *Guidelines Pertaining to Urban/Wildlands Interface*, is intended to address indirect effects associated with development in proximity to MSHCP Conservation Areas. The Urban/Wildlife Interface Guidelines are intended to ensure that indirect project-related impacts to the MSHCP Conservation Area, including drainage, toxics, lighting, noise, invasive plant species, barriers, and grading/land development, are avoided or minimized. The project site is not located within or immediately adjacent to any Criteria Cells, corridors, linkages, or designated Public/Quasi-Public (PQP) Lands. Therefore, the Urban/Wildlands Interface Guidelines do not apply to this project.

Literature Review

The first step in determining if a project is consistent with the above listed sections of the MSHCP is to conduct a literature review and records search for special-status biological resources potentially occurring on or within the vicinity of the project. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project were determined through a query of the CDFW's QuickView Tool in the Biogeographic Information and Observation System (BIOS), CNDDB Rarefind 5, the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, United States Fish and Wildlife Service (USFWS) species listings, and species covered within the MSHCP and associated technical documents.

All available literature detailing the biological resources previously observed on or within the vicinity of the project were reviewed to understand existing site conditions and note the extent of any disturbances that have occurred on the project that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources, as well as the following resources:

- Google Earth Pro historic aerial imagery (1996-2018);
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey;
- USFWS Critical Habitat designations for Threatened and Endangered Species;
- Stephen's Kangaroo Rat Habitat Conservation Plan; and
- RCA MSHCP Information Map.



The literature review provided a baseline from which to inventory the biological resources potentially occurring on the project. 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.

Habitat Assessment/Field Investigation

Following the literature review, biologists Travis J. McGill and Jacob H. Lloyd Davis inventoried and evaluated the condition of the habitat found within the boundaries of the project site on July 18, 2019. 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. In addition, aerial photography was reviewed prior to the site investigation to locate potential natural corridors and linkages that may support the movement of wildlife through the area. These areas identified on aerial photography were then walked during the field survey.

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.

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.

Stephen's Kangaroo Rat Habitat Conservation Plan

Riverside County developed the Stephen's Kangaroo Rat Habitat Conservation Plan (SKR HCP) in 1990 for protecting the Stephens' kangaroo rat (*Dipodomys stephensi*, SKR), a federally endangered and state threatened species which occurs in Riverside County (County Ordinance No. 663.10). The HCP provided for incidental take of SKR within the plan boundaries but outside of seven core reserves that were established to provide long-term conservation for SKR. SKR was found to occur primarily within the boundaries of these seven core reserves. Preservation of the core reserves was identified as adequate mitigation to offset any potential impacts to SKR outside the seven core reserves. The project site, although



not located within a core reserve area, is located within a Fee Area for SKR. Fee Areas were established to collected mitigation fees to fund the costs of managing the seven core reserve areas. Therefore, the project applicant is not expected to impact SKR but will need to pay the SKR HCP mitigation fee prior to development of the site. No further mitigation is required for SKR.

Existing Site Condition

Surface elevations on the project site range from approximately 1,600 to 1,950 feet above mean sea level. The eastern boundary of the project is located at the highest elevation and slopes north to south towards the northern boundary of the site. Based on the NRCS USDA Web Soil Survey², the project site is underlain by the following soil units: Lodo rocky loam (25 to 50 percent slopes, eroded), Lodo rocky loam (8 to 25 percent slopes, eroded), and Ysidora gravelly very fine sandy loam (8 to 25 percent slopes, eroded).

The project site is bordered by undeveloped land and residential developments to the south, west and north, and undeveloped and graded land to the east. The project site primarily consists of vacant, undeveloped land that supports natural plant communities. Several named dirt access roads extend round the middle interior of the project site and to the peak in the middle of the site. A remnant rural residential home was observed in the middle of on the south facing slope on the southern portion of the site. Refer to Attachment B, *Site Photographs*, for representative site photographs.

Vegetation

Two plant communities were observed on the project site during the field investigation: Riversidean sage scrub (RSS) and non-native grassland. In addition, the project site consists of land cover types that would be classified as disturbed and developed.

Riversidean Sage Scrub

The project site is primarily composed of a RSS pant community. This plant community is found throughout the steep hillsides on the project site and is relatively undisturbed. Dominant species within this community include California buckwheat (*Eriogonum fasciculatum*), brittlebush (*Encelia farinosa*), deerweed (*Acmispon glaber*), and California sagebrush (*Artemesia californica*). Other common plant species observed onsite include doveweed (*Croton setigerus*), white sage (*Salvia apiana*), popcorn flower (*Cryptantha* sp.), valley cholla (*Cylindropuntia parryi*), cudweed aster (*Corethrogyne filaginifolia*), wreath plant (*Stephanomeria exigua*), elderberry (*Sambucus nigra*), sweetbush (*Bebbia juncea*), paniculate tarplant (*Deinandra paniculata*), common phacelia (*Phacelia distans*), prickly lettuce (*Lactuca serriola*), vinegar weed (*Trichostema lanceolatum*), and tocalote (*Centaurea melitensis*).

Non-Native Grassland

The non-native grassland plant community is intermixed with the RSS plant community throughout the project site. The non-native grassland plant community primarily consists of non-native grasses and early successional plant species. Dominant plant species within this plant community included short-podded



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.

mustard (*Hirschfeldia incana*), red brome (*Bromus madritensis*) ripgut (*Bromus diandrus*), wild oat (*Avena fatua*), stinknet (*Oncosiphon piluliferum*), and Russian thistle (*Salsoa tragus*).

<u>Disturbed</u>

The disturbed area on the project site no longer supports native vegetation or comprises a native plant community but are generally un-vegetated or vegetated with weedy plant species. Portions of the disturbed areas contain areas of bare ground due to years of extensive disturbance. The disturbed areas on the project site no longer support vegetation or comprise a plant community. Disturbed areas on the project site consist of the existing dirt access roads and areas subject to off-road vehicle uses.

<u>Developed</u>

Developed areas generally encompass all building/structures, parks, and paved, impervious surfaces. The only vegetation occurring on the project site consists of ornamental/landscaped plant species that have been planted in association with existing development. The remnant rural residential home in the middle of on the south facing slope on the southern portion of the site is considered developed.

<u>Wildlife</u>

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

<u>Fish</u>

The MSHCP does not identify any covered or special-status fish species as potentially occurring within the project site. Further, no fish or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for fish were observed on the project site. Therefore, no fish are expected to occur and are presumed absent.

<u>Amphibians</u>

The MSHCP does not identify any covered or special-status amphibian species as potentially occurring within the project site. Further, no amphibians or hydrogeomorphic features (e.g., perennial creeks, ponds, lakes, reservoirs) that would provide suitable habitat for amphibian species were observed on or within the vicinity of the project site. Therefore, no amphibians are expected to occur.

<u>Reptiles</u>

The MSHCP does not identify any covered or special-status reptilian species as potentially occurring within the project site. The plant communities on the project site have the potential to support a number of reptilian species known to occur in the area. Common side-blotched lizard (*Uta stansburiana elegans*), Coastal whiptail (*Aspidoscelis tigris stejngeri*) and coast horned lizard (*Phrynosoma blainvillii*) were observed during the field investigation. Common reptilian species expected to occur on-site include Great Basin fence lizard (*Sceloporus occidentalis longipes*), gopher snake (*Pituophis catenifer*), southern pacific



rattlesnake (Crotalus oreganus helleri), and southern alligator lizard (Elgaria multicarinata).

<u>Birds</u>

The project site provides suitable foraging and nesting habitat for a variety of bird species known to occur in the region. Bird species detected during the field survey included mourning dove (*Zenaida macroura*), house finch (*Haemorhouse mexicanus*), hooded oriole (*Icterus cucullatus*), California towhee (*Melozone crissalis*), California gnatcatcher (*Polioptila californica*), lesser goldfinch (*Carduelis psaltria*), California quail (*Callipepla gambelii*), Say's phoebe (*Sayornis saya*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), red-tailed hawk (*Buteo jamaicensis*), house finch (*Haemorhous mexicanus*), Bewick's wren (*Thryomanes bewickii*), Anna's hummingbird (*Calypte anna*), Cassin's kingbird (*Tyrannus vociferans*), turkey vulture (*Cathartes aura*), and northern mockingbird (*Mimus polyglottos*). <u>Mammals</u>

The MSHCP does not identify any covered or special-status mammalian species as potentially occurring within the project site. No mammalian species were observed on-site during the field investigation. Common mammalian species expected to occur include Botta's pocket gopher (*Thomomys bottae*), coyote (*Canis latrans*), California ground squirrel (*Otospermophilus beecheyi*), cottontail (*Sylvilagus audubonii*), deer mouse (*Peromyscus sp.*). No bat species are expected to occur due to a lack of suitable roosting habitat (i.e., trees, crevices) on and surrounding the project site.

Nesting Birds

No active nests or birds displaying nesting behavior were observed during the field survey. The project site and surrounding habitat has the potential to provide foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area. A pre-construction nesting bird clearance survey should be conducted within three (3) days prior to ground disturbance to ensure no nesting birds will be impacted from site development.

Migratory Corridors and Linkages

Habitat linkages provide connections between larger 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 still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The project site has not been identified as occurring in a wildlife corridor or linkage per the MSHCP. Although partially constrained by residential developments to the south and east, the undeveloped habitats on the project site have the potential to allow for wildlife to move from the project site to the north and west in search of food, shelter, or nesting habitat.

The San Jacinto River, a regional wildlife corridor/linkage, is located approximately 1.5 miles north/northwest of the project site. The project site is separated from the San Jacinto River by existing



residential developments and undeveloped land. As a result, development of the project site is not expected to impact regional wildlife movement opportunities or prevent the San Jacinto River from continuing to function as a wildlife corridor. Therefore, implementation of the proposed project is not expected to have any adverse impacts to wildlife movement.

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 or fill materials into "waters of the United States" pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and bank under Fish and Wildlife Code Sections 1600 et seq., and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

No riparian/riverine or wetland features have been mapped on the project site per the NWI. However, several erosional features that follow onsite topography have the potential to be considered jurisdictional, or isolated/non-jurisdictional features.

A formal jurisdictional delineation is recommended to be conducted to determine if the onsite erosional features will be considered jurisdictional, and to document the extent of potential jurisdictional drainage features on the project site. If the onsite features are determined to fall under the regulatory authority of the Corps, Regional Board or CDFW and will be impacted from implementation of the proposed project, the applicant will need to obtain the following regulatory approvals prior to impacts occurring within the identified jurisdictional areas: Corps CWA Section 404 Permit; Regional Board CWA Section 401 Water Quality Certification; and CDFW Section 1602 Streambed Alteration Agreement (SAA). However, if the onsite features are determined not to be jurisdictional and/or they will not be impacted from site development, regulatory approvals will not be required.

Special-Status Biological Resources

The CNDDB was queried for reported locations of special-status plant and wildlife species as well as natural communities of special concern in the Romoland and Lake Elsinore USGS 7.5-minute quadrangles. A search of published records within these quadrangles were conducted using the CNDDB Rarefind 5 online software and the CDFW BIOS database and the CNPS Inventory of Rare and Endangered Plants of California that supplied information regarding the distribution and habitats of vascular plants in the vicinity of the project site. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified twenty-five (25) special-status plant species, seventy-three (73) specialstatus wildlife species, and three (3) special-status plant communities as having potential to occur within the Romland and Lake Elsinore quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the project boundaries based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity are presented in Attachment C, *Potentially Occurring Special-Status Biological Resources*. Refer to the Table in Attachment C for a determination regarding the potential occurrence of special-status



plant and wildlife species within the project site.

Special-Status Plants

According to the CNDDB, CNPS and MSHCP, twenty-five (25) special-status plant species have been recorded in the Romoland and Lake Elsinore quadrangles and within the vicinity of the project site (refer to Attachment C). Paniculate tarplant was the only special-status species observed onsite during the field investigation. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that that project site has a low potential to provide suitable habitat for smooth tarplant (*Centromadia pungens ssp. laevis*) and Parry's spineflower (*Chorizanthe parryi var. parryi*). All other special-status plant species are presumed absent from the project site due to the lack of native habitats and routine on-site disturbances.

Special-Status Wildlife

According to the CNDDB, seventy-three (73) special-status wildlife species have been reported in the Romoland and Lake Elsinore quadrangles (refer to Attachment C). Coastal whiptail, coast horned lizard, and coastal California gnatcatcher (Poliopitila californica californica) were the only special-status wildlife species observed during the field investigation. Since both of these species are fully covered under the MSHCP, no further studies will be required. Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the project site has a high potential to support Cooper's hawk (Accipiter cooperii), sharp-shinned hawk (Accipiter striatus), and orange-throated whiptail (Aspidoscelis hyperythra); a moderate potential to support southern California rufous-crowned sparrow (Aimophila ruficeps canescens), and San Diego black-tailed jackrabbit (Lepus californicus bennettii); and a low potential to support grasshopper sparrow (Ammodramus savannarum), golden eagle (Aquila chrysaetos), Bell's sage sparrow (Artemisiospiza belli belli), burrowing owl, Costa's hummingbird (Calypte costae), coastal cactus wren (Campylorhynchus brunneicapillus sandiegensis), northern harrier (Circus cyaneus), white-tailed kite (Elanus leucurus), California horned lard (Eremophila alpestris actia), western mastiff bat (Eumops perotis californicus), prairie falcon (Falco mexicanus), peregrine falcon (Falco peregrinus anatum), loggerhead shrike (Lanius ludovicianus), western yellow bat (Lasiurus xanthinus), pallid bobcat (Lynx rufus pallescens), and San Diego desert woodrat (Neotoma lepida intermedia).

It should be noted that California gnatcatcher is a fully covered species under the MSHCP. As long as the project is consistent with the rules and regulations of the MSHCP, no further studies or permits will be required.

Special-Status Plant Communities

The CNDDB lists three (3) special-status plant communities as being identified within the Romoland and Lake Elsinore 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 are presumed absent.



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 United States Fish and Wildlife Service (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 purpose of adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If a there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located with federally designated Critical Habitat. The closest designated Critical Habitat is located approximately 0.40 mile north of the project site and 0.5 mile south of the project site for California gnatcatcher (*Polioptila californica californica*). Therefore, the loss or adverse modification of Critical Habitat will not occur as a result of the proposed project and consultation with the USFWS will not be required for impacts to Critical Habitat.

Western Riverside County MSHCP

Based on the RCA MSHCP Information Map query and review of the MSHCP, it was determined that the project site is located within the Mead Valley Area Plan of the MSHCP but is not located within any Criteria Cells or MSHCP Conservation Areas (refer to Exhibit 3, *MSHCP Conservation Areas*, in Attachment A). Further, it was determined that the project site is only located within the designated survey area for burrowing owl.

Riparian/Riverine Areas and Vernal Pools

Riparian/Riverine Areas

As identified in Section 6.1.2 of the MSHCP, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*, riparian/riverine areas are defined as 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. If impacts to riparian/riverine habitat cannot be avoided, a Determination of Biologically Equivalent or Superior Preservation (DBESP) must be developed to address the replacement of lost functions of habitats in regards to the listed species. This assessment is independent from considerations given to "waters of the U.S." and "waters of the State" under the CWA and the California Fish and Game Code.

No riparian/riverine or wetland features have been mapped on the project site per the NWI. However, several erosional features that follow onsite topography have the potential to be considered jurisdictional,



or isolated/non-jurisdictional features.

A formal jurisdictional delineation is recommended to be conducted to document the extent of potential riparian/riverine habitat on the project site (the limits of riparian/riverine habitat are typically synonymous with CDFW jurisdictional areas). If the onsite features are determined to be riparian/riverine habitat under the MSHCP, and will be impacted from implementation of the project, a DBESP will need to be prepared under the MSHCP. However, if the onsite features are not determined to be riparian/riverine habitat, and/or the features will not be impacted, a DBESP will not be required.

Vernal Pools and Fairy Shrimp Habitat

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 be considered the length of time the areas 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.

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.

The MSHCP lists two general classes of soils known to be associated with listed and special-status plant species; clay soils and Traver-Domino Willow association soils. The specific clay soils known to be associated with listed and 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 plant or wildlife species associated with vernal pools can occur on the project site. None of these soils occur on the project site.

A review of recent and historic aerial photographs (1996-2018) of the project site and its immediate vicinity did not provide visual evidence of an astatic or vernal pool conditions within the project site. No ponding was observed onsite, further supporting the fact that the drainage patterns currently occurring on the project



site do not follow hydrologic regime needed for vernal pools. From this review of historic aerial photographs and observations during the field investigations, it can be concluded that there is no indication of vernal pools or suitable fairy shrimp habitat occurring within the proposed project site.

Burrowing Owl

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

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.

No burrowing owls or recent sign (i.e., pellets, feathers, castings, or white wash) was observed during the field investigation. The project site is vegetated with a variety of low-growing plant species that provides marginal line-of-sight opportunities favored by burrowing owls. However, the majority of the project site lacks suitable burrows (>4 inches in diameter) capable of providing roosting and nesting opportunities, and the steep terrain likely precludes burrowing owl from inhabiting the project site. As a result, burrowing owl was determined to have a low potential to occur on-site. Prior to development of the proposed project it is recommended that a pre-construction burrowing owl clearance survey be conducted in accordance with the MSHCP.

Conclusion and Recommendations

The project site primarily consists of vacant, undeveloped land that supports natural plant communities. Several named dirt access roads extend round the middle interior of the project site and to the peak in the middle of the site. A remnant rural residential home was observed in the middle of on the south facing slope on the southern portion of the site. Two plant communities were observed on the project site during the field investigation: Riversidean sage scrub and non-native grassland. In addition, the project site consists of land cover types that would be classified as disturbed and developed.

Based on the proposed project footprint, and with the implementation of the recommendations provided in this report, project impacts to special-status plant and wildlife species will be considered less than significant. With completion of the recommendations provided in this report and payment of the SKR HCP mitigation fee and MSHCP mitigation fee, development of the project site is fully consistent with the



Western Riverside County MSHCP.

Migratory Bird Treaty Act and Fish and Game Code

Nesting birds are protected pursuant to the 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). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season.

If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Burrowing Owl

A pre-construction burrowing owl clearance survey shall be conducted thirty (30) days prior to ground disturbing activities to ensure that burrowing owl remain absent from the project site. If ground disturbing activities are delayed or suspended for more than 30 days after the pre-construction survey, the area shall be resurveyed for owls. The pre-construction survey and any relocation activity will be conducted in accordance with the current Burrowing Owl Instruction for the Western Riverside MSHCP.

Please do not hesitate to contact Tom McGill at (951) 285-6014 or <u>tmcgill@elmtconsulting.com</u> or Travis McGill at (909) 816-1646 or <u>travismcgill@elmtconsulting.com</u> should you have any questions.

Sincerely,

mma A

Thomas J. McGill, Ph.D. Managing Director

Travis J. McGill Director



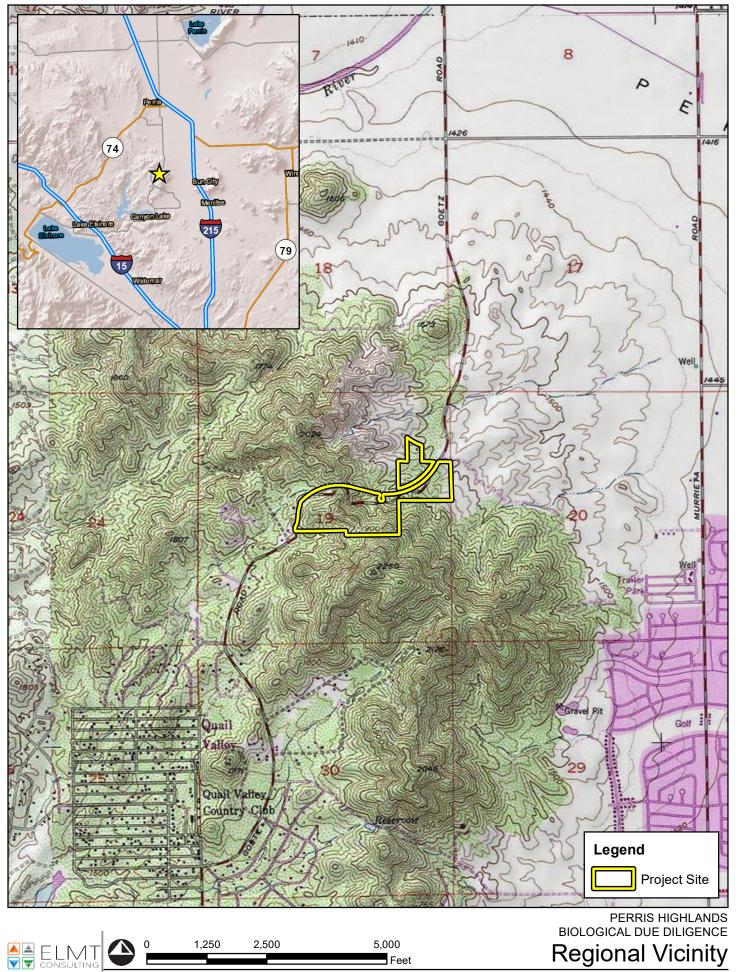
Attachments:

- A. Project Exhibits
- B. Site Photographs
- C. Potentially Occurring Special-Status Biological Resources
- D. Regulations

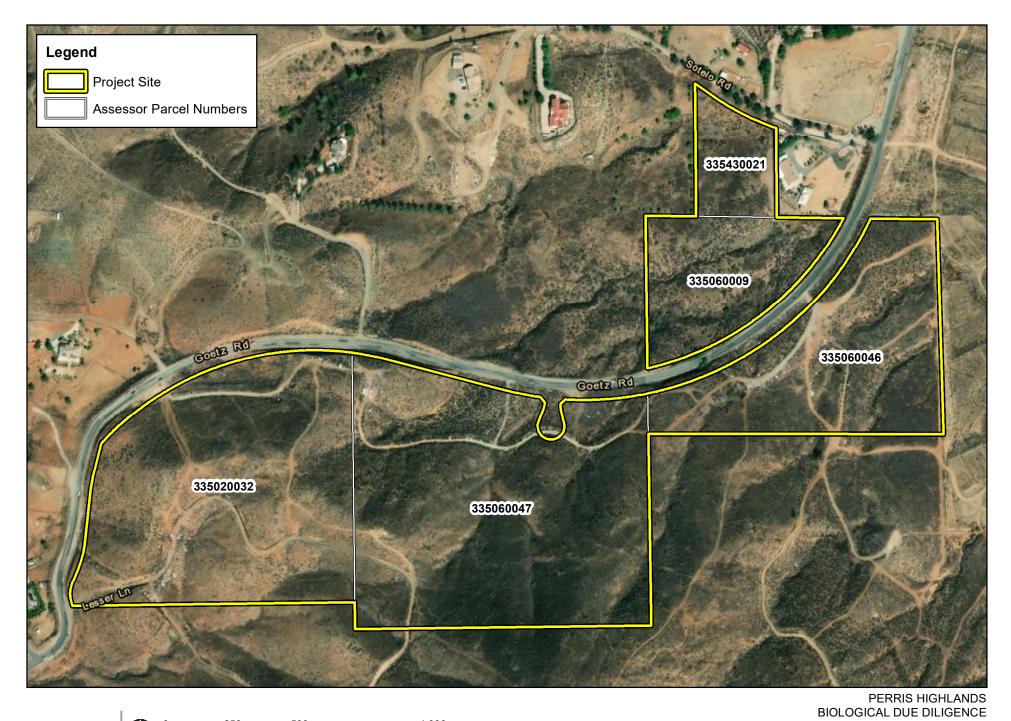


Attachment A

Project Exhibits



Source: Federal Highway Administration, US Department of Transportation, USA Topographic Map, Riverside County

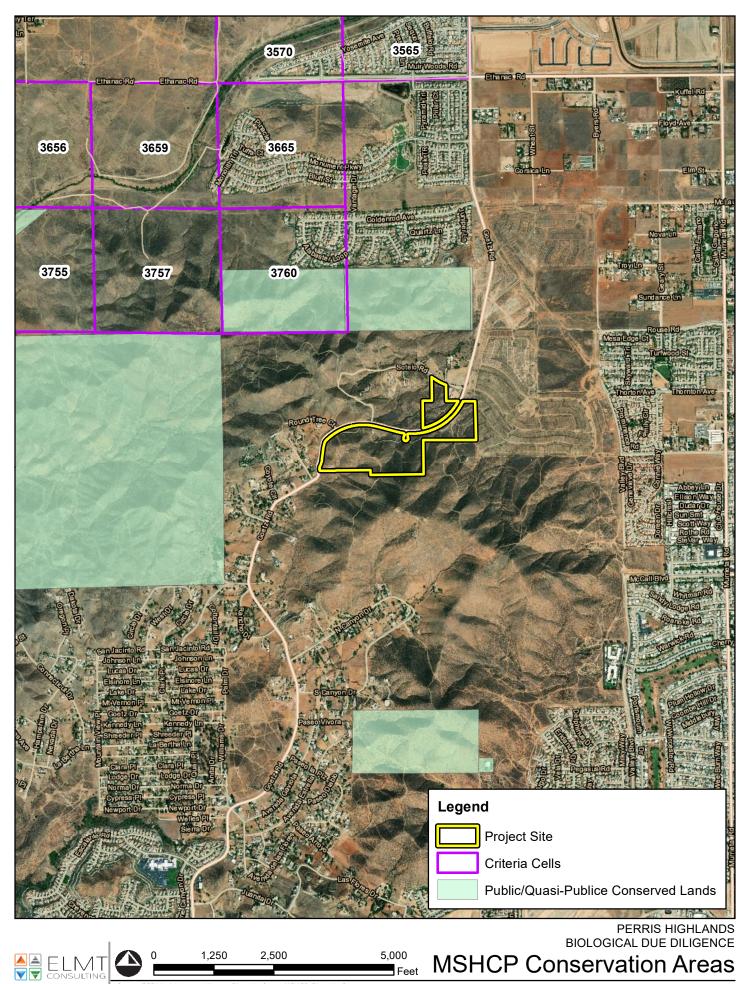


1,000

Feet

CONSULTING O O 250 500 Source: ESRI Aerial Imagery, Riverside County

Project Site Exhibit 2



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

Attachment B

Site Photographs



Photograph 1: Disturbed access road with Riversidean Sage Scrub surrounding on the western portion of the site.



Photograph 2: From the northwest corner of the site looking east across the northern boundary of the site at the Riversidean Sage Scrub habitat onsite.





Photograph 3: Riversidean Sage Scrub habitat with patches of Non-Native Grassland on the western boundary of the site.



Photograph 4: Looking northwest from the middle of the northern boundary of the site.



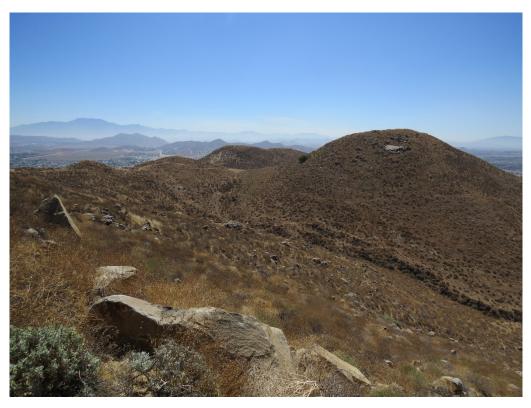


Photograph 5: Non-Native Grassland on the southern boundary of the site.



Photograph 6: Looking west from the western boundary of the site at the Riversidean Sage Scrub and Non-Native Grassland.





Photograph 7: Rolling hills and steep terrain characteristic of the project site.



Photograph 8: From the eastern boundary of the project site looking east at a steep valley and Riversidean Sage Scrub habitat.





Photograph 9: Disturbed area in the northwest corner of the project site.



Photograph 10: Disturbed area in the northwest corner of the project site abutting Riversidean Sage Scrub.



Attachment C

Potentially Occurring Special-Status Biological Resources

Scientific Name	Common Name	Federal Status	State Status	State Listing	CNPS Rare Plant Rank	Covered By MSHCP	Potential to Occur
	Special-Stat	tus Wildlife Spec	eis				
Accipiter cooperii	Cooper's hawk	None	None	WL	-	Yes	High
Accipiter striatus	sharp-shinned hawk	None	None	WL	-	Yes	High
Agelaius tricolor	tricolored blackbird	None	Threatened	SSC	-	Yes	Presumed Absent
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	None	None	WL	-	Yes	Moderate
Ammodramus savannarum	grasshopper sparrow	None	None	SSC	-	Yes	Low
Anaxyrus californicus	arroyo toad	Endangered	None	SSC	-	Yes (c)	Presumed Absent
Aquila chrysaetos	golden eagle	None	None	FP ; WL	-	Yes	Low
Ardea alba	great egret	None	None	-	-	No	Presumed Absent
Ardea herodias	great blue heron	None	None	-	-	Yes	Presumed Absent
Arizona elegans occidentalis	California glossy snake	None	None	SSC	-	No	Presumed Absent
Artemisiospiza belli belli	Bell's sage sparrow	None	None	WL	-	Yes	Low
Aspidoscelis hyperythra	orange-throated whiptail	None	None	WL	-	Yes	High
Aspidoscelis tigris stejnegeri	coastal whiptail	None	None	SSC	-	Yes	Present
Athene cunicularia	burrowing owl	None	None	SSC	-	Yes (c)	Low
Avthva valisineria	canvasback	None	None	-	-	No	Presumed Absent
Baeolophus inornatus	oak titmouse	None	None	-	-	No	Presumed Absent
Bombus crotchii	Crotch bumble bee	None	None	-	-	No	Presumed Absent
Botaurus lentiginosus	American bittern	None	None	-	-	Yes	Presumed Absent
Buteo regalis	ferruginous hawk	None	None	WL	-	Yes	Presumed Absent
Buteo swainsoni	Swainson's hawk	None	Threatened	-	-	Yes	Presumed Absent
Calypte costae	Costa's hummingbird	None	None	_	-	No	Low
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	None	None	SSC	-	Yes	Low
Chaetodipus californicus femoralis	Dulzura pocket mouse	None	None	SSC	-	No	Presumed Absent
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None	None	SSC	_	Yes	Presumed Absent
Chaetura vauxi	Vaux's swift	None	None	SSC	_	No	Presumed Absent
Charadrius alexandrinus nivosus	western snowy plover	Threatened	None	SSC	_	No	Presumed Absent
Charadrius montanus	mountain plover	None	None	SSC	_	Yes	Presumed Absent
Chlidonias niger	black tern	None	None	SSC	_	No	Presumed Absent
Cicindela senilis frosti	senile tiger beetle	None	None	-	_	No	Presumed Absent
Circus hudsonius	northern harrier	None	None	SSC	-	Yes	Low
Cistothorus palustris clarkae	Clark's marsh wren	None	None	SSC	_	No	Presumed Absent
Coleonyx variegatus abbotti	San Diego banded gecko	None	None	SSC	-	Yes	Presumed Absent
Crotalus ruber	red-diamond rattlesnake	None	None	SSC	-	Yes	Presumed Absent
Diadophis punctatus modestus	San Bernardino ringneck snake	None	None	-	-	No	Presumed Absent
	e		None	SSC	-	Yes (c)	Presumed Absent
Dipodomys merriami parvus	San Bernardino kangaroo rat	Endangered None	None		-	Yes	Presumed Absent
Dipodomys simulans	Dulzura kangaroo rat			-	-		
Dipodomys stephensi	Stephens' kangaroo rat	Endangered		-	-	Yes	Presumed Absent
Egretta thula	snowy egret	None	None	-	-	No	Presumed Absent
Elanus leucurus	white-tailed kite	None	None	FP	-	Yes	Low
Empidonax traillii	willow flycatcher	None	Endangered	-	-	No Vez (z)	Presumed Absent
Empidonax traillii extimus	southwestern willow flycatcher	U	Endangered	-	-	Yes (a)	Presumed Absent
Emys marmorata	western pond turtle	None	None	SSC	-	Yes	Presumed Absent
Eremophila alpestris actia	California horned lark	None	None	WL	-	Yes	Low
Eumops perotis californicus	western mastiff bat	None	None	SSC	-	No	Low
Euphydryas editha quino	quino checkerspot butterfly	Endangered	None	-	-	Yes	Presumed Absent
Falco columbarius	merlin	None	None	WL	-	Yes	Presumed Absent

Falco mexicanus	prairie falcon	None	None	WL	-	Yes	Low
Falco peregrinus anatum	American peregrine falcon	Delisted	Delisted	FP	-	Yes	Low
Hydroprogne caspia	Caspian tern	None	None	-	-	No	Presumed Absent
Icteria virens	yellow-breasted chat	None	None	SSC	-	Yes	Presumed Absent
Lanius ludovicianus	loggerhead shrike	None	None	SSC	-	Yes	Low
Lasiurus xanthinus	western yellow bat	None	None	SSC	-	No	Low
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None	None	SSC	-	Yes	Moderate
Lynx rufus pallescens	pallid bobcat	None	None	-	-	Yes	Low
Neotoma lepida intermedia	San Diego desert woodrat	None	None	SSC	-	Yes	Low
Numenius americanus	long-billed curlew	None	None	WL	-	No	Presumed Absent
Nycticorax nycticorax	black-crowned night heron	None	None	-	-	Yes	Presumed Absent
Onychomys torridus ramona	southern grasshopper mouse	None	None	SSC	-	No	Presumed Absent
Pandion haliaetus	osprey	None	None	WL	-	Yes	Presumed Absent
Pelecanus erythrorhynchos	American white pelican	None	None	SSC	-	No	Presumed Absent
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None	None	SSC	-	Yes (c)	Presumed Absent
Phalacrocorax auritus	double-crested cormorant	None	None	WL	-	Yes	Presumed Absent
Phrynosoma blainvillii	coast horned lizard	None	None	SSC	-	Yes	Present
Plegadis chihi	white-faced ibis	None	None	WL	-	Yes	Presumed Absent
Polioptila californica californica	coastal California gnatcatcher	Threatened	None	SSC	-	Yes	Present
Progne subis	purple martin	None	None	SSC	-	Yes	Presumed Absent
Salvadora hexalepis virgultea	coast patch-nosed snake	None	None	SSC	-	No	Presumed Absent
Setophaga petechia	yellow warbler	None	None	SSC	-	Yes	Presumed Absent
Spea hammondii	western spadefoot	None	None	SSC	-	Yes	Presumed Absent
Spinus lawrencei	Lawrence's goldfinch	None	None	-	-	No	Presumed Absent
Streptocephalus woottoni	Riverside fairy shrimp	Endangered	None	-	-	Yes (a)	Presumed Absent
Thamnophis hammondii	two-striped gartersnake	None	None	SSC	-	No	Presumed Absent
Vireo bellii pusillus	least Bell's vireo	Endangered	Endangered	-	-	Yes (a)	Presumed Absent
1	Speci	ial-Status Plant Species	5				
Allium munzii	Munz's onion	-		-	1B.1	Yes (b)	Presumed Absent
Ambrosia pumila	San Diego ambrosia	Endangered	None	-	1B.1	Yes (b)	Presumed Absent
Atriplex coronata var. notatior	San Jacinto Valley crownscale	Endangered	None	-	1B.1	Yes (c)	Presumed Absent
Brodiaea filifolia	thread-leaved brodiaea	Threatened	Endangered	-	1B.1	Yes (c)	Presumed Absent
Carex buxbaumii	Buxbaum's sedge	None	None	-	4.2	No	Presumed Absent
Caulanthus simulans	Payson's jewelflower	None	None	-	4.2	Yes	Presumed Absent
Centromadia pungens ssp. laevis	smooth tarplant	None	None	-	1B.1	Yes (c)	Low
Chorizanthe leptotheca	Peninsular spineflower	None	None	-	4.2	Yes	Presumed Absent
Chorizanthe parryi var. parryi	Parry's spineflower	None	None	-	1B.1	Yes	Low
Chorizanthe polygonoides var. longispina	long-spined spineflower	None	None	-	1B.2	Yes	Presumed Absent
Convolvulus simulans	small-flowered morning-glory	None	None	-	4.2	Yes	Presumed Absent
Deinandra paniculata	paniculate tarplant	None	None	-	4.2	No	Present
Dodecahema leptoceras	slender-horned spineflower	Endangered		-	1B.1	Yes (b)	Presumed Absent
Dudleya multicaulis	many-stemmed dudleya	None	None		1B.2	Yes (b)	Presumed Absent
Harpagonella palmeri	Palmer's grapplinghook	None	None		4.2	Yes	Presumed Absent
Hordeum intercedens	vernal barley	None	None	_	3.2	Yes	Presumed Absent
Juglans californica	southern California black walnut	None	None	-	4.2	Yes	Presumed Absent
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	None	None	-	4.2 1B.1	Yes (c)	Presumed Absent
Lasinenia glabraia ssp. couneri Lepidium virginicum var. robinsonii	Robinson's pepper-grass	None	None	-	4.3	No	Presumed Absent
Microseris douglasii ssp. platycarpha	small-flowered microseris	None	None	-	4.3	Yes	Presumed Absent
	little mousetail		None	-	4.2 3.1		
Myosurus minimus ssp. apus	mue mousetan	None	INORE	-	5.1	Yes (c)	Presumed Absent

Navarretia fossalis	spreading navarretia	Threatened	None	-	1B.1	Yes (b)	Presumed Absent				
Orcuttia californica	California Orcutt grass	Endangered	Endangered	-	1B.1	Yes (b)	Presumed Absent				
Romneya coulteri	Coulter's matilija poppy	None	None	-	4.2	Yes	Presumed Absent				
Viguiera laciniata	San Diego County viguiera	None	None	-	4.3	No	Presumed Absent				
Special-Status Plant Communities											
Southern Coast Live Oak Riparian Forest		None	None	Sensitive Habitat	-	NA	Absent				
Southern Cottonwood Willow Riparian Forest		None	None	Sensitive Habitat	-	NA	Absent				
Southern Sycamore Alder Riparian Woodland		None	None	Sensitive Habitat	-	NA	Absent				
						NA					
U.S. Fish and Wildlife Service (Fed) - Federal	California Department of Fish and Wildlife (CA) - California			<i>CNPS Threat Ranks</i> 0.1- Seriously threatened in		Western Riverside County MSHCP					
END- Federal Endangered	END- California Endangered					Yes- Fully covered					
THR- Federal Threatened	THR- California Threatened	and Elsewhere 2B Plants Rare, Threatened, or Endangered in California,		California		No- Not covered					
	Candidate- Candidate for listing under the California					Yes (a)- May require survyes under MSHCP Section 6.1.2					
	Endangered Species Act										
	FP- California Fully Protected					nia Yes (b)- May require survyes under MSHCP					
	SSC- Species of Special Concern	But More Common Elsewhere 3 Plants About Which More Information is Needed – A Review List 4 Plants of Limited Distribution – A Watch List				Section 6.1.3					
	WL- Watch List				Yes (c)- May require surveys under MSHCP						
					Section 6.3.2						
					Yes (d)- May require surveys under MSHCP						
					Section 6.3.2						
						Yes (3)- Conditionally covered pending the					
					achievement of species-specific conservation						
						measures					

Attachment D

Regulations

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

Federal Regulations

Endangered Species Act of 1973

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

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

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

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

Migratory Bird Treaty Act

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



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

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

State Regulations

California Environmental Quality Act (CEQA)

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

California Endangered Species Act (CESA)

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

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

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



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

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

Fish and Game Code

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

Native Plant Protection Act

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

California Native Plant Society Rare and Endangered Plant Species

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

California Rare Plant Rank

- 1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere
- 1B- Plants Rare, Threatened, or Endangered in California and Elsewhere



- 2A- Plants Presumed Extirpated in California, But More Common Elsewhere
- 2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
- 3- Plants about Which More Information is Needed A Review List
- 4- Plants of Limited Distribution A Watch List

Threat Ranks

- .1- Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- .3- Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

Local Policies

Western Riverside County MSHCP

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

The approval of the MSHCP and execution of the Implementing Agreement (IA) by the wildlife agencies allows signatories of the IA to issue "take" authorizations for all species covered by the MSHCP, including state- and federal-listed species as well as other identified sensitive species and/or their habitats. Each city or local jurisdiction will impose a Development Mitigation Fee for projects within their jurisdiction. With payment of the mitigation fee to the County and compliance with the survey requirements of the MSHCP where required, full mitigation in compliance with the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), CESA, and FESA will be granted. The Development Mitigation Fee varies according to project size and project description. The fee for residential development ranges from approximately \$800 per unit to \$1,600 per unit depending on development density (County Ordinance 810.2). Payment of the mitigation fee and compliance with the requirements of Section 6.0 of the MSHCP are intended to provide full mitigation under CEQA, NEPA, CESA, and FESA for impacts to the species and habitats covered by the MSHCP pursuant to agreements with the USFWS, the CDFW, and/or any other appropriate participating regulatory agencies and as set forth in the IA for the MSHCP.



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

Federal Regulations

Section 404 of the Clean Water Act

Since 1972, the Corps and U.S. Environmental Protection Agency (EPA) have jointly regulated the filling of "waters of the U.S.," including wetlands, pursuant to Section 404 of the Clean Water Act (CWA). The Corps has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the CWA. The Corps and EPA define "fill material" to include any "material placed in waters of the United States where the material has the effect of: (i) replacing any portion of a water of the United States with dry land; or (ii) changing the bottom elevation of any portion of the waters of the United States." Examples include, but are not limited to, sand, rock, clay, construction debris, wood chips, and "materials used to create any structure or infrastructure in the waters of the United States." In order to further define the scope of waters protected under the CWA, the Corps and EPA published the Clean Water Rule on June 29, 2015. Pursuant to the Clean Water Rule, the term "*waters of the United States*" is defined as follows:

- (i) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- (ii) All interstate waters, including interstate wetlands¹.
- (iii) The territorial seas.
- (iv) All impoundments of waters otherwise defined as waters of the United States under the definition.
- (v) All tributaries² of waters identified in paragraphs (i) through (iii) mentioned above.
- (vi) All waters adjacent³ to a water identified in paragraphs (i) through (v) mentioned above, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.



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

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

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

- (vii) All prairie potholes, Carolina bays and Delmarva bays, Pocosins, western vernals pools, Texas coastal prairie wetlands, where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (i) through (iii) meantioned above.
- (viii) All waters located within the 100-year floodplain of a water identified in paragraphs (i) through (iii) mentioned above and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (i) through (v) mentioned above, where they are determined on a case-specific basis to have a significant nexus to a waters identified in paragraphs (i) through (iii) mentioned above.

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

- (i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.
- (ii) Prior converted cropland.
- (iii) The following ditches:
 - (A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
 - (B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
 - (C) Ditches that do not flow, either directly or through another water, into a water of the United States as identified in paragraphs (i) through (iii) of the previous section.
- (iv) The following features:
 - (A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;
 - (B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;
 - (C) Artificial reflecting pools or swimming pools created in dry land;
 - (D) Small ornamental waters created in dry land;
 - (E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;
 - (F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of a tributary, non-wetland swales, and lawfully constructed grassed waterways; and
 - (G) Puddles.
- (v) Groundwater, including groundwater drained through subsurface drainage systems.
- (vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.



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

Section 401 of the Clean Water Act

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

State Regulations

Fish and Game Code

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

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

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

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



Porter Cologne Act

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

