Appendix 5.3-1a Biological Technical Report and MSHCP Consistency Analysis

Appendices

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Inland Valley Medical Center Project
Biological Technical Report
and
MSHCP Consistency Analysis

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July 27, 2021

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Acronyms and Abbreviations

CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
I-15	Interstate 15
MBTA	Migratory Bird Treaty Act
MSHCP	Multiple Species Habitat Conservation Plan
NEPSSA	Narrow Endemic Plant Species Survey Area
project	Inland Valley Medical Center Project
RCHCA	Riverside County Habitat Conservation Agency
RWQCB	Regional Water Quality Control Board
SKR HCP	Habitat Conservation Plan
USDA	U.S. Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WRCRCA	Western Riverside County Regional Conservation Authority

Executive Summary

The Inland Valley Medical Center Project (project) proposes to expand the existing hospital facility with a new addition that would increase services to support 100 new patient beds. The project is located in the city of Wildomar, California, just west of Inland Valley Drive, on assessor's parcel numbers 380-250-009, 380-250-026, 380-250-027, 380-260-001, 380-260-029, 380-260-037, and 380-260-037. The project site is located primarily on a previously graded site dominated by existing development and non-native vegetation, with a small area of native vegetation within a manufactured channel. The 22.25-acre project site and a 100-foot off-site survey buffer (survey area) were evaluated to determine the current condition of the biological resources present. In addition, a western burrowing owl habitat assessment in accordance with Step I and a focused burrow survey in accordance with Step II, Part A of the Burrowing Owl Survey Instructions (Western Riverside County Regional Conservation Authority [WRCRCA] 2006) were conducted within the project site plus accessible land within 150 meters (500 feet).

RECON Environmental, Inc. conducted a general biological survey, western burrowing owl habitat assessment, and jurisdictional assessment for the project on October 21, 2020.

The project would impact four vegetation communities: freshwater marsh, riparian scrub, disturbed land, and developed land. Impacts to disturbed land and developed land would not be considered significant under the MSHCP and would not require mitigation. The freshwater marsh and riparian scrub do not meet the criteria of riparian/riverine areas, and no vernal pools are present, so these impacts would not necessitate preparation of a Determination of Biologically Equivalent or Superior Preservation in compliance with Multiple Species Habitat Conservation Plan (MSHCP) Section 6.1.2.

One sensitive plant species was observed on-site and would be impacted: paniculate tarplant (*Deinandra paniculata*). This species is not state or federally listed and is not an MSHCP narrow endemic or covered species but is identified by the California Native Plant Society as a California Rare Plant Rank 4.2 species. Based on this low level of sensitivity, impacts to paniculate tarplant would not be considered significant and would not require mitigation.

No sensitive wildlife species were detected in the survey area; however, there is moderate potential for Cooper's hawk (*Accipiter cooperii*), western burrowing owl (*Athene cunicularia hypugaea*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) to nest/occur within the survey area and be directly impacted. In addition, the project site has potential to support nesting migratory birds protected by the federal Migratory Bird Treaty Act and California Fish and Game Code Sections 3503 and 3503.5.

A habitat assessment for western burrowing owl was completed in accordance with Step I of the Burrowing Owl Survey Instructions (WRCRCA 2006) and identified suitable habitat. Accordingly, a focused burrow survey in accordance with Step II, Part A was conducted, and no suitable burrows or burrowing owls were detected. Based on the results of the focused burrow survey, no additional surveys for burrowing owl are recommended.

To avoid potential direct impacts to nesting birds and raptors (including Cooper's hawk) a pre-construction nest survey would be required prior to the start of construction during the breeding season (February 1 to September 15). If nests are detected, an avoidance buffer of appropriate radius and biological monitoring would be required. Potential impacts to San Diego black-tailed jackrabbit would be considered less than significant and no mitigation would be required. Lastly, although the project would occur within the Stephens' kangaroo rat fee area, the project would occur entirely within areas that were previously graded, disturbed, or developed during construction of the existing hospital complex, so the Stephens' kangaroo rat fee is not anticipated to apply.

1.0 Introduction

This report describes the results of the biological resource survey conducted for the approximately 22.25-acre Inland Valley Medical Center Project (project). This report provides the necessary biological data and background information required for environmental analysis according to guidelines set forth in the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP; Western Riverside County Regional Conservation Authority [WRCRCA] 2003), and the California Environmental Quality Act (CEQA). This report also discusses the project's compliance with the Sections 6.1.2, 6.1.3, 6.1.4, and 6.3.2 of the MSHCP (WRCRCA 2003).

1.1 Project Location

The project is located in the city of Wildomar, within Section 6, Township 07 South, Range 03 West of the U.S. Geological Survey (USGS) 7.5-minute topographic map, Murrieta quadrangle (Figures 1 and 2; USGS 1979). It is situated immediately northeast of Interstate 15 (I-15) and west of Inland Valley Drive (Figure 3), and includes assessor's parcel numbers 380-250-009, 380-250-026, 380-250-027, 380-260-001, 380-260-029, 380-260-037, and 380-260-037, plus a small area of road improvements adjacent to those parcels.

The survey area is not located inside or adjacent to any Criteria Area, Criteria Cell, or Conservation Area identified for conservation potential by the MSHCP; however, portions of the project site and surrounding areas are located within a MSHCP western burrowing owl (*Athene cunicularia hypugaea*) survey area (WRCRCA 2003; see Figure 3).

1.2 Project Description

This project would expand the existing Inland Valley Medical Center with a new 100-bed, 232,000-square-foot addition to the hospital that includes expansion of all services and critical ancillary support, bringing the campus total to 202 beds and 298,925 square feet.

Project Location

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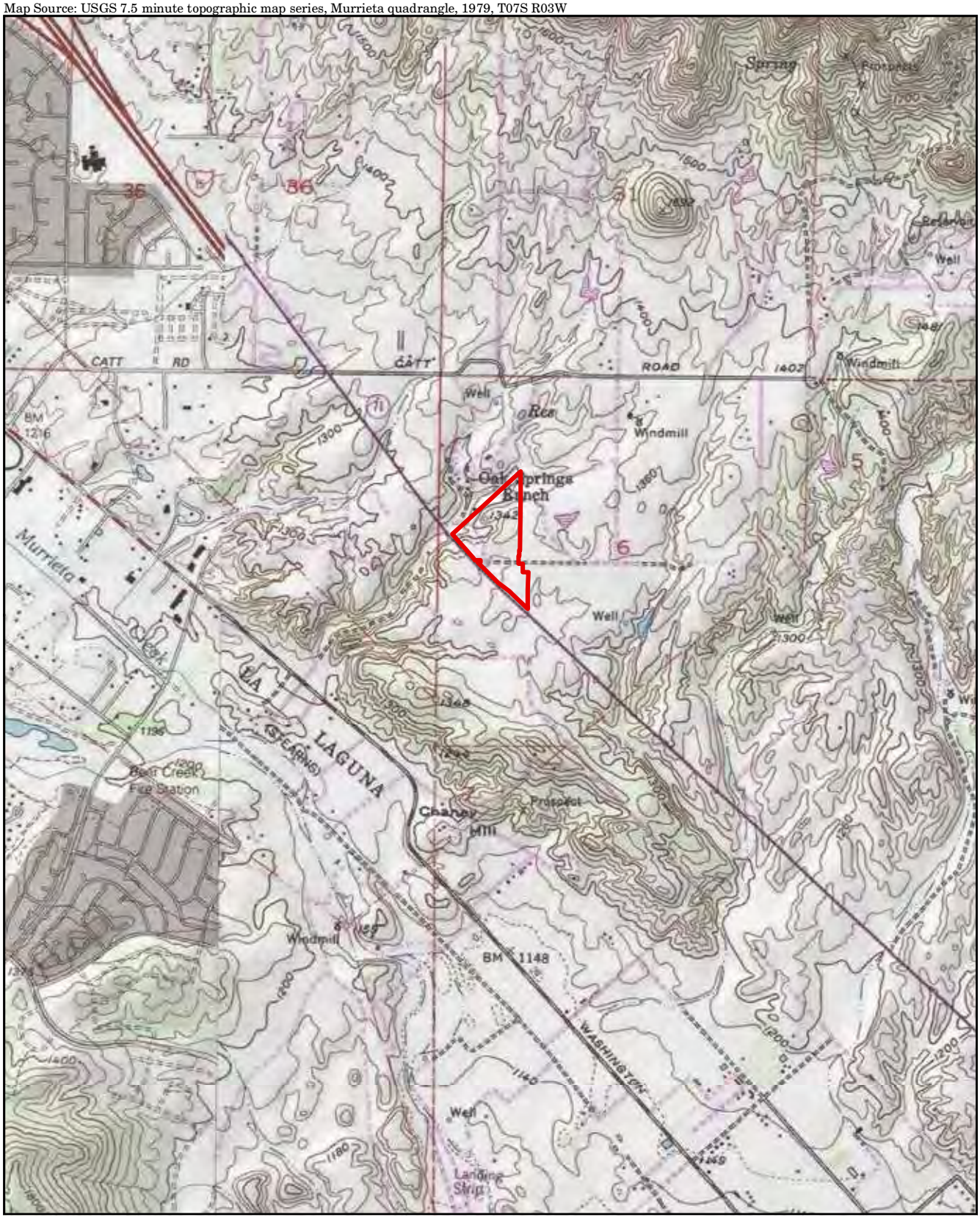
FIGURE 1
Regional Location

Map Source: USGS 7.5 minute topographic map series, Murrieta quadrangle, 1979, T07S R03W



Project Boundary

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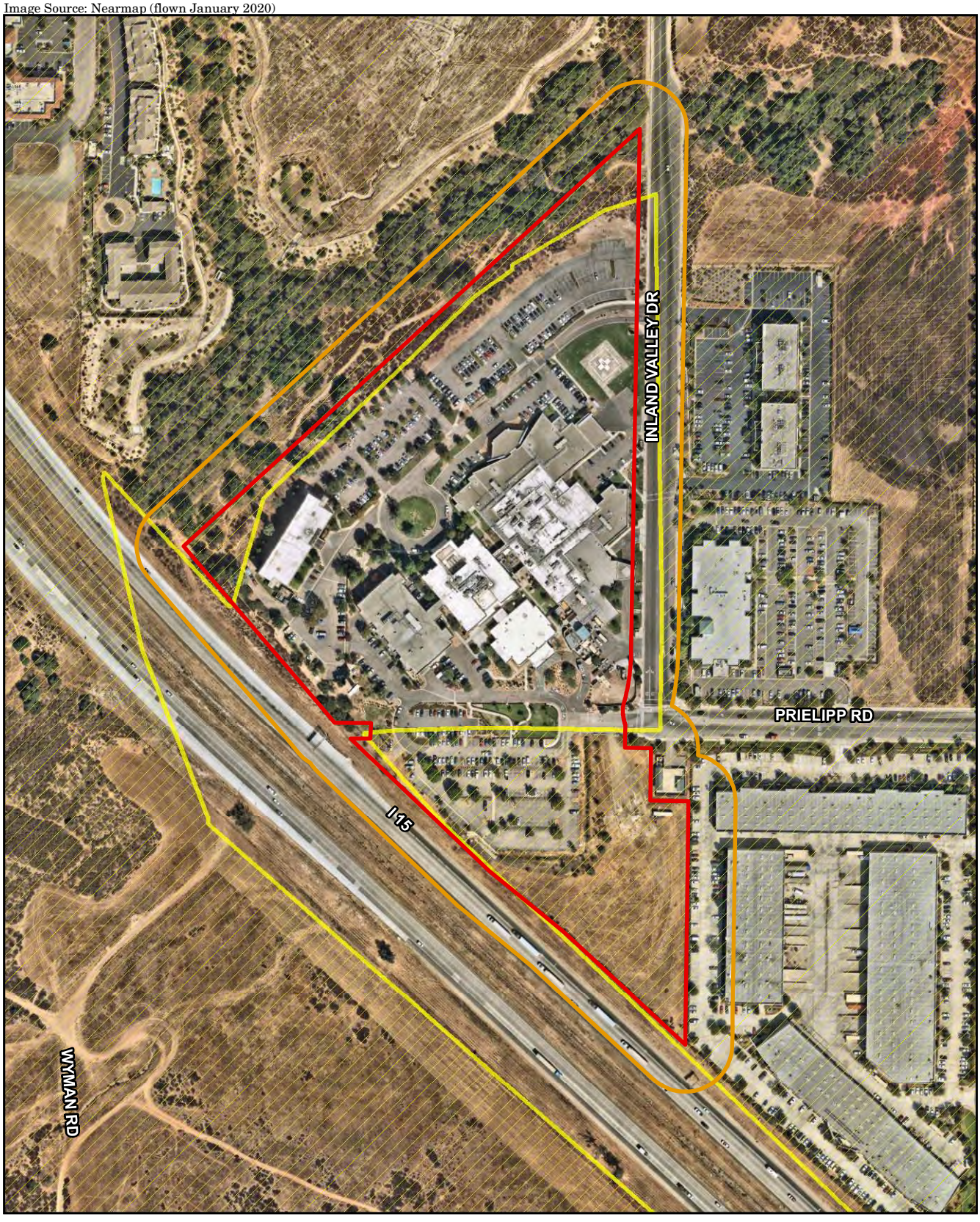
FIGURE 2
Project Location on USGS Map

Image Source: Nearmap (flown January 2020)



Project Boundary

Survey Area

MSHCP Western Burrowing Owl Survey Area

0 Feet 300

FIGURE 3
Project Location on Aerial Photograph

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Existing buildings on the project site consist of the existing hospital building (Building B-H), two buildings of patient rooms (Buildings A and I), a Central Utility Plant, an administration building, and one building (Building C), which will be demolished and replaced by construction of a new seven-story, 232,000-square-foot tower. The new tower will connect to existing Buildings A and I, unifying the hospital campus. The existing hospital Building B-H, and the existing Central Utility Plant will remain operational during construction.

Building A, which currently houses patient rooms, will be modified to include a new main entry canopy and lobby renovation to create the new front door to the medical center; a connecting corridor that links the new entry with public elevators in the new tower; and renovation of spaces for relocated departments once the new hospital is completed. Building I will be modified to create a new loading dock and Materials Management department.

A new Central Utility Plant will serve the new tower and backfeed existing Buildings A and I. The project will conclude with demolition of existing hospital Building B-H and the creation of new surface parking lots. In addition, there would be minor improvements to the connecting roadways, sidewalks, and other areas immediately adjacent to the hospital property.

2.0 Survey Methodology

2.1 Literature Review

Prior to conducting field investigations, RECON conducted a review of the WRCRCA MSHCP Information Map (WRCRCA 2020) for information on required biological investigations for the project site. In addition, RECON performed a literature and database review for potentially occurring sensitive plant and animal species within two miles of the project site. Databases reviewed include the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB; CDFW 2020a), the United States Fish and Wildlife Service (USFWS) All Species Occurrences Database (USFWS 2020), the California Native Plant Society (CNPS) Online database (CNPS 2020a).

2.2 General Biological Survey

RECON biologist Andrew Smisek conducted a general biological survey and western burrowing owl habitat assessment on October 21, 2020 between 9:30 a.m. and 1:15 p.m. Weather conditions during the survey were mild and warm, with temperatures between 65.8 and 83.0 degrees Fahrenheit, wind between 1 and 3 miles per hour, and cloud cover decreasing from 20 percent to zero percent. The survey area totaled 34.09 acres, and included the project site, plus all accessible land within 100 feet.

The general biological survey was conducted on foot by meandering through accessible portions of the survey area. Fenced private property in the 100-foot survey buffer was not directly accessible, so these areas were surveyed from accessible areas with the use of binoculars when necessary. The biologist mapped vegetation communities, recorded

vegetation and habitat characteristics, and noted wildlife and plant species apparent at the time of the survey.

Nomenclature in this report follows the Jepson Online Herbarium (University of California 2020), CNPS (2020), and Brenzel (2001) for plant species, American Ornithological Society Checklist (Chesser et al. 2020) and Unitt (2004) for birds, American Society of Mammalogists (2020) for mammals; Crother et al. (2017) for amphibians and reptiles, and Evans (2008) for invertebrates.

2.3 Western Burrowing Owl Habitat Assessment and Survey

A western burrowing owl habitat assessment was conducted in accordance with Step I of the guidelines developed by the County of Riverside (survey guidelines; WRCRCA 2006) and was performed immediately following the general biological survey.

As required by the survey guidelines, the survey area included in the habitat assessment included all areas identified as MSHCP western burrowing owl survey area within the impact footprint and within 150 meters (approximately 500 feet). The habitat assessment area was surveyed on foot, using binoculars, to inspect areas on inaccessible private property.

Based on the presence of suitable habitat on the project site and surrounding 500 feet (see Section 4.3.2 below), a focused burrow survey was conducted by RECON biologist Brian Parker on March 20, 2021, in accordance with Step II, Part A of the survey guidelines (WRCRCA 2006). During the focused burrow survey, all accessible areas of suitable habitat identified during the habitat assessment were inspected on foot for the presence of suitable burrows. Mr. Parker walked rough transects through the habitat and made notes of avian activity and searched for evidence of owls, natural burrows, or manufactured structures suitable for western burrowing owl. Areas of private property that were not directly accessible were viewed from the project site or public rights-of-way with the use of binoculars.

2.4 Jurisdictional Assessment

RECON biologist Andrew Smisek conducted a jurisdictional waters/wetland assessment within the portion of the survey area that would be impacted by the project on October 21, 2020, in conjunction with the general biological survey. This assessment included digging sample soil pits; however, a complete delineation following the guidelines set forth by the U.S. Army Corps of Engineers (USACE; 1987and 2008) was not performed. It is anticipated that if any jurisdictional resources would be impacted, a formal delineation would be required. The extent of potential wetlands and/or waters under the jurisdiction of USACE, Regional Water Quality Control Board (RWQCB), and/or CDFW is analyzed in Section 4.4 below based largely on vegetation mapping.

2.4.1 Wetland Parameters

Wetlands and waters are delineated based on the presence of the three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology, each of which is discussed below.

Hydrophytic Vegetation. Hydrophytic vegetation is defined as "the sum total of macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content" (USACE 1987). The wetland indicator status of each species recorded on-site was determined by using the National Wetland Plant List (Lichvar et al. 2016). The wetland indicator status of a plant can be one of the following:

Obligate (OBL): Plants that have a 99 percent probability of occurring in wetlands under natural conditions.

Facultative-Wet (FACW): Plants that occur in wetlands (67–99 percent probability) but are occasionally found in non-wetlands.

Facultative (FAC): Plants that are equally likely to occur in wetlands or non-wetlands (estimated probability 34–66 percent).

Facultative Upland (FACU): Plants that are most often found in upland sites (estimated probability 67–99 percent).

Upland (UPL): Plants that almost always occur in upland sites (estimated probability greater than 99 percent).

No Indicator (NI): Plants for which insufficient data are available to determine an indicator status for the local region. These are considered upland species unless other data to support a different status are available.

Hydric Soils. A hydric soil is a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the accumulation of visible indicators of extended saturation (USACE 1987). Information on the soil types sampled in the project site is summarized from the Soil Survey for Riverside County (United States Department of Agriculture [USDA] 1971) and the Hydric Soils list obtained from the USDA's Natural Resources Conservation Service (USDA 2014).

Hydrology. Wetland hydrology indicators are used to determine if inundation or saturation has occurred on a site. These indicators are features that suggest current or recent flows through an area but do not provide information about the timing, duration, or frequency of the event. Hydrology features are generally the most ephemeral of the three wetland parameters (USACE 2008). Hydrologic information for the site was obtained by reviewing USGS topographic maps and by directly observing hydrology indicators in the field.

2.4.2 Non-wetland Waters Parameters

USACE also requires the delineation of non-wetland jurisdictional waters. These waters must have strong hydrology indicators such as the presence of seasonal flows and an ordinary high watermark. An ordinary high watermark is defined as:

> . . . that line on the shore established by the fluctuations of water and indicated by physical characteristics such as [a] 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 (33 CFR Part 328.3).

Areas delineated as non-wetland jurisdictional waters may lack wetland vegetation or hydric soil characteristics. Hydric soil indicators may be missing, because topographic position precludes ponding and subsequent development of hydric soils. Absence of wetland vegetation can result from frequent scouring due to rapid water flow. These types of jurisdictional waters are delineated by the lateral and upstream/downstream extent of the ordinary high watermark of the particular drainage or depression.

2.4.3 Jurisdictional Criteria

2.4.3.1 U.S. Army Corps of Engineers

Under Section 404 of the Clean Water Act, the USACE regulates the dredging or discharge of fill material into Waters of the U.S. including wetlands and non-wetland Waters of the U.S. The term "Waters of the U.S" is defined as:

- All waters currently used, or used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds; the use, degradation, or destruction of which could affect foreign commerce including any such waters, (1) which could be used by interstate or foreign travelers for recreational or other purposes; or (2) from which fish or shellfish are, or could be, taken and sold in interstate or foreign commerce; or (3) which are used or could be used for industries in interstate commerce.
- All other impoundments of waters otherwise defined as Waters of the U.S. under the definition;
- Tributaries of waters identified above;

- The territorial seas; and
- Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in the paragraphs above (33 Code of Federal Regulations [CFR] Part 328.3(a)).

2.4.3.2 Regional Water Quality Control Board

The jurisdiction of the RWQCB includes all Waters of the State and all Waters of the U.S. as mandated by both Section 401 of the federal Clean Water Act and the California Porter–Cologne Water Quality Control Act. State waters generally include, but are not limited to, all waters that meet USACE criteria.

2.4.3.3 California Department of Fish and Wildlife

Under Sections 1600–1607 of the California Fish and Game Code (CFGC), the CDFW regulates activities that would divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. In most cases, CDFW jurisdictional areas overlap USACE jurisdictional areas; however, the CDFW also regulates riparian vegetation associated with watercourses, regardless of USACE jurisdiction.

2.4.4 Assessment of Riparian/Riverine Area and Vernal Pools

In compliance with Section 6.1.2 of the MSHCP, the biological survey assessed the survey area for presence of any riparian/riverine habitat or vernal pools. Section 6.1.2 of the MSHCP defines riparian/riverine areas and vernal pools as follows:

> Riparian/Riverine Areas are lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.
>
> Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season, but normally lack wetlands 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, while upland species (annuals) may be dominant during the drier portion of the growing season.

In addition to mapping vernal pools, the MSHCP requires mapping of stock ponds, ephemeral pools, and other features which may be suitable habitat for Riverside fairy shrimp (*Streptocephalus woottoni*), vernal pool fairy shrimp (*Branchinecta lynchi*), and Santa Rosa fairy shrimp (*Linderiella santarosae*).

3.0 Existing Conditions

3.1 Topography and Soils

The project site is relatively flat, but trends down into a canyon in the northern portion. Elevations range from 1,270 feet above mean sea level in the canyon bottom where it drains under I-15 to the west, to 1,340 feet above mean sea level along the eastern edge of the site.

A total of four soil series are mapped within the survey area by the USDA: Ramona and Buren Loam, Arlington and Greenfield, Rough broken land, and Hanford sandy loam (USDA 1971). These soil types are described in further detail below.

Ramona and Buren Loam soils 5-15 percent slopes, eroded: This is an undifferentiated soil series consisting of a mix of Ramona and Buren loams, with a small portion of Hanford soils present in drainage bottoms. It occurs generally on convex, rolling, dissected terraces, as medium runoff potential and moderate erosion potential. This soil series is present in the southern third of the project site.

Arlington and Greenfield fine sandy loams 8-15 percent slopes, eroded: This is an undifferentiated soil series that occurs on terraces, ridges, and where alluvial fans meet. These soils are well-drained and have moderate runoff potential and moderate erosion hazard. This soil series is present in an east-west strip through the central portion of the project site.

Rough broken land: This soil series consists of alluvial soils that are remnants of old alluvial fans and terraces, often dissected by numerous drainages. This soil series is generally derived from acid igneous rocks, such as granite. It occurs in the northern portion of the project site, beginning on the upper canyon slopes and extending south onto the largely flat portion of the site.

Hanford sandy loam 2-15 percent slopes: This soil series often occurs along braided or entrenched stream channels and is subject to erosion and sediment deposition. These soils are excessively drained and have rapid permeability. Runoff is slow to medium, and has a slight to moderate erosion hazard. This soil series occurs on the north-facing canyon slopes at the far northern edge of the project site. Hanford sandy loam 2-15 percent slopes is listed as a hydric soil on the Hydric Soils List of California (USDA 2014).

3.2 Botanical Resources

Seven vegetation communities were mapped within the survey area: freshwater marsh, riparian forest, riparian scrub, coast live oak woodland, Riversidean sage scrub, disturbed land, and developed land (Table 1 and Figure 4). Additionally, a total of 44 plant species were identified within the survey area, including 26 native (59 percent) and 18 (41 percent) non-native species (Attachment 1).

Image Source: Nearmap (flown January 2020)

Project Boundary

Survey Area

Vegetation Communities

Coast Live Oak Woodland

Freshwater Marsh

Disturbed Land

Developed Land

Riparian Forest

Riparian Scrub

Riversidean sage Scrub

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FIGURE 4
Existing Biological Resources

Freshwater marsh occurs in one small patch at a storm drain outlet within a manufactured channel constructed in 2006 in the southern portion of the survey area, about 120 feet west of the intersection of Prielipp road and Inland Valley Drive. The channel was manufactured in an upland area to collect runoff from the hospital parking lot. Vegetation in this area is dominated by broad-leaved cattail (*Typha latifolia*) with occasional mule fat (*Baccharis salicifolia*), bull thistle (*Cirsium vulgare*), and coyote brush (*Baccharis pilularis*) around the periphery.

Riparian forest occurs in the canyon in the far northern portion of the survey area, within the survey buffer surrounding the project site (see Table 1). It is dominated by a mix of coast live oak (*Quercus agrifolia*), Fremont cottonwood (*Populus fremontii*), red willow (*Salix laevigata*), and Goodding's black willow (*Salix gooddingii*). The understory is characterized by a mix of native and non-native species, including broad-leaved cattail, horseweed (*Erigeron canadensis*), western ragweed (*Ambrosia psilostachya*), and short-pod mustard (*Hirschfeldia incana*).

A small strip of primarily exotic vegetation mapped as riparian scrub occurs within the manufactured channel just south of the freshwater marsh. As noted above, the channel was manufactured in an upland area to collect runoff from the hospital parking lot. This area is strongly dominated by non-native annual plants such as Spanish false fleabane (*Pulicaria paludosa*) with small amounts of bull thistle, annual beard grass (*Polypogon monspeliensis*), and other non-native annual grasses. In addition, scattered native perennials occur along the edges of the riparian scrub, including recently sprouted Fremont cottonwood, Goodding's black willow, and coyote brush.

Coast live oak woodland occurs as a small patch in the western portion of the survey area, west of the existing hospital buildings and just east of I-15. It consists of a cluster of five small- to moderate-sized coast live oak trees.

Riversidean sage scrub occurs in the northern portion of the survey area, primarily on the northern portion of the slope leading down into the canyon. Portions of this vegetation community occurring on slopes adjacent to developed land, such as along I-15 and the hospital parking lot, may have been graded and revegetated as part of past development. Vegetation in this community varies from a virtual monoculture of California buckwheat (*Eriogonum fasciculatum*), to more diverse areas that include California buckwheat, brittlebush (*Encelia farinosa*), and California sagebrush (*Artemisia californica*). Other subdominant species in the Riversidean sage scrub include cane cholla (*Cylindropuntia californica* var. *parkeri*), doveweed (*Croton setiger*), western jimson weed (*Datura wrightii*), tocalote (*Centaurea melitensis*), and short-pod mustard.

Disturbed land occurs in several patches throughout the survey area, including a large area southwest of the intersection of Prielipp Road and Inland Valley Drive, the strip of land running along the edge of I-15, and a strip just outside a parking lot in the northern portion of the survey area. These areas appear to have been historically graded and have low overall vegetation cover consisting mostly of bare ground, non-native weeds, and scattered natives. Dominant plant species present in the disturbed land include short-pod mustard, prickly

lettuce (*Lactuca serriola*), telegraph weed (*Heterotheca grandiflora*), tocalote, and non-native grasses.

Developed land (identified in the MSHCP as residential/urban/exotic) is the dominant vegetation community mapped in the survey area, and consists of the hospital and associated facilities, I-15 and other roadways, and the neighboring light industrial developments. Vegetation within the developed land consists of ornamental and exotic species, including Canary Island pine (*Pinus canariensis*), gum tree (*Eucalyptus* sp.), and blue jacaranda (*Jacaranda mimosifolia*).

Table 1
Vegetation Communities within the Survey Area (acres)

Land Cover Types	Project Site	100-foot Off-Site Survey Buffer	Survey Area Total
Freshwater marsh	0.02	-	0.02
Riparian forest	0.27	2.52	2.79
Riparian scrub	0.04	-	0.04
Coast live oak woodland	0.22	0.06	0.28
Riversidean sage scrub	1.17	1.14	2.31
Disturbed land	3.75	1.54	5.29
Developed land	16.67	6.69	23.36
TOTAL	**22.14**	**11.95**	**34.09**

3.3 Zoological Resources

A total of 10 wildlife species were identified within the survey area (Attachment 2). The wildlife observed on-site are typical species found in developed sites and adjacent natural or naturalized habitats. Species detected include harvester ant (*Pogonomyrmex* sp.), Great Basin fence lizard (*Sceloporus occidentalis longipes*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), California scrub-jay (*Aphelocoma californica*), California towhee (*Melozone crissalis*), warbler (*Setophaga* sp.), desert cottontail (*Sylvilagus audubonii*), northern raccoon (*Procyon lotor*), and coyote (*Canis latrans*).

4.0 Sensitive Biological Resources

4.1 Sensitivity Criteria/Regulatory Setting

For purposes of this report, species will be considered sensitive if they are (1) covered species under the MSHCP; (2) listed or proposed to be listed by state or federal agencies as threatened or endangered; (3) on California Rare Plant Rank (CRPR) 1B (considered endangered throughout its range), CRPR 2 (considered endangered in California but more common elsewhere), CRPR 3 (more information about the plant's distribution and rarity needed), and CRPR 4 (plants of limited distribution) of the CNPS Inventory of Rare and Endangered Vascular Plants of California (2020); or (4) considered rare, endangered, or threatened by the CNDDB (CDFW 2020a, 2020b, 2020c, 2020d, 2020e). Vegetation community/land cover type sensitivity follows the MSHCP (WRCRCA 2003).

4.1.1 State Regulations

Under Section 3503 of the CFGC, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 of the CFGC prohibits take, possession, or destruction of any birds in the orders Falconiformes (raptors) or Strigiformes (owls) or of their nests and eggs.

4.1.2 Federal Regulations

The federal Migratory Bird Treaty Act of 1918 (MBTA) was established to provide protection to the breeding activities of migratory birds throughout the U.S. The MBTA, which is enforced by USFWS, makes it unlawful "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird, or attempt such actions, except as permitted by regulation. The take, possession, import, export, transport, sale, purchase, barter, or offering of these activities is prohibited, except under a valid permit or as permitted in the implementing regulations.

4.1.3 Western Riverside County MSHCP

The MSHCP is a comprehensive multi-jurisdictional habitat conservation plan focusing on the conservation of species and their associated habitats in western Riverside County. It is one of several large multi-jurisdictional habitat-planning efforts in southern California with the overall goal of maintaining biological and ecological diversity within a rapidly urbanizing region. The MSHCP allows the County of Riverside and its cities to better control local land use decisions and maintain a strong economic climate in the region while addressing the requirements of the federal Endangered Species Act (WRCRCA 2003). The MSHCP plan area encompasses 1.26 million acres (1,966 square miles), including all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as the cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, Menifee, and San Jacinto.

The MSHCP serves as a habitat conservation plan pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of 1973, as amended, as well as a Natural Community Conservation Plan under the Natural Community Conservation Planning Act of 2001. The jurisdictions participating in the MSHCP assemble and manage habitat within the coordinated MSHCP Criteria Area. In exchange for this preservation, the U.S. Fish and Wildlife Service (USFWS) and CDFW have granted these jurisdictions "Take Authorization" for otherwise lawful actions, such as public and private development, that incidentally take or harm species or their habitat outside the MSHCP Criteria Area (WRCRCA 2003).

A total of 146 sensitive plant and wildlife species receive some level of coverage under the MSHCP. Of that total, the majority of these species have no additional survey/conservation requirements and 16 plant species are classified as "narrow endemic species" based on their limited distributions in the region. These narrow endemics are sensitive biological resources;

some are also federally or state listed as threatened or endangered. The habitat that supports a narrow endemic species is also considered a sensitive biological resource.

The survey area is not located inside a Criteria Area, Criteria Cell, Conservation Area, or Narrow Endemic Plant Species Survey Area (NEPSSA) identified by the MSHCP. In addition, it is not located within the MSHCP Additional Survey Areas for amphibians, mammals, or within any Special Linkage Areas; however, it is located partially within the MSHCP western burrowing owl survey area. As such, the project is required to comply with the western burrowing owl survey requirements identified in the MSHCP (see Figure 3; WRCRCA 2003). As noted above, a habitat assessment and focused burrow survey in accordance with Step I and Step II Part A of the Burrowing Owl Survey Instructions (WRCRCA 2006) have been completed. The results of those surveys are discussed in Section 4.3.2 and the western burrowing owl survey letter (RECON 2021).

4.1.4 Stephens' Kangaroo Rat Habitat Conservation Plan

In 1996, USFWS approved the Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan (HCP) and granted an incidental take permit for Riverside County covering an estimated 30,000 acres of occupied habitat within eight member cities: Perris, Temecula, Murrieta, Lake Elsinore, Corona, Riverside, Moreno Valley, and Hemet (Riverside County Habitat Conservation Agency [RCHCA] 1996). The SKR HCP authorizes the incidental take of half of the occupied habitat remaining in the HCP plan area while using development fees to implement the plan, purchase private property, and create a reserve system. The SKR HCP and corresponding permits are in effect for areas covered by the MSHCP; however, the SKR HCP and the MSHCP remain separate. The SKR fee areas are subject to mandatory conservation measures as outlined in the SKR HCP (RCHCA 1996) and as subsequently modified.

The survey area is not part of a SKR core reserve but does occur within the SKR fee area (RCHCA 1996). As the project would occur entirely within areas that have previously been graded, disturbed, or developed, the SKR fee is not anticipated to apply. As the survey area is situated outside of a SKR core reserve, focused SKR surveys are not required.

4.2 Sensitive Plants

One sensitive plant species, paniculate tarplant (*Deinandra paniculata*), was observed within the survey area. Paniculate tarplant is discussed in more detail below, and an assessment for this and other sensitive plant species to occur is presented in Attachment 3.

Paniculate tarplant. Paniculate tarplant is not state or federally listed and is not an MSHCP covered or narrow endemic species; however, it is identified by the CNPS as a CRPR 4.2 species. Paniculate tarplant is an annual plant that generally occurs on sandy soils in grassland, open chaparral, open woodland, and disturbed habitat. It was present scattered throughout the patch of disturbed land in the southern tip of the project site.

4.3 Sensitive Wildlife

No sensitive wildlife species were observed within the survey area; however, there is moderate potential for Cooper's hawk (*Accipiter cooperii*), western burrowing owl, and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), to nest/occur within the survey area. An assessment of potential for sensitive wildlife species to occur is presented in Attachment 4. Sensitive species observed or with moderate or high potential to occur within the survey area are discussed in further detail below.

4.3.1 Cooper's Hawk

Cooper's hawk is a CDFW watch list species and an MSHCP-covered species and has a moderate potential to nest within the gum trees and other exotic trees within the hospital property. Additional, higher quality nesting habitat occurs in the riparian forest habitat within the canyon to the north of the project site. The Riversidean sage scrub and disturbed lands within the survey area and in the surrounding land provide foraging opportunities for this species.

4.3.2 Western Burrowing Owl

The western burrowing owl is a CDFW species of special concern and an MSHCP-covered species. In conjunction with the general biological survey, a habitat assessment and focused burrow survey were completed in accordance with Step I and Step II Part A of the survey guidelines (WRCRCA 2006). The western burrowing owl survey report is included as Attachment 5.

Based on the habitat assessment, there is suitable habitat on the project site and within 500 feet, although no western burrowing owls or evidence of owl activity (e.g., active burrows, whitewash, feathers, pellets, or bones) were detected during the focused burrow survey (Figure 5). This habitat is open and sparsely vegetated with low-growing species and supports numerous rodent burrows. Although there is Riversidean sage scrub within the survey area, the shrub density in this community too dense to provide suitable habitat for western burrowing owl.

There are five areas of suitable habitat for western burrowing owl within the burrowing owl survey area that were evaluated during the focused burrow survey (see Figure 5 and Attachment 5).

Survey Area 1. A 3.45-acre patch of disturbed land within and adjacent to the southern tip of the project site, southwest of the western terminus of Prielipp Road.

Survey Area 2. Two patches of disturbed land and mowed Riversidean sage scrub totaling 2.41 acres east of Inland Valley Drive. These areas are across the street from the developed portions of the existing hospital. They are situated a minimum of 1,000 feet north of the suitable habitat on-site (Survey Area 1).

Image Source: Nearmap (flown January 2021)

Project Boundary

Habitat Assessment Area

Survey Area

FIGURE 5

Western Burrowing Owl Survey Map

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Survey Area 3. A 2.27-acre patch of land consisting of disturbed habitat and a maintained detention basin associated with an apartment complex. This patch lies approximately 300 feet north of the northern edge of the hospital property, across the riparian canyon. In addition, this area is approximately 1,150 feet north of and on the other side of the existing hospital from the suitable habitat on-site.

Survey Area 4. A 7.23-acre graded pad with disturbed habitat located to the west of Inland Valley Drive. This patch is approximately 325 feet north of the northern edge of the project site and separated from the site by a canyon with tall riparian trees. In addition, this area is approximately 1,000 feet north of and on the other side of the existing hospital from the suitable habitat on-site. This area was on private property and was not directly accessible. Therefore, it was inspected from the project site and the edge of Inland Valley Drive with the use of binoculars.

Survey Area 5. A long stretch of disturbed habitat and totaling 6.27 acres west of I-15. This patch is approximately 300-400 feet west of the suitable habitat on-site and is separated from the site by a busy freeway. It was inaccessible due to the presence of private property and could only be viewed from the project site with the use of binoculars.

Survey Areas 1 through 3 were directly accessible and were surveyed on foot. Survey Areas 4 and 5 were on private property and could only be surveyed from the project site or accessible public rights-of-way. The two inaccessible areas are separated from suitable habitat on-site by a large canyon with a tall riparian corridor (Survey Area 4) or a busy freeway (Survey Area 5), both of which provide substantial barriers for western burrowing owl.

Numerous small rodent burrows were found in Survey Areas 1 and 2 during the burrow survey, but none were found in Survey Area 3. No owl sign (e.g., active burrows, whitewash, feathers, pellets, or bones) was detected in any Survey Area. Most of the burrows appeared to belong to Botta's pocket gopher (*Thomomys bottae*) or other small rodents. While it is possible some of the burrows were small California ground squirrel (*Otospermophilus beechyi*) burrows, all of the burrows observed were too small (approximately 1–3 inches in diameter) to support western burrowing owl.

Based on the results of the focused burrow survey, no suitable burrows were detected, and further surveys are not recommended in accordance with the survey guidelines. A summary of the habitat assessment and focused burrow survey is provided in the western burrowing owl survey report (RECON 2021).

4.3.3 San Diego Black-tailed Jackrabbit

The San Diego black-tailed jackrabbit is a CDFW species of special concern and an MSHCP-covered species. This species has moderate potential to occur within the Riversidean sage scrub and adjacent disturbed land within survey area.

4.4 Jurisdictional Resources and Riparian/Riverine Areas

The southern portion of the survey area supports a manufactured channel that contains freshwater marsh and riparian scrub habitat in the upstream portion and indicators of hydrology in the downstream portion. The canyon in the northern portion of the survey area supports riparian forest along an unnamed channel, the majority of which is found within the survey buffer rather than the project site. As noted above, potential jurisdictional areas within the project site (i.e., areas that could be impacted by the project) were assessed to determine potential jurisdictional status. As such, the assessment occurred within the manufactured drainage, and the canyon to the north of the project footprint was not directly assessed. The results of the assessment are summarized below.

Sample soil pits were dug within the freshwater marsh and riparian scrub habitats in the manufactured channel in the southern portion of the survey area. The soils within these vegetation communities met the hydric soil parameter, and these areas also meet the hydrology and hydrophytic vegetation parameters to qualify as wetlands according to the guidelines set forth by the USACE. The downstream portion of this drainage does not contain hydrophytic vegetation as it contains a mixture of mostly upland native and non-native species. However, hydrology indicators were observed throughout the drainage as it extends west, eventually becoming concrete-lined and spilling into a culvert that extends under I-15. Aerial photography (Google 2020) indicates that water flowing out of this culvert likely has connectivity with a network of downstream channels, eventually emptying into Murrieta Creek.

As noted above, the assessment was limited to areas within the project impact site, so no sample soil pits were dug within the riparian forest vegetation community in the northern portion of the survey area. The prevalence of willow trees (*Salix* spp.) and wetland species in the understory indicates that this habitat likely meets the hydrophytic vegetation parameter. Further investigation would be needed to determine the extent of hydric soil and hydrology indicators within this habitat. However, for the purposes of this report, it is assumed that this habitat meets these wetland parameters. The riparian forest is located within the off-site survey buffer, and entirely outside the project impact footprint.

4.4.1 Waters of the U.S. – USACE

The applicant consulted with USACE staff regarding the jurisdictional status of the manufactured channel in the southern portion of the surrey area. The USACE reviewed the manufactured channel and determined it was not a jurisdictional Water of the U.S. because it "is a non-perennial ditch that was excavated in uplands and is draining only uplands" (USACE 2019). Therefore, although this manufactured channel and associated riparian scrub and freshwater marsh contains portions that meet the wetland (0.06 acre) and non-wetland waters (0.05 acre) criteria, it is excluded from USACE jurisdiction.

Although the areas of riparian forest in the northern portion of the survey area were not formally assessed, they support a prevalence of hydrophytic vegetation growing along an established drainage. Therefore, this report considers the 2.79-acre area to be potential wetland Waters of the U.S. (Table 2 and Figure 6). However, this area is located within the off-site survey buffer and entirely outside within the project impact footprint.

Table 2
Summary of Potential Jurisdictional Waters [a]

Jurisdictional Areas	Acres
USACE Waters of the U.S. [a]	
Wetland Waters of the U.S.	2.79
Non-wetland Waters of the U.S.	-
RWQCB Waters of the State [a]	
Wetland Waters of the State	2.79
Non-wetland Waters of the State	-
CDFW Waters of the State [a]	
Wetland Waters of the State	2.85
Non-wetland Waters of the State	0.05

[a]The riparian habitat in the northern canyon was not formally assessed but would likely be considered a USACE, RWQCB, and CDFW wetland. Per communication from USACE and RWQCB, the manufactured channel (0.05 acre) and associated vegetation (0.06 acre) in the southern portion of the site is not under their jurisdiction. CDFW has been contacted to determine if they concur with this finding.

4.4.2 Waters of the State – CDFW

The 2.79-acre riparian forest in the canyon in the northern portion of the survey area would likely be considered a CDFW jurisdictional wetland. This area is located primarily within the off-site survey buffer and entirely outside the project impact footprint.

The CDFW are being notified to determine if they concur with the USACE and RWQCB determination that the manufactured channel in the southern portion of the project site is non-jurisdictional (see below). Based on the jurisdictional assessment, the 0.06 acre of riparian scrub and freshwater marsh support hydrophytic vegetation and may meet the CDFW criteria for wetlands. The remainder of the manufactured channel may be a CDFW jurisdictional non-wetland Water of the State.

Image Source: Nearmap (flown January 2020)

Project Boundary

Survey Area

Jurisdictional Resources

Potential CDFW Non-wetland Waters of the State

Potential CDFW Wetland Waters of the State

Potential USACE Wetland Waters of the U.S./RWQCB and CDFW Wetland Waters of the State

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FIGURE 6
Jurisdictional Resources

4.4.3 Waters of the State – RWQCB

The 2.79-acre riparian forest in the canyon in the northern portion of the survey area is dominated by hydrophytic vegetation along a natural stream and would likely be considered a RWQCB wetland Water of the State. This area is located primarily within the off-site survey buffer and entirely outside the project impact footprint.

The applicant consulted with Darren Bradford of the RWQCB staff about the status of the manufactured channel in the southern portion of the project site. Mr. Bradford determined that RWQCB would not take jurisdiction over the channel as it is a ditch excavated outside of waters of the United States and/or State, would not require a federal permit or license, and would not threaten discharge into waters of the United States and/or State. Therefore, a 401 Certification is not required (see Table 2 and Figure 6).

4.4.4 Riparian/Riverine Area and Vernal Pools

The 2.79-acre riparian forest within the canyon along the northern edge of the survey area would be considered a riparian/riverine resource because it is dominated by riparian vegetation and is supported by persistent flows within a drainage channel. The channel flows at the canyon bottom from northeast to southwest, and flows through a culvert under I-15, from which point it drains into Murrieta Creek, which flows generally south until it merges with Temecula Creek becomes the Santa Margarita River, which, in turn, flows southwest into San Diego County and empties into the Pacific Ocean. This 2.79-acre area is located primarily within the off-site survey buffer, entirely outside the project impact footprint.

The manufactured channel in the southern portion of the site supports a small amount (0.06 acre) of wetland vegetation but is not considered a riparian/riverine area because it is an artificially created feature manufactured to collect runoff from the existing hospital parking lot and is not fed by a freshwater source. As noted above, this artificial feature was reviewed by the USACE and RWQCB and was determined not to be a jurisdictional feature.

5.0 Project Impacts

Biological impacts from the proposed project are shown on Figure 7 and are analyzed below in accordance with the MSHCP.

5.1 Vegetation Communities

The project would cause permanent, direct impacts to four vegetation communities: freshwater marsh, riparian scrub, disturbed land, and residential/urban/exotic (Table 3, see Figure 7).

Table 3 Impacts to Vegetation Communities (acres)				
Land Cover Types	Existing within Survey Area	Permanent Impacts		
		On-site	Off-site	Total
Freshwater marsh	0.02	0.02	-	0.02
Riparian forest	2.79	-	-	-
Riparian scrub	0.04	0.04	-	0.04
Coast live oak woodland	0.28	-	-	-
Riversidean sage scrub	2.31	-	-	-
Disturbed land	5.29	2.99	0.04	3.03
Developed Land	23.36	13.89	0.55	14.44
TOTAL	**34.09**	**16.94**	**0.59**	**17.53**

Per the MSHCP, impacts to disturbed land and developed land would not require mitigation. The freshwater marsh and riparian scrub forest in the manufactured channel would be impacted. As discussed in Section 4.4.4, these areas do not meet the criteria of riparian/riverine areas. The riparian forest in the canyon in the northern portion of the site would be considered a riparian/riverine area; however, this community would not be impacted.

5.2 Sensitive Plant Species

Implementation of the proposed project would result in impacts to a patch of paniculate tarplant, including approximately 30 plants. Paniculate tarplant has only a low level of sensitivity and is common in disturbed area. The impact is not expected to jeopardize the local or regional population of this species. Therefore, the impact would be less than significant and no mitigation would be required.

5.3 Wildlife Species

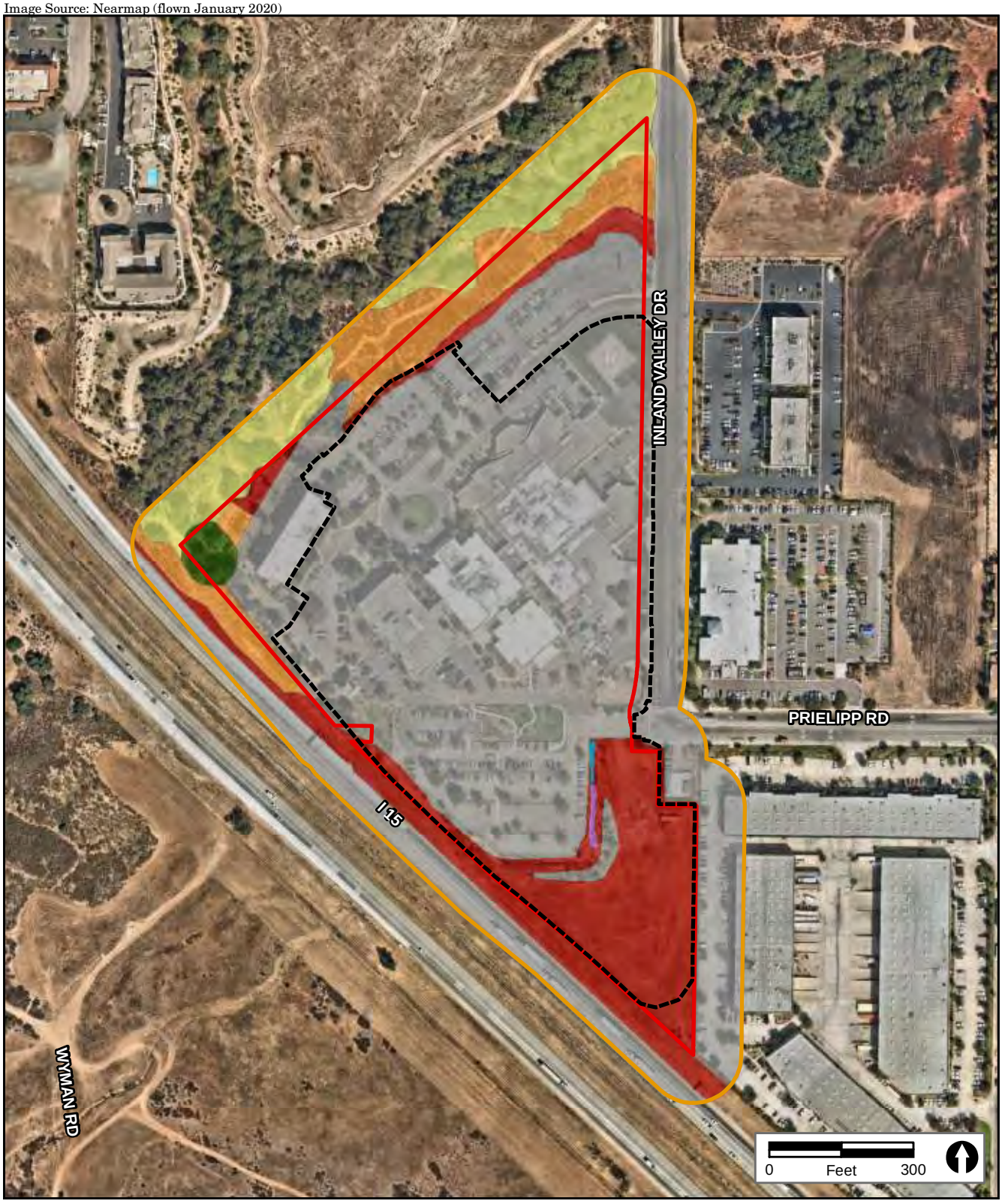
5.3.1 Stephens' Kangaroo Rat Fee Area

The project would impact a total of 17.53 acres within the SKR fee area. As noted in Section 4.1, SKR is not expected to occur within the survey area and the project would occur entirely within previously graded, disturbed, or developed areas. Therefore, the SKR fee is not anticipated to apply. Due to the lack of suitable habitat within the project site, focused SKR surveys would not be required.

5.3.2 Nesting Migratory Birds

The project has potential to result in direct impacts to migratory or nesting birds protected by the MBTA and CFGC Section 3503 if vegetation removal and/or project grading occurs during the bird breeding season (February 1 to September 15). Direct impacts to nesting and migratory birds would be considered significant. Measures to prevent impacts to nesting migratory birds are described in Section 6.1.1.

Image Source: Nearmap (flown January 2020)



Project Boundary
Project Impacts
Survey Area

Vegetation Communities

Coast Live Oak Woodland
Freshwater Marsh
Disturbed Land
Developed Land
Riparian Forest
Riparian Scrub
Riversidean sage Scrub

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FIGURE 7
Impacts to Biological Resources

5.3.3 Cooper's Hawk and Other Raptors

Native trees in the riparian forest and numerous large exotic trees in the developed land may provide suitable nesting habitat for Cooper's hawk and other tree-nesting raptors. These species are considered adequately covered by the MSHCP and take is authorized outside Criteria Cells. Therefore, impacts to these species would be considered less than significant under the MSHCP. However, these species are protected by the MBTA and CFGC Section 3503.5, and direct impacts to nesting individuals would need to be avoided. Measures to avoid impacts to Cooper's hawk and other raptors are described in Section 6.1.1.

5.3.4 Western Burrowing Owl

The disturbed land within the project site provides suitable nesting and foraging habitat for western burrowing owl; however, based on the results of the focused burrow survey, no suitable burrows were present. Therefore, no direct impacts to this species are anticipated.

5.3.5 San Diego Black-tailed Jackrabbit

Vegetation removal and grading within disturbed land may result in impacts to San Diego black-tailed jackrabbit. Since this species is considered adequately covered under the MSHCP, take is authorized outside Criteria Cells. Any potential impacts are not expected to reduce the overall populations below self-sustaining levels. Therefore, project impacts to San Diego black-tailed jackrabbit would be considered less than significant and no mitigation would be required.

5.4 Jurisdictional Resources

This section provides project impacts to potential jurisdictional wetlands and waters. No impacts would occur to the riparian forest in the northern portion of the survey area. As noted in Section 4.4.1, the USACE and RWQCB have previously determined that the manufactured channel in the southern portion of the survey area (including the freshwater marsh and riparian scrub totaling 0.06 acre) is not a jurisdictional Water of the U.S. Therefore, this section only addresses impacts to Waters of the State under CDFW jurisdiction.

Waters of the State under CDFW jurisdiction are regulated under a no-net-loss policy, and all impacts are considered significant and need to be avoided to the greatest extent possible. Impacts to potential RWQCB and CDFW Waters of the State would be impacted in the southern portion of the site, as the manufactured drainage would be removed, and the flows placed in a culvert. A formal delineation would be required to confirm the extent of jurisdictional resources and associated impacts. Impacts to potential jurisdictional resources are shown on Figure 8 and Table 4.

Image Source: Nearmap (flown January 2020)

Project Boundary

Project Impacts

Survey Area

Jurisdictional Resources

Potential CDFW Non-wetland Waters of the State

Potential CDFW Wetland Waters of the State

Potential USACE Wetland Waters of the U.S./RWQCB and CDFW Wetland Waters of the State

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FIGURE 8
Impacts to Jurisdictional Resources

Table 4
Impacts to Potential Jurisdictional Waters (acres)[a]

Jurisdictional Areas	Existing	Impacts
USACE Waters of the U.S.		
Wetland Waters of the U.S.	2.79	-
Non-wetland Waters of the U.S.	-	-
RWQCB Waters of the State		
Wetland Waters of the State	2.79	-
Non-wetland Waters of the State	-	-
CDFW Waters of the State		
Wetland Waters of the State	2.85	0.06
Non-wetland Waters of the State	0.05	0.05

[a]USACE and RWQCB have assessed the manufactured channel in the southern portion of the survey area and determined it is not a jurisdictional Water of the U.S. or State.

5.5 Riparian/Riverine Areas

The project would not impact riparian/riverine areas, as the riparian forest within the canyon in the northern portion of the site would be avoided. As noted in Section 4.4.4, the manufactured channel in the southern portion of the site was constructed to collect runoff from the hospital parking lot and does not meet the criteria of "riparian/riverine" under the MSHCP.

6.0 Avoidance and Mitigation Measures

Mitigation is required for impacts that are considered significant under CEQA and the MSHCP (WRCRCA 2003), including impacts to jurisdictional resources and sensitive species. The project has been designed to avoid or minimize impacts to sensitive biological resources to the maximum extent feasible. Avoidance measures are presented in Section 6.1, and mitigation for unavoidable impacts are discussed in Section 6.2.

6.1 Avoidance Measures

6.1.1 Nesting Migratory Birds and Raptors

To remain in compliance with the MBTA and CFGC Sections 3503 and 3503.5, no direct impacts shall occur to any nesting birds or raptors, their eggs, chicks, or nests during the breeding season (February 1 to September 15). If vegetation removal activities must occur during this breeding season, a qualified biologist will conduct a pre-construction survey to determine the presence or absence of breeding migratory birds or raptors within the impact footprint. If nests or breeding activities are located on the survey area, an avoidance buffer area would be required around the nesting site. The width of the buffer would be determined

by a qualified biologist, and biological monitoring would be required during construction until the young have fledged. If no nesting birds are detected during the pre-construction survey, no additional measures would be required.

6.1.2 Western Burrowing Owl

Although no impacts to western burrowing owl are anticipated, suitable habitat is present on site. Therefore, pre-construction surveys would be required in accordance with the survey guidelines (WRCRCA 2006), The pre-construction survey shall be conducted on suitable habitat within the impact footprint (the 3.45-acre patch of suitable habitat in the southern portion of the site) 30 days prior to ground disturbance to avoid direct take of burrowing owls.

6.2 Mitigation Measures

Mitigation would be required for impacts that are considered significant pursuant to CEQA and based on applicable policies set forth in MSHCP Sections 6.1.2, 6.1.3, 6.1.4, and 6.3.2. The project would not result in impacts to sensitive upland vegetation communities, riparian/riverine areas, vernal pools, or narrow endemic plant species. In addition, the project is not located within or adjacent to an MSHCP Criteria Area, Criteria Cell, or Conservation Area. Therefore, project impacts would not require mitigation per the MSHCP. However, potential impacts to western burrowing owl would require additional surveys and proposed impacts to the manufactured channel may require a permit and subsequent mitigation from the CDFW.

6.2.1 Jurisdictional Resources

Anticipated mitigation requirements for impacts to potential jurisdictional resources are summarized in Table 5. As noted above, USACE and RWQCB have been consulted and declined to take jurisdiction over the manufactured channel in the southern portion of the site. CDFW is being contacted to seek concurrence with the USACE and RWQCB findings. If CDFW takes jurisdiction, unavoidable impacts to CDFW jurisdictional waters would require mitigation. In compliance with the CDFW no-net-loss policy, impacts to non-wetland waters would require mitigation at a 1:1 ratio. Impacts to wetlands would require mitigation at a 2:1 ratio, including a minimum 1:1 creation component.

Mitigation for impacts to jurisdictional waters can be achieved either through permittee responsible mitigation (e.g., habitat creation) or the purchase of credits from an approved mitigation bank. The approval of mitigation for impacts to jurisdictional waters would be a part of the 1602 Streambed Alteration Agreement process.

Table 5
Mitigation for Impacts to Jurisdictional Resources[a]

Jurisdictional Areas	Impacts	Mitigation[b]	
		Ratio	Acreage
CDFW Jurisdictional Areas (1602)			
Wetland Waters of the State	0.06	2:1	0.12
Non-wetland Waters of the State	0.05	1:1	0.05

[a]All areas are presented in acres rounded to the nearest 0.01.
[b]Mitigation would occur in-kind with a minimum 1:1 creation component, and the remainder consisting of restoration or enhancement. Mitigation ratio assumes mitigation site would occur within the same watershed. Final mitigation ratios will be determined in consultation with CDFW.

7.0 MSHCP Consistency

This section demonstrates the compliance of the project with respect to biological aspects of the MSHCP. More specifically, the project was evaluated in respect to Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (MSHCP Section 6.1.2), Protection of Narrow Endemic Plant Species (MSHCP Section 6.1.3), Guidelines Pertaining to the Urban/Wildlands Interface MSHCP Section 6.1.4), and Additional Survey Needs and Procedures (MSHCP Section 6.3.2).

7.1 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

As noted in Section 5.5, the project would not impact riparian/riverine resources. Therefore, a Determination of Biologically Equivalent or Superior Preservation (DBESP) in compliance with MSHCP Section 6.1.2 would not be required (WRCRCA 2003).

7.2 Protection of Narrow Endemic Plant Species

Section 6.1.3 of the MSHCP addresses measures required to ensure protection of narrow endemic species. The project is not located within a NEPSSA and as discussed in Section 5.2 and Attachment 3 of this report, no narrow endemic species have moderate or high potential to occur on site. Therefore, no narrow endemic species are expected to be impacted so the project would be in compliance with Section 6.1.3 of the MSHCP.

7.3 Guidelines Pertaining to the Urban/ Wildland Interface

MSHCP Section 6.1.4 addresses requirements related to indirect impacts for projects adjacent to within or adjacent to a MSHCP Criteria Area, Criteria Cell, or Conservation Area.

As the project is not located within or adjacent to any of these areas, it would be in compliance with Section 6.1.4 of the MSHCP.

7.4 Additional Survey Needs and Procedures

MSHCP Section 6.3.2, addresses survey requirements for covered plant and animal species in order to achieve coverage for these species (WRCRCA 2003). As noted in Section 4.1.3, the project site is not located within the MSHCP Additional Survey Areas for amphibians, mammals, or within any Special Linkage Areas but is within the survey area for western burrowing owl. Therefore, a western burrowing owl habitat assessment (Step I) and focused burrow survey (Step II, Part A) were conducted in accordance with County of Riverside survey guidelines (WRCRCA 2006). Suitable habitat was detected during the habitat assessment, but no suitable burrows were detected during the focused burrow survey, and no additional focused surveys are recommended. However, despite these negative surveys, the survey guidelines require pre-construction surveys for western burrowing owl, given the presence of suitable habitat. The survey would be conducted within the impact area within 30 days prior to ground disturbance (WRCRCA 2006).

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ATTACHMENTS

ATTACHMENT 1

Plant Species Observed

Attachment 1 Plant Species Observed			
Scientific Name	Common Name	Habitat	Origin
GYMNOSPERMS			
PINACEAE	**PINE FAMILY**		
Pinus canariensis	Canary Island pine	NNV	I
ANGIOSPERMS: MONOCOTS			
POACEAE (GRAMINEAE)	**GRASS FAMILY**		
Bromus sp.	brome grass	CLOW, RSS	N
Bromus rubens [=*Bromus madritensis* ssp. *rubens*]	red brome	DL	I
Polypogon monspeliensis	annual beard grass, rabbitfoot grass	RS	I
TYPHACEAE	**CATTAIL FAMILY**		
Typha latifolia	broad-leaved cattail	FWM, RF	N
ANGIOSPERMS: DICOTS			
AMARANTHACEAE	**AMARANTH FAMILY**		
Amaranthus albus	tumbleweed	DEV	I
ASTERACEAE	**SUNFLOWER FAMILY**		
Ambrosia psilostachya	western ragweed	RF	N
Artemisia californica	California sagebrush	RSS	N
Baccharis pilularis	coyote brush	FWM, RS	N
Baccharis salicifolia ssp. *salicifolia*	mule fat, seep-willow	FWM, RS, DEV	N
Centaurea melitensis	tocalote, Maltese star-thistle	CLOW, RSS, DL	I
Cirsium vulgare	bull thistle	FWM, RS	I
Corethrogyne filaginifolia var. *filaginifolia*	California sand-aster	RF, CLOW	N
Deinandra [=*Hemizonia*] *paniculata*	paniculate tarplant	DL	N
Encelia farinosa	brittlebush, incienso	DL	N
Ericameria palmeri	Palmer's goldenweed	DL	N
Erigeron [=*Conyza*] *canadensis*	horseweed	RF, DL	N
Gutierrezia sarothrae	broom snakeweed, matchweed	DL	N
Helianthus annuus	western sunflower	DL	N
Heterotheca grandiflora	telegraph weed	RF, DL	N
Lactuca serriola	prickly lettuce	DL	I
Logfia [=*Filago*] *gallica*	daggerleaf cottonrose	CLOW	I
Pulicaria paludosa	Spanish false fleabane	RS	I
BIGNONIACEAE	**BIGNONIA FAMILY**		
Jacaranda mimosifolia	blue jacaranda	DEV	I
BORAGINACEAE	**BORAGE FAMILY**		
Heliotropium curassavicum var. *oculatum*	seaside heliotrope, alkali heliotrope	DL	N
BRASSICACEAE (CRUCIFERAE)	**MUSTARD FAMILY**		
Hirschfeldia incana	short-pod mustard	RF, RSS, DL	I
CACTACEAE	**CACTUS FAMILY**		
Cylindropuntia californica var. *parkeri*	cane cholla, valley cholla	RSS	N

Attachment 1 Plant Species Observed			
Scientific Name	Common Name	Habitat	Origin
CHENOPODIACEAE	**GOOSEFOOT FAMILY**		
Salsola tragus	Russian thistle, tumbleweed	DL	I
EUPHORBIACEAE	**SPURGE FAMILY**		
Croton [=*Eremocarpus*] *setiger*	dove weed	RSS, DL	N
Euphorbia [=*Chamaesyce*] *maculata*	spotted spurge	DL	I
FABACEAE (LEGUMINOSAE)	**LEGUME FAMILY**		
Acmispon glaber	deerweed, California broom	RSS	N
Melilotus indicus	sourclover	RS	I
FAGACEAE	**OAK FAMILY**		
Quercus agrifolia	coast live oak, encina	RF, CLOW	N
Quercus berberidifolua	scrub oak	CLOW	N
LAMIACEAE	**MINT FAMILY**		
Trichostema lanceolatum	vinegar weed	DL	N
MYRTACEAE	**MYRTLE FAMILY**		
Eucalyptus sp.	gum tree	DEV	I
POLYGONACEAE	**BUCKWHEAT FAMILY**		
Eriogonum fasciculatum	California buckwheat	CLOW, RSS, DL	N
SALICACEAE	**WILLOW FAMILY**		
Populus fremontii ssp. *fremontii*	Fremont cottonwood, alamo	RF, RS	N
Salix gooddingii	Goodding's black willow	RF, RS	N
Salix laevigata	red willow	RF	N
SOLANACEAE	**NIGHTSHADE FAMILY**		
Datura wrightii	western Jimson weed	RSS	N
Nicotiana glauca	tree tobacco	DL	I
Solanum nigrum	black nightshade	DL	I
TAMARICACEAE	**TAMARISK FAMILY**		
Tamarix ramosissima	saltcedar	DW, NNV	I

HABITATS

CLOW = Coast live oak woodland
DL = Disturbed land
DEV = Developed land
FWM = Freshwater marsh
RF = Riparian forest
RS = Riparian scrub
RSS = Riversidean sage scrub

ORIGIN

N = Native to locality
I = Introduced species from outside locality

ATTACHMENT 2

Wildlife Species Observed

Attachment 2 Wildlife Species Observed			
Scientific Name	Common Name	Occupied Habitat	Evidence of Occurrence
INVERTEBRATES (Nomenclature for spiders and insects from Evans 2008)			
FORMICIDAE	**ANTS**		
Pogonomyrmex sp.	harvester ant	DL	O
REPTILES (Nomenclature from Crother 2017)			
PHRYNOSOMATIDAE	**SPINY LIZARDS**		
Sceloporus occidentalis longipes	Great Basin fence lizard	RSS	O
BIRDS (Nomenclature from Chesser et al.2019)			
COLUMBIDAE	**PIGEONS & DOVES**		
Zenaida macroura	mourning dove	DEV	V, O
TROCHILIDAE	**HUMMINGBIRDS**		
Calypte anna	Anna's hummingbird	DEV	V
CORVIDAE	**CROWS, JAYS, & MAGPIES**		
Aphelocoma californica	California scrub-jay	RF	V
PARULIDAE	**WOOD WARBLERS**		
Setophaga sp.	unidentified warbler	RF	V
PASSERELLIDAE	**NEW WORLD PASSERINES**		
Melozone [=*Pipilo*] *crissalis*	California towhee	RSS, DL	V, O
MAMMALS (American Society of Mammalogists 2020)			
LEPORIDAE	**RABBITS & HARES**		
Sylvilagus audubonii	desert cottontail	DL, RSS	O
PROCYONIDAE	**PROCYONIDS**		
Procyon lotor	northern raccoon	RS	T
CANIDAE	**CANIDS**		
Canis latrans	coyote	RS	T

HABITATS
DEV = Developed land
DL = Disturbed land
RF = Riparian forest
RS = Riparian scrub
RSS = Riversidean sage scrub

EVIDENCE OF OCCURRENCE
O = Observed
T = Tracks
V = Vocalization

ATTACHMENT 3

Sensitive Plant Species Observed or with the Potential to Occur

Attachment 3 Sensitive Plant Species Observed or with the Potential for Occurrence							
Scientific Name Common Name	Sensitivity Code & Status State/ Federal Status	CNPS Rank	MSHCP	Habitat Preference/ Requirements	Verified On-Site Yes/No (direct/indirect evidence)	Potential to Occur On-Site	Factual Basis for Determination of Occurrence Potential
ANGIOSPERMS: DICOTS							
ASTERACEAE **SUNFLOWER FAMILY**							
Centromadia pungens ssp. *laevis* smooth tarplant	–/–	1B.1	Covered	Annual herb; chenopod scrub, meadow and seeps, playas, riparian woodland, valley and foothill grasslands; alkaline soils; blooms April–September; elevation less than 2,100 feet. California endemic. Known from San Diego, Riverside, and San Bernardino counties.	No	Low	No suitable habitat occurs on-site. All records of this species within two miles are within grassland or meadow habitat along Murrieta Creek, approximately 0.75–1.5 miles to the southwest (CDFW 2020a).
Deinandra paniculate paniculate tarplant	–/–	4.2	–	Annual herb; sandy soils in grassland, open chaparral and woodland, disturbed habitat; blooms May–November; elevations below 4,400 feet.	Yes	Observed	This species was found scattered throughout the disturbed land in the southern portion of the survey area.
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	–/–	1B.1	–	Annual herb; coastal salt marsh, vernal pools, playas; blooms February–June; elevation less than 4,000 feet.	No	Not Expected	No suitable salt marsh or vernal pool habitat occurs on site.
Pseudognaphalium leucocephalum white rabbit-tobacco	–/–	2B.2	–	Short-lived perennial herb; riparian woodland, cismontane woodland, coastal scrub, chaparral; found in sandy or gravelly streambeds and canyon bottoms; blooms July–October; elevation below 1,500 feet.	No	Not Expected	The woodland habitat on site is too limited to support this species; however, there is potentially suitable habitat in the canyon bottom to the north of the survey area. The only nearby record is a 1995 observation on Cole Creek 1.7 miles to the southwest (CDFW 2020a).

Attachment 3 Sensitive Plant Species Observed or with the Potential for Occurrence							
Scientific Name Common Name	Sensitivity Code & Status State/ Federal Status	 CNPS Rank	 MSHCP	Habitat Preference/ Requirements	Verified On-Site Yes/No (direct/indirect evidence)	Potential to Occur On-Site	Factual Basis for Determination of Occurrence Potential
Trichocoronis wrightii var. wrightii Wright's trichocoronis	–/–	2B.1	NE; Covered	Alkaline; Meadows and seeps; marshes and swamps; riparian forest; vernal pools.	No	Not Expected	No suitable habitat occurs in the survey area. There are no records of this species within two miles of the project site (CDFW 2020a).
BORAGINACEAE BORAGE FAMILY							
Phacelia stellaris Brand's star phacelia	–/–	1B.1	NE, Covered	Annual herb; coastal scrub coastal dunes; blooms March–June; elevation less than 1,300 feet. Known from approximately 10 occurrences in San Diego, Riverside, San Bernardino, Los Angeles (presumed extirpated), and Orange counties. Additional populations occur in Baja California, Mexico.	No	Not Expected	No suitable habitat occurs in the survey area. There are no records of this species within two miles of the project site (CDFW 2020a).
BRASSICACEAE MUSTARD FAMILY							
Sibaropsis hammittii Hammitt's clay-cress	–/–	1B.2	NE, Covered	Annual herb; openings in chaparral, valley and foothill grasslands; clay soils; blooms March–April; elevation 2,300–3,500 feet. California endemic. Known from San Diego and Riverside counties.	No	Not Expected	Scrub habitats are limited and the site lacks extensive clay soils. There are no records of this species within two miles of the project site.
Boechera johnstonii Johnston's rock cress	–/–	1B.2	NE, Covered	Chaparral; lower montane coniferous forest; often on eroded clay.	No	Not Expected	No suitable habitat occurs in the survey area. There are no records of this species within two miles of the project site (CDFW 2020a).

Attachment 3 Sensitive Plant Species Observed or with the Potential for Occurrence							
Scientific Name Common Name	Sensitivity Code & Status State/ Federal Status	CNPS Rank	MSHCP	Habitat Preference/ Requirements	Verified On-Site Yes/No (direct/indirect evidence)	Potential to Occur On-Site	Factual Basis for Determination of Occurrence Potential
CRASSULACEAE STONECROP FAMILY							
Dudleya multicaulis many-stemmed dudleya	–/–	1B.2	NE, Covered	Perennial herb; chaparral; coastal scrub; valley and foothill grassland.	No	Low	Riversidean sage scrub is limited to the periphery of the survey area, is adjacent to existing development, and lacks areas of suitably undisturbed soils to support this species. There are no records of this species within two miles of the project site (CDFW 2020a).
LAMIACEAE MINT FAMILY							
Clinopodium [=*Satureja*] *chandleri* San Miguel savory	–/–	1B.2	NE; Covered	Perennial shrub; chaparral, cismontane woodland, coastal sage scrub, riparian woodland, valley and foothill grasslands; blooms March–May; elevation less than 3,500 feet.	No	Low	Although Riversidean sage scrub is present, this perennial species would have been apparent if present. There are no records of this species within two miles (CDFW 2020a).

Attachment 3 Sensitive Plant Species Observed or with the Potential for Occurrence							
	Sensitivity Code & Status						
Scientific Name Common Name	State/ Federal Status	CNPS Rank	MSHCP	Habitat Preference/ Requirements	Verified On-Site Yes/No (direct/indirect evidence)	Potential to Occur On-Site	Factual Basis for Determination of Occurrence Potential
POLEMONIACEAE PHLOX FAMILY							
Navarretia fossalis spreading navarretia	–/FT	1B.1	NE, Covered	Annual herb; vernal pools, marshes and swamps, chenopod scrub; blooms April–June; elevation 100–4,300 feet.	No	Not Expected	Project site lacks suitable vernal pool habitat. Nearest records are from a site one mile to the east that was extirpated by development, and a habitat restoration site one mile to the northeast (CDFW 2020a)
POLYGONACEAE BUCKWHEAT FAMILY							
Chorizanthe parryi Parry's spineflower	–/–	1B.1	Covered	Annual herb; occurs on dry sandy soils in coastal scrub, chaparral, and grasslands, especially in ecotones between two habitats. blooms May–June. Found at elevations between 300 and 4,000 feet.	No	Low	Project site is largely too disturbed for this species; however, there is potentially suitable habitat in the canyon bottom to the north of the survey area. Nearest records are from observations in an undeveloped open space two miles to the northeast and along I-15 two miles to the northwest (CDFW 2020a).
Chorizanthe polygonoides var. *longispina* long-spined spineflower	–/–	1B.2	Covered	Annual herb; clay soils; openings in chaparral, coastal sage scrub, near vernal pools and montane meadows, April–July; elevation 100–5,000 feet.	No	Not Expected	Project site lacks suitable habitat, and no vernal pools are present. Nearest record of this species is from a 2012 in an open space two miles to the northeast (CDFW 2020a).

Attachment 3 Sensitive Plant Species Observed or with the Potential for Occurrence							
Scientific Name Common Name	Sensitivity Code & Status State/ Federal Status	 CNPS Rank	 MSHCP	Habitat Preference/ Requirements	Verified On-Site Yes/No (direct/indirect evidence)	Potential to Occur On-Site	Factual Basis for Determination of Occurrence Potential
Dodecahema leptoceras Slender-horned spineflower	CE/FE	1B.1	NE, Covered	Annual herb; chaparral, cismontane woodland, coastal sage scrub, alluvial fans and sandy areas; blooms April-June; elevation 600-2,500 feet.	No	Low	Project site lacks suitable sandy habitats; however, potentially suitable habitat is present in the canyon bottom to the north. There are no records of this species within two miles of the project site (CDFW 2020a)
RUBIACEAE MADDER FAMILY							
Galium angustifolium ssp. jacinticum San Jacinto Mountains bedstraw	–/–	1B.3	NE, Covered	Lower montane coniferous forest	No	Not Expected	No suitable habitat occurs in the survey area. There are no records of this species within two miles of the project site (CDFW 2020a).
ANGIOSPERMS: MONOCOTS							
ALLIACEAE ONION OR GARLIC FAMILY							
Allium marvinii Yucaipa onion	–/–	1B.2	NE, Covered	Chaparral (clay openings).	No	Not Expected	Project site lacks suitable chaparral with clay soils openings. There are no records of this species within two miles of the project site (CDFW 2020a).

Attachment 3 Sensitive Plant Species Observed or with the Potential for Occurrence							
Scientific Name Common Name	Sensitivity Code & Status State/ Federal Status	CNPS Rank	MSHCP	Habitat Preference/ Requirements	Verified On-Site Yes/No (direct/indirect evidence)	Potential to Occur On-Site	Factual Basis for Determination of Occurrence Potential
Allium munzii Munz's onion	FE/CT	1B.1	NE, Covered	Chaparral; cismontane woodland; coastal scrub; pinyon and juniper woodland; valley and foothill grassland; mesic clay.	No	Not Expected	Although Riversidean sage scrub is present, it is limited to the periphery and occurs along the edge of development and the survey area lacks mesic areas with clay soil. There are no records of this species within two miles (CDFW 2020a).
LILIACEAE **LILY FAMILY**							
Calochortus palmeri var. *munzii* San Jacinto mariposa lily	–/–	1B.2	NE, Covered	Chaparral; lower montane coniferous forest; meadows and seeps.	No	Not Expected	No suitable habitat occurs in the survey area. There are no records of this species within two miles of the project site (CDFW 2020a).
POACEAE **GRASS FAMILY**							
Orcuttia californica California Orcutt grass	CE/FE	1B.1	NE, Covered	Annual herb; vernal pools; blooms April–August; elevation 50–2,200 feet.	No	Not Expected	No suitable vernal pool habitat occurs in the survey area. There are no records of this species within two miles of the project site (CDFW 2020a).

Attachment 3 Sensitive Plant Species Observed or with the Potential for Occurrence							
	Sensitivity Code & Status						
Scientific Name Common Name	State/ Federal Status	CNPS Rank	MSHCP	Habitat Preference/ Requirements	Verified On-Site Yes/No (direct/indirect evidence)	Potential to Occur On-Site	Factual Basis for Determination of Occurrence Potential

FEDERAL LISTED PLANTS

FE = Federally listed endangered

FT = Federally listed threatened

STATE LISTED PLANTS

CE = State listed endangered

CT = State listed threatened

CALIFORNIA NATIVE PLANT SOCIETY (CNPS): CALIFORNIA RARE PLANT RANKS (CRPR)

1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.

2B = Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing.

4 = A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations.

.1 = Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat).

.2 = Species fairly threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat).

.3 = Species not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known).

COUNTY OF RIVERSIDE

NE = Narrow endemic

Covered= Multiple Species Habitat Conservation Program covered species

ATTACHMENT 4

Sensitive Wildlife Species Occurring or with the Potential to Occur

Attachment 4 Sensitive Wildlife Species Occurring or with the Potential to Occur						
Species' Common Name/ Scientific Name	State/ Federal Status	MSHCP	Habitat Preference/ Requirements	Detected On-Site?	Potential to Occur On-Site?	Basis for Determination of Occurrence Potential
INVERTEBRATES						
BRANCHINECTIDAE FAIRY SHRIMP						
San Diego fairy shrimp *Branchinecta sandiegonensis*	FE/-		Vernal pools.	No	Not Expected	No vernal pools are present on site. There are no records of this species within two miles (CDFW 2020a)
STREPTOCEPHALIDAE FAIRY SHRIMP						
Riverside fairy shrimp *Streptocephalus woottoni*	FE/-	Covered	Vernal pools.	No	Not Expected	No vernal pools are present on site. This species has been reported multiple times in vernal pools approximately 300 feet east of the project site (CDFW 2020a)
NYMPHALIDAE BRUSH-FOOTED BUTTERFLIES						
Quino checkerspot *Euphydryas editha quino*	FE/-	Covered	Open, dry areas in foothills, mesas, lake margins. Larval host plant *Plantago erecta.* Adult emergence mid-January through April.	No	Low	Riversidean sage scrub on site is limited and occurs adjacent to a busy hospital. The nearest records of this species are from 1998 from two sites that have been subsequently developed (CDFW 2020a).

Attachment 4 Sensitive Wildlife Species Occurring or with the Potential to Occur						
Species' Common Name/ Scientific Name	State/ Federal Status	MSHCP	Habitat Preference/ Requirements	Detected On-Site?	Potential to Occur On-Site?	Basis for Determination of Occurrence Potential
AMPHIBIANS						
SALAMANDRIDAE NEWTS						
California newt *Taricha torosa*	-/CSC	Covered	Under rocks, in or under logs, in rodent burrows. In or near streams, ponds, and reservoirs.	No	Not Expected	No suitable habitat occurs within the survey area. Riparian habitat in the canyon 150 feet to the north of the project site contains a stream with potentially suitable habitat; however, the potential habitat is constrained by existing development. The nearest record of this species is a 2001 observation at Cole Canyon Park, 1.75 miles to the southwest (CDFW 2020a).
PELOBATIDAE SPADEFOOT TOADS						
Western spadefoot *Spea hammondii*	-/CSC	Covered	Vernal pools, floodplains, and alkali flats within areas of open vegetation.	No	Low	No vernal pools or other suitable habitat is found on site. The riparian forest in the canyon to the north is only marginally suitable due to the constrained nature of this floodplain. The nearest recent records of this species are from vernal pools in an open space preserve approximately one mile to the northeast (CDFW 200a).

Attachment 4 Sensitive Wildlife Species Occurring or with the Potential to Occur						
Species' Common Name/ Scientific Name	State/ Federal Status	MSHCP	Habitat Preference/ Requirements	Detected On-Site?	Potential to Occur On-Site?	Basis for Determination of Occurrence Potential
REPTILES						
EMYDIDAE BOX & WATER TURTLES						
Southwestern pond turtle *Actinemys pallida* [=*Clemmys marmorata pallida*]	-/CSC	Covered	Ponds, small lakes, marshes, slow-moving, sometimes brackish water.	No	Not Expected	No ponds, lakes, or other suitable habitat occurs on site. The nearest record of this species is a 1970 collection at a site that is presumed extirpated (CDFW 2020a).
IGUANIDAE IGUANID LIZARDS						
Blainville's [=Coast] horned lizard *Phrynosoma blainvillii* [= *P. coronatum blainvillii*]	-/CSC	Covered	Chaparral, coastal sage scrub with fine, loose soil. Partially dependent on harvester ants for forage.	No	Low	Although harvester ants were observed, the areas of suitable Riversidean sage scrub on-site are limited and occurs in a largely developed area. The nearest recent record of this species is from a large open space approximately 1.9 miles to the northeast (CDFW 2020a).

Attachment 4 Sensitive Wildlife Species Occurring or with the Potential to Occur						
Species' Common Name/ Scientific Name	State/ Federal Status	MSHCP	Habitat Preference/ Requirements	Detected On-Site?	Potential to Occur On-Site?	Basis for Determination of Occurrence Potential
TEIIDAE **WHIPTAIL LIZARDS**						
Belding's orange-throated whiptail *Aspidoscelis hyperythra beldingi*	-/CSC	Covered	Chaparral, coastal sage scrub with coarse sandy soils and scattered brush.	No	Low	Riversidean sage scrub on site is limited and occurs adjacent to a substantially developed area. The nearest records of this species are from 1998; one was made on a property that has since been developed, and the other was in riparian and chaparral habitat 1.4 miles to the northeast (CDFW 2020a).
COLUBRIDAE **COLUBRID SNAKES**						
California glossy snake *Arizona elegans occidentalis*	-/CSC	-	Scrub and grassland habitats, often with loose or sandy soils.	No	Not Expected	The Riversidean sage scrub in the survey area is located in a largely developed area, and limited areas of loose sandy soils occur in the riparian forest habitat north of the project site. The only records of this species within two miles of the project site are from 1946 records citing "Wildomar" and "Murrieta" as the locations (CDFW 2020a).

Attachment 4 Sensitive Wildlife Species Occurring or with the Potential to Occur						
Species' Common Name/ Scientific Name	State/ Federal Status	MSHCP	Habitat Preference/ Requirements	Detected On-Site?	Potential to Occur On-Site?	Basis for Determination of Occurrence Potential
BIRDS						
ACCIPITRIDAE HAWKS, KITES, & EAGLES						
Cooper's hawk (nesting) *Accipiter cooperii*	-/WL	Covered	Mature forest, open woodlands, wood edges, river groves. Parks and residential areas.	No	Moderate	There are several large gum trees and other exotic trees in on the hospital property that are suitable to support nesting Cooper's hawks. Additionally, higher quality nesting habitat occurs in the riparian forest habitat within the canyon to the north of the project site. There are no records of this species within two miles (CDFW 2020a).
STRIGIDAE TYPICAL OWLS						
Burrowing owl (burrow sites) *Athene cunicularia*	-/CSC	Covered	Grassland, agricultural land, coastal dunes. Require rodent burrows. Declining resident.	No	Moderate	The disturbed land within the survey area and surrounding land is potentially suitable to support this species. Focused surveys would be required to determine presence or absence. There are no records of this species within two miles (CDFW 2020a).

Attachment 4 Sensitive Wildlife Species Occurring or with the Potential to Occur						
Species' Common Name/ Scientific Name	State/ Federal Status	MSHCP	Habitat Preference/ Requirements	Detected On-Site?	Potential to Occur On-Site?	Basis for Determination of Occurrence Potential
ALAUDIDAE LARKS						
California horned lark *Eremophila alpestris actia*	-/WL	Covered	Sandy shores, mesas, disturbed areas, grasslands, agricultural lands, sparse creosote bush scrub.	No	Low	Suitable disturbed land within the survey area is limited as most of this habitat likely occurs too close to existing high-traffic development to support this species. The Riversidean sage scrub is too dense to provide suitable habitat. All records of this species within two miles date to 1998 and may have been extirpated (CDFW 2020a).
POLIOPTILIDAE GNATCATCHERS						
Coastal California gnatcatcher *Polioptila californica*	FT/CSC	Covered	Coastal sage scrub, maritime succulent scrub. Resident.	No	Low	The Riversidean sage scrub on site occurs in a narrow strip along the edge of the existing hospital development and is likely too small and constrained to provide suitable habitat for this species. There are three records of this species in undeveloped locations within two miles of the survey area, all of which are in a large swath of Riversidean sage scrub beginning approximately one mile to the northeast (CDFW 2020a).

ATTACHMENT 5

Western Burrowing Owl Surveys for the Inland Valley Medical Center Project

RECON

An Employee-Owned Company

March 26, 2021

Mr. Loren Williams
Universal Health Services Inc.
367 South Gulph Road
King of Prussia, PA 19406

Reference: Western Burrowing Owl Surveys for the Inland Valley Medical Center Project
(RECON Number 9790)

Dear Mr. Williams:

This letter summarizes the results of western burrowing owl (*Athene cunicularia hypugaea*) surveys conducted for the Inland Valley Medical Center Project (project). RECON Environmental, Inc. (RECON) performed a habitat assessment and four focused survey visits as required per the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) Area (survey guidelines; Western Riverside County Regional Conservation Authority [WRCRCA] 2006). Project location, burrowing owl species and historical occurrence information, survey methods, and results are discussed in detail below. Neither burrowing owl nor suitable burrows were detected within the project survey area during the surveys.

PROJECT LOCATION AND DESCRIPTION

The project is located in the city of Wildomar, within Section 6, Township 07 South, Range 03 West of the U.S. Geological Survey (USGS) 7.5-minute topographic map, Murrieta quadrangle (Figures 1 and 2; USGS 1979). It is situated immediately northeast of Interstate 15 (I-15) and west of Inland Valley Drive (Figure 3), and includes assessor's parcel numbers 380-250-009, 380-250-026, 380-250-027, 380-260-001, 380-260-029, and 380-260-037, plus a small area of road improvements adjacent to those parcels. The site is not located inside or adjacent to any Criteria Area, Criteria Cell, or Conservation Area identified for conservation potential by the MSHCP; however, portions of the project site and surrounding areas are located within a MSHCP western burrowing owl survey area (WRCRCA 2003; see Figure 3).

The project would expand the existing Inland Valley Medical Center with a new addition that would expand all services and critical ancillary support for 100 new patient beds, bringing the campus total to 202 beds. The project would include construction of a new tower and demolition and replacement of one existing medical building. A new Central Utility Plant would serve the expanded hospital operations. In addition, new surface parking lots would be installed to accommodate the increased capacity. The hospital would remain operational during construction.

WESTERN BURROWING OWL SPECIES DESCRIPTION

Burrowing owl is a California Department of Fish and Wildlife (CDFW) species of special concern. Western burrowing owl, the western subspecies, is primarily restricted to the western United States and Mexico. Studies conducted by Ruhlen et al. (2004) show that the density and abundance of this species within the Imperial Valley is exceptionally high compared to other areas in southern California.

Project Location

RECON

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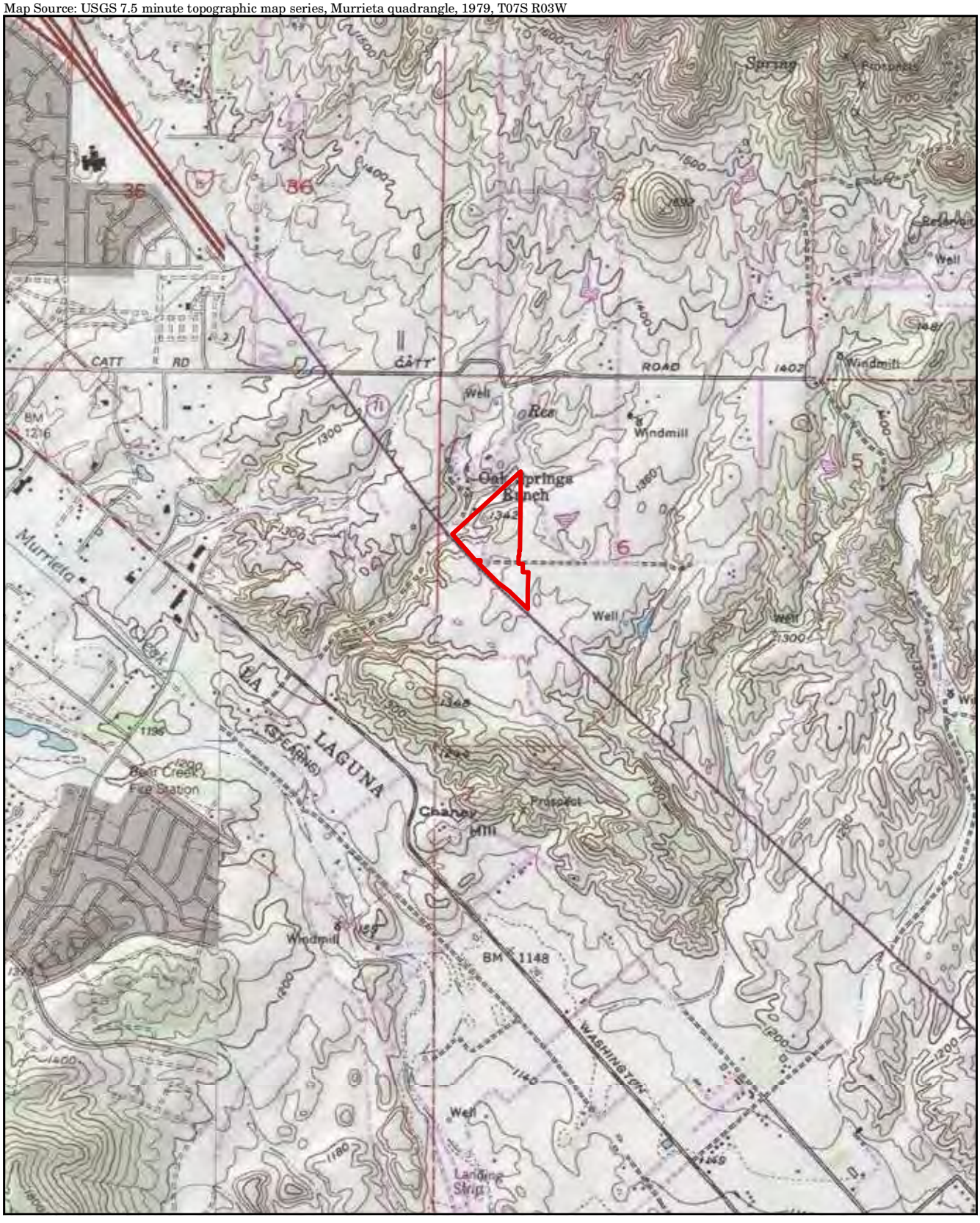
FIGURE 1
Regional Location

Map Source: USGS 7.5 minute topographic map series, Murrieta quadrangle, 1979, T07S R03W



Project Boundary

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FIGURE 2
Project Location on USGS Map

Image Source: Nearmap (flown January 2021)

FIGURE 3
Project Location on Aerial Photograph

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Habitat for the western burrowing owl includes dry, open, low-growing grasslands, deserts, and scrublands with level to gently sloping topography and well-drained soils (CDFW 2012). These areas are also often associated with burrowing mammals (Haug et al. 1993). Irrigation canals, ditches, and drains immediately adjacent to agricultural fields are also commonly used as nesting sites (Ruhlen et al. 2004). Western burrowing owl commonly occupies burrows with a diameter of at least 4.3 inches (CDFW 2012), particularly those dug by California ground squirrel (*Otospermophilus beecheyi*). In addition, western burrowing owl is known to use rubbish piles and other man-made structures with suitably sized crevices. The species is known to use multiple burrows in addition to their nesting burrows called "satellite" burrows. These non-nesting burrows are used to seek protection from predators and for roosting during the non-breeding season (CDFW 2012).

Western burrowing owl is diurnal and typically perches during daylight at the entrance to its burrow or on adjacent structures, such as low posts. Nesting typically occurs from March through August. Western burrowing owl breeding pairs form a bond for more than one year and exhibit high site fidelity, reusing the same burrow year after year (Haug et al. 1993). The female remains inside the burrow during most of the egg laying and incubation period and is fed by the male throughout brooding. Western burrowing owl is an opportunistic feeder, consuming a diet that includes arthropods, small mammals, birds, and occasionally amphibians and reptiles (Haug et al. 1993).

Urbanization has greatly reduced the amount of suitable habitat for the western burrowing owl. Other contributions to the decline of this species include the poisoning of fossorial mammals, road and ditch maintenance, and collisions with automobiles (CDFW 2012).

The western burrowing owl survey was performed in accordance with the survey guidelines (WRCRCA 2006) and included a habitat assessment (Step I) and focused burrow survey (Step II).

STEP I – HABITAT ASSESSMENT

Habitat Assessment Methods

The habitat assessment began with a review of relevant biological information to provide local and regional context, and to document known occurrences of the species in the project vicinity. This analysis included a record search of the California Natural Diversity Database (CNDDB; CDFW 2020) and eBIRD (http://ebird.org) databases, as well as USGS topographic maps (USGS 1979), soils survey maps (U.S. Department of Agriculture 1971), and online aerial satellite imagery (Google Inc. 2020).

RECON Biologist Andrew Smisek conducted a western burrowing owl habitat assessment on October 21, 2020 between 12:00 p.m. and 1:15 p.m. Weather conditions during the survey were mild and warm, with a temperature of approximately 83 degrees Fahrenheit, 1- to 3-mile-per-hour wind, and no cloud cover. The habitat assessment was conducted in accordance with Step I of the survey guidelines (WRCRCA 2006).

The area investigated in the habitat assessment included the project area plus suitable habitat within 150 meters (500 feet) and totaled approximately 95.56 acres (see Figure 3). The habitat assessment was conducted on foot, using binoculars, to inspect areas on inaccessible private property. During the assessment, Mr. Smisek analyzed vegetation types and structure; land use; presence or absence of friable soils, burrows, and/or burrow complexes; topography; hydrological features; and presence or absence of burrowing owl sign. Areas considered unsuitable included developed areas, dense Riversidean sage scrub, and woodland and riparian habitats.

Habitat Assessment Results

No western burrowing owls or evidence of owl activity (e.g., active burrows, whitewash, feathers, pellets, or bones) were detected during the habitat assessment. However, the habitat assessment identified five areas

of suitable habitat for western burrowing owl within the survey area, as discussed below and shown on Figure 4.

Survey Area 1. A 3.45-acre patch of disturbed land in the southern tip of the project site and extending northwest along the freeway edge. Representative views of the habitat conditions in this area are shown in Attachment 1, Photographs 1 and 2.

Survey Area 2. Two patches of disturbed land and mowed Riversidean sage scrub totaling 2.41 acres east of Inland Valley Drive. These areas are across the street from the developed portions of the existing hospital. They are situated a minimum of 1,000 feet north of the suitable habitat on-site in Survey Area 1. Representative views of the habitat conditions in this area are shown in Attachment 1, Photographs 3 and 4.

Survey Area 3. A 2.27-acre patch land consisting of disturbed habitat and a maintained detention basin associated with an apartment complex. This patch lies approximately 300 feet north of the northern edge of the hospital property, across the riparian canyon. In addition, this area is approximate 1,150 feet north of, and on the other side of the existing hospital from the suitable habitat on-site. A representative view of the habitat conditions in this area is provided in Attachment 1, Photograph 5.

Survey Area 4. A 7.23-acre graded pad with disturbed habitat located to the west of Inland Valley Drive. This patch is approximately 325 feet north of the northern edge of the project site and separated from the site by a canyon with tall riparian trees. In addition, this area is approximately 1,000 feet north of, and on the other side of the existing hospital from the suitable habitat on-site. This area was on private property and was not directly accessible. Therefore, it was inspected from the project site and the edge of Inland Valley Drive with the use of binoculars. Representative views of the habitat conditions in this area are shown in Attachment 1, Photographs 6 and 7.

Survey Area 5. A long stretch of disturbed habitat and totaling 6.27 acres west of I-15. This patch is approximately 300–400 feet west of the suitable habitat on-site and is separated from the site by a busy freeway. It was inaccessible due to the presence of private property and could only be viewed from the project site with the use of binoculars. A representative view of the habitat conditions in this area is provided in Attachment 1, Photograph 8.

Based on the presence of suitable habitat, surveys in accordance with Step II of the survey guidelines were determined necessary, as described below.

STEP II, PART A – FOCUSED BURROW SURVEY

Focused Burrow Survey Methods

Based on the presence of suitable habitat within the survey area, a focused burrow survey was conducted by RECON biologist Brian Parker on March 20, 2021 between 6:05 a.m. and 8:45 a.m., in accordance with Step II of the survey guidelines (WRCRCA 2006). Weather conditions during the survey were cool, with temperatures between 51 and 52 degrees Fahrenheit, wind between 2 and 4 miles per hour, and cloud cover decreasing from 100 to 90 percent.

All accessible areas of suitable habitat identified during the habitat assessment were surveyed for the presence of suitable burrows. Mr. Parker walked meandering transects through the habitat, with transects spaced between 30 and 50 feet apart. Notes were taken on avian activity, natural burrows, manufactured structures suitable for western burrowing owl, and any other information relevant to owl presence (e.g., whitewash, feathers, pellets, or bones). Areas of private property (Survey Areas 4 and 5 discussed above) were not directly accessible and could only be viewed from a distance on the project site or public rights-of-way with the use of binoculars.

Image Source: Nearmap (flown January 2021)

Project Boundary

Habitat Assessment Area

Survey Area

Photo Point

FIGURE 4

Western Burrowing Owl Habitat Survey Results

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Photographs were taken to document habitat conditions and examples of burrows found during the survey.

Focused Burrow Survey Results

A total of 14 bird species were detected during the focused burrow survey; no western burrowing owls were detected. A list of species detected is presented below:

Scientific Name	Common Name
Corvus brachyrhynchos	American crow
Calypte anna	Anna's hummingbird
Tyrannus vociferans	Cassin's kingbird
Melospiza melodia	song sparrow
Sayornis nigricans	black phoebe
Haemorhous mexicanus	house finch
Thryomanes bewickii	Bewick's wren
Accipiter cooperii	Cooper's hawk (flyover)
Chamaea fasciata	wrentit
Spinus psaltria	lesser goldfinch
Melanerpes formicivorus	acorn woodpecker
Callipepla californica	California quail
Geothlypis trichas	common yellowthroat
Larus sp.	gull

A summary of the findings of the focused burrow survey for each survey area is presented below.

Survey Area 1. This area was characterized by a disturbed, previously graded area to the south of the hospital. Numerous small burrows with diameters of approximately 1 to 3 inches were found in this area, including a large cluster of burrows adjacent to the parking lot. Most of the burrows appeared to be from Botta's pocket gopher (*Thomomys bottae*); however, it is possible some of the burrows in this area were very small California ground squirrel burrows. No burrows in this area were suitable for western burrowing owl. Representative burrows are shown in Survey Area 1 are shown on Attachment 2, Photo Points 1 and 2 (see Figure 4).

Survey Area 2. This area consisted of two patches of disturbed habitat and mowed Riversidean sage scrub east of Inland Valley Drive. Vegetation in this area was low and open (see Attachment 1, Photographs 3 and 4) and contained a small number of 1- to 3-inch diameter burrows (Attachment 2, Photo Points 3 through 5; see Figure 5). All burrows in this area were too small to be suitable for use as owl burrows.

Survey Area 3. This area consisted of a graded, disturbed lot with a homeless encampment, and a detention basin that was landscaped, irrigated, and maintained. The detention basin was within a fenced lot associated with the adjacent Oak Springs Ranch apartment complex. Direct access to the detention basin was not possible; however, the ground was largely visible from the surrounding fence line. No burrows of any kind were found in either the disturbed lot or detention basin.

Survey Area 4. This area was on a graded lot associated with the Oak Springs Ranch apartment complex. It was not directly accessible and visibility of the lot within the 500-foot survey area was extremely limited by slopes and dense, tall trees. The nearest viewpoint of this lot was from Inland Valley Road approximately 225 feet northeast of the northern edge of the survey area. Based on this view, the habitat appeared suitable, but no burrows of any kind were observed. Habitat in this area appeared suitable; however, as noted above, it is located approximately 1,000 feet north of suitable habitat on-site (Survey Area 1) and separated from the suitable habitat by the existing hospital and a canyon with tall riparian trees.

Survey Area 5. This area was on private property with access restricted by gated roads through additional private property. The nearest viewpoint of this area was the hospital parking lot, approximately 340 feet to the east, across I-15. While the habitat in this area appeared suitable, it was not possible to detect any burrows.

As noted above, Survey Areas 1 through 3 were directly accessible and were surveyed on foot while Areas 4 and 5 were inaccessible and could only be surveyed from a distance. The two inaccessible areas are separated from suitable habitat on-site by a large canyon with a tall riparian corridor (Survey Area 4) or a busy freeway (Survey Area 5), both of which provide barriers for western burrowing owl.

Numerous small rodent burrows were found during the burrow survey, but no owl sign (e.g., active burrows, whitewash, feathers, pellets, or bones) was detected. All burrows found during the burrow survey were smaller (1 to 3 inches in diameter) than typical California ground squirrel burrows (4 inches). In addition, all the observed burrows were too small for western burrowing owl.

CONCLUSION

Suitable habitat was identified during the habitat assessment; however, no western burrowing owls, owl sign, or suitable burrows were detected during the focused burrow survey. Based on the results of these surveys, additional surveys per Step II, Part B are not required (WRCRCA 2006). However, due to the presence of suitable habitat on-site, a pre-construction survey will be required within 30 days prior to ground disturbance to ensure no burrowing owls have entered the site. The survey will include all areas of suitable habitat is present within the project site (Survey Area 1; see Figure 4).

If you have any questions concerning the contents of this letter, please contact me at bparker@reconenvironmental.com or (619) 308-9333 extension 109.

Sincerely,

Brian Parker
Associate Project Manager/Biologist

BDP:jg

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ATTACHMENTS

ATTACHMENT 1

Photos of Suitable Habitat

PHOTOGRAPH 1
View of Central Portion of Survey Area 1, Facing North

PHOTOGRAPH 2
View of Western Portion of Survey Area 1, Facing Southeast along I-15

PHOTOGRAPH 3
View Southern Portion of Survey Area 2, Facing Northeast

PHOTOGRAPH 4
View Northern Portion of Survey Area 2, Facing South Along Inland Valley Drive

PHOTOGRAPH 5
View of Survey Area 3, Facing North Toward Detention Basin

PHOTOGRAPH 6
View of Survey Area 4, Facing West from Inland Valley Drive

PHOTOGRAPH 7
View of Survey Area 4, Facing North Across Canyon from Northern Edge of Hospital Property

PHOTOGRAPH 8
View of Survey Area 5, Facing West Across I-15 from Survey Area 1

ATTACHMENT 2

Photos of Typical Burrows Observed During Survey

PHOTO POINT 1
Typical Burrow in Survey Area 1,
with Burrow Diameter of Approximately 2.5 Inches

PHOTO POINT 2
View of Burrow Complex in Northwestern Portion of Survey Area 1,
with Burrow Diameters Between 1 and 3 Inches

PHOTO POINT 3
View of Burrow in Southwestern Portion of Survey Area 2,
with Burrow Diameter of Approximately 1.5 Inches

PHOTO POINT 4
View of Burrow in Southeastern Portion of Survey Area 2,
with Burrow Diameter of Approximately 2.5 Inches

PHOTO POINT 5
View of Burrow in Northern Portion of Survey Area 2,
With Burrow Diameter of Approximately 2 Inches