## Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis

Commercial Retail – 76 Station Central Avenue (Hwy 74) and Eighth Street

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## 1 EXECUTIVE SUMMARY

Jericho Systems, Inc. (Jericho) is pleased to provide this Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis prepared for the commercial development (Project) located in Lake Elsinore, California (Figures 1, 2, and 3). The approximately 1.9 -acre Project site is made up of two parcels: APN 347-130-029 (1.12 acre) and 347-130-028 (0.49 acre) located within Elsinore Area Plan of the Western Riverside MSHCP.

The City of Lake Elsinore is signatory to the MSHCP Implementing Agreement and thereby a permittee responsible for meeting the terms and conditions outlined in the MSHCP and the Biological Opinion issued for the MSHCP. Therefore, the City of Lake Elsinore has the responsibility to ensure the projects they approve are consistent the MSHCP and will not preclude the overall conservation goals and reserve design from being accomplished.

The MSHCP is a criteria-based plan and identification of planning units on which to base the Criteria is necessary for such a criteria-based plan. The MSHCP Conservation Area is comprised of a variety of existing and proposed Cores, Extensions of Existing Cores, Linkages, Constrained Linkages and Non-contiguous Habitat Blocks. The MSHCP coverage area is divided into Area Plans (AP) based on the Riverside County's General Plan Area Plan boundaries. Each of the AP's has: established conservation criteria, species specific surveys that may be required based on on-site Habitat Assessment, and resources and areas identified for conservation. In each Area Plan text, applicable Cores and Linkages are identified.

There are 146 species covered by the MSHCP. Surveys are not required for 106 of these covered species. The remaining 40 covered species may require focused surveys for proposed development projects include 4 birds, 3 mammals, 3 amphibians, 3 crustaceans, 14 Narrow Endemic Plants, and 13 other sensitive plants within the Criteria Area. The need to conduct focused surveys for all but six of these 40 species is determined by the presence of suitable habitat within designated 'survey areas' mapped for each of the species. The remaining six species that require focused surveys throughout the entire MSHCP area are associated with riparian/riverine areas and vernal pools and include least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, Riverside fairy shrimp, Santa Rosa Plateau fairy shrimp, and vernal pool fairy shrimp.

The MSHCP requires that a project comply with the MSHCP policies identified in Section 6 of the MSHCP. The Project site is not located within a 'Cell group' or in a 'Criteria Cell'. The Project site is not in an amphibian, criteria area species, mammal, or narrow endemic plant species survey area. However, a portion of APN 347-130-028 is within a burrowing owl survey area. Therefore, a habitat suitability assessment for burrowing owl (MSHCP section 6.3.2) and a Riparian/Riverine/Vernal Pool Area assessment (MSHCP section 6.1.2) were required and conducted.

The Project site consists of vacant, undeveloped land that has been subject to a variety of anthropogenic disturbances. The entire site is mapped by the RCA MSHCP Vegetation (2012) layer as developed/disturbed land, and the site survey confirmed these findings for all but the northeast corner, which consists of a mix of salt cedar, eucalyptus and willow scrub. The acreage is as follows 0.11 acre of eucalyptus trees (*Eucalyptus* ssp) approximately 35 feet in height, with a range in diameter at breast height (DBH) of 6 inches to 18 inches and a mid-story densely covered in 0.03 acre of salt cedar (*Tamarix ramossima*) with a DBH of 8 inches and 0.27 acre of black willow shrubs

(*Salix gooddingii*) with a DBH of 6 inches. The vegetation here is used as cover for a homeless encampment that supports approximately 10 transients. This area is heavily littered and disturbed. Many of the bushes and trees on site have had trunks/branches sawed off and used for cover in the homeless encampment.

The willow and salt cedar thickets grow as a result of a roadside swale originating from HWY74 and N. Frontage road located along the northeastern boundary of the site. Street runoff enters the Project site in the northern portion of APN 347-130-028 and continues westerly along the property boundary between the Project site and the parcel north of the Project site. This swale collects street runoff and is not a natural or jurisdictional feature subject to Sections 1600 of the Fish and Game Code (FGC) or Sections 404/401 of the federal Clean Water Act (CWA). There is no bed or bank associated with this swale indicating a flow of water. The water runoff from HWY 74 travels west, back flows to the southeast and percolates in the well-drained soils. There is no evidence that the swale connects to the blue line stream located off-site to the west.

This roadside swale is a result of man-made roadside water diversion from HWY 74 and is not considered jurisdictional or riverine/riparian. Although the patch of willows growing in the mid-story of the swale are riparian by definition, it is not the intent of the MSHCP to conserve small patches of riparian species growing as a direct result of man-made features. The willows occur as a direct result of roadside runoff. If the run off was redirected, these willows would not exist.

Riparian Birds covered under the MSHCP such as the Least Bell's vireo (*Vireo bellii pusillus*) [LBVI], Southwestern willow flycatcher (*Empidonax trallii extimus*) [SWWF] and Yellow-billed cuckoo (*Coccyzus americanus*) [YBCU] are found only in well-developed riparian habitat. The habitat structure on site is not what is required by these species. Furthermore, the disturbance levels preclude their occurrence.

No vernal pool habitat exist on site. None of the mapped soils on site are listed on the USDA-NRCS National Hydric Soils List to indicate the potential for vernal pools. The soils onsite are well drained and the duration, timing, and frequency of inundation on site provide no indication or validation of vernal pool ecology. Water does not accumulate on the surface for seasonal periods (more than 3 weeks) of inundation. Clay soils are not mapped on site. The site as a whole lacks the water retention capabilities necessary to support vernal pool habitat. Therefore, the biological functions and values of vernal pool habitat do not exist on site.

The area on site requiring burrowing owl surveys is densely vegetated in a three-story canopy cover structure that includes eucalyptus trees, salt cedar, willows, and non-native grasses and weeds. The habitat composition and structure is not suitable for burrowing owl. No further investigation is warranted.

## 2 INTRODUCTION

The purpose of this Consistency Analysis (Analysis) report is to summarize the biological data for the proposed commercial development (Project) and to document project's consistency with the goals and objectives of the Western Riverside County MSHCP. The proposed Project consists of the development of a proposed gas station consisting of a 3,516 square foot (sf) convenience store, 3,160 sf fueling canopy with six multi-product dispensers, and two underground storage tanks.

## 2.1 Project Area

The 1.9-acre Project site is made up of two parcels, located on Assessor's Parcel Number (APN): 347-130-029 and 347-130-028 in the City of Lake Elsinore, Riverside County, California, on the northwest corner of Central Avenue (Hwy 74) and Ardenwood Way. The Site is identified on the *Lake Elsinore* US Geological Survey's (USGS) 7.5-minute topographic map in Section 30 of Township 5 South, Range 4 West (Figures 1, 2 and 3). The site is bounded on the north by 8th Street, on the south by Ardenwood Way, on the west by vacant land, and on the east by Central Avenue (Hwy 74).

## 2.2 Project Description

The proposed Project consists of the development of a proposed gas station consisting of a 3,516 square foot (sf) convenience store, 3,160 sf fueling canopy with six multi-product dispensers, and two underground storage tanks (Figure 4)

## 2.3 Covered Roads

The Project proposes no new roads.

## 2.4 General Setting

According to the EPA Regional map, the Project site is located in the Inland Valleys (85k) ecoregion. An ecoregion is a regional area that has similar ecosystems in terms of type, quality, and quantity of environmental resources. The Inland Valleys ecoregion is influenced less by marine processes, and more by alluvial processes. The ecoregion consists of alluvial fans and basin floors at the base of the San Bernardino and San Gabriel mountains and the San Jacinto and Perris Valleys in the south. The region was historically composed of Riversidean coastal sage scrub, valley grasslands, and riparian woodlands. The ecoregion is now heavily urbanized with some remaining agriculture.

Hydrologically, the Project site is located within the Lake Mathews hydrologic area, in the 14,217-acre hydrologic sub-area (HSA 801.35) within the Temescal Wash watershed (HUC 180702030601).

The City of Lake Elsinore is located in southwestern Riverside County at the foothills of the Cleveland National Forest. Topographically, Lake Elsinore is located on the east side of the Santa Ana mountains. Air quality is relatively poor, as characteristic of the region due to temperature inversions, convergence zones, and accumulation of air pollutants. Air pollutants of greatest concern are carbon monoxide, PM2.5, ozone, and PM10. The general climate of Lake Elsinore includes hot summers (99°F average maximum in August) and mild winters (38°F average minimum in February) with cool ocean breezes and sparse winter rainfall, averaging 12.09 inches of precipitation per year.

Soils on the Project site area consist of Cortina cobbly loamy sand, 2-9% slopes (CmC), Lodo rocky loam, 25-50% slopes (LpF2), and Arbuckle gravelly loam, 2-9% slopes – dry, MLRA 19 (AIC), (Figure 6). Soils in the Arbuckle series are well-drained remnants of alluvial fans derived from numerous types of rock. Soils in the Cortina series are well-drained soils made from alluvium derived from metasedimentary rock. The Lodo series consists of shallow, somewhat excessively drained soils that formed in material weathered from hard shale and fine grained sandstone. Terrace escarpments are landforms (terraces) made from alluvium derived from mixed sources. (Figure 5)

## 3 RESERVE ASSEMBLY ANALYSIS

The site is not located or mapped within any criteria cells or cell groups, reserve assembly or Public or Quasi-Public lands. Therefore, this analysis is not applicable.

## 4 VEGETATION MAPPING

According to the Riverside Conservation Authority (RCA) MSHCP GIS Vegetation (2012) layer, the Project site is mapped as Developed/Disturbed Land. Field survey confirmed this mapping with the exception of the northeast corner of the site, which site supports an over-story canopy 0.11 acre of eucalyptus trees (Eucalyptus ssp) approximately 35 feet in height, with a range in diameter at breast height (DBH) of 6 inches to 18 inches and a mid-story densely covered in 0.03 acre of salt cedar (Tamarix ramossima) with a DBH of 8 inches and 0.27 acre of black willow shrubs (Salix gooddingii) with a DBH of 6 inches. The average height of the mid-story is approximately 12 feet. The dense understory in the northeast corner primarily consists of short-podded mustard (*Hischfeldia incana*), tocalote (*Centaurea melitensis*), and non-native grasses (*Bromus* ssp.). A few native plants are found scattered along the eastern and western edges of the Project site including California buckwheat (*Erioginum faciculatum*), encilia (*Encilia farinosa*) and telegraph weed (*Heterotheca grandiflora*). The remainder of the Project site is bare and compacted due to blading.

#### 5 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AREAS AND VERNAL POOLS (SECTION 6.1.2)

According to Section 6.1.2 of the MSHCP:

"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. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinationsshould consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records.

"Fairy Shrimp. For Riverside, vernal pool and Santa Rosa fairy shrimp, mapping of stock ponds, ephemeral pools and other features shall also be undertaken as determined appropriate by a qualified biologist.

"With the exception of wetlands created for the purpose of providing wetlands Habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions."

## 5.1 Riparian/Riverine

As defined under Section 6.1.2 of the MSHCP, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*, riparian/riverine areas are areas dominated by trees, shrubs, persistent emergent plants, or emergent mosses and lichens which occur close to or are dependent upon nearby freshwater, or areas with freshwater flowing during all or a portion of the year. Conservation of these areas is intended to protect habitat that is essential to a number of listed or special-status water-dependent fish, amphibian, avian, and plant species.

Any unavoidable alteration or loss of riparian/riverine area related to a project requires the preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) analysis to ensure the replacement of any lost functions and values of the habitat. This assessment is independent from considerations given to waters of the United States and waters of the State under the CWA, the California Porter-Cologne Water Quality Control Act, and CDFW jurisdictional streambed under the California Fish and Game Code.

#### 5.1.1 Methods

Ms. Lawrey assessed the Project site for State and /or federal jurisdictional waters that are subject to Sections 404 and 401 of the federal Clean Water Act (CWA) regulated by the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) respectively; and/or Section 1602 of the California Fish and Game Code (FCG) administered by the California Department of Fish and Wildlife (CDFW) and Riverine/Riparian and Vernal Pool habitat subject to Section 6.1.2 of the MSHCP.

Potential limits of jurisdictional waters, i.e. WoUS as regulated by the USACE and RWQCB, and streambed and associated riparian habitat as regulated by the CDFW were evaluated using the follow techniques.

Evaluation of CWA WoUS was based upon the Corps' regulations and technical guidance issued by the USACE including, among other sources described further below, (i) USACE Wetlands Research Program Technical Report Y-87-1 (on-line edition), Wetlands Delineation Manual, Environmental Laboratory, 1987 (Wetland Delineation Manual), USACE Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, December 2008 (Arid West Supplement) and USACE A Guide to Ordinary High Water Mark (OHWM) Delineation Arid West Region of the United States, 2010. The lateral extent of USACE jurisdiction was measured at the Ordinary High Watermark (OHWM), which is 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.

Evaluation of FGC Section 1600 Streambed Waters followed guidance in the FGC in the *MESA Field Guide*, described above, pursuant to which CDFW claims jurisdiction beyond traditional stream banks and the outer edge of riparian. Under MESA, the term stream is defined broadly to include "a body of water that flows perennially or episodically and that is defined by the area in which water currently flows, or has flowed, over a given course during the historic regime [i.e., 'circa 1800 to the present'], and where the width of its course can reasonably be identified by physical or biological indicators." Specifically, CDFW jurisdiction was delineated by measuring the elevations of land that confine a stream to a definite course when its waters rise to their highest level and to the extent of associated riparian vegetation. Here the extent of associated riparian vegetation was used to mark the lateral extent of the jurisdictional areas. Other data recorded included bank height and morphology, substrate type, and vegetation within and adjacent to the low flow streambed.

A variety of reference materials relevant to the project site were reviewed during the course of this delineation, including historical and current aerial imagery, Federal Emergency Management Agency (FEMA) flood insurance rate maps (FIRM), National Oceanic & Atmospheric Administration (NOAA) climate data, USFWS National Wetland Inventory (NWI) and EPA Water Program "My Waters" data layers and United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) web soil survey. The data provided in the Web Soil Survey provides a standard basis for the soil textures and types that are assigned a hydric indicator status of "hydric" or "non-hydric" by the National Technical Committee for Hydric Soils.

The methods used to determine any riparian/riverine or vernal pool areas were based on the above techniques as well as soils evaluations and vegetation classifications. This is because an area may be characterized as riparian based on its vegetative composition but does not meet the criteria of being federal or state jurisdictional water.

## 5.1.2 Existing Conditions and Results

A roadside swale originating from HWY74 and N. Frontage road located along the northeastern boundary of the site, enters the Project site in the northern portion of APN 347-130-028 and continues westerly along the property boundary between the Project site and the parcel north of the Project site. This swale collects street runoff and is not a natural or jurisdictional feature subject to Sections 1600 of the FGC or 404/401 of the federal CWA. There is no bed or bank associated with this swale indicating a flow of water. The water runoff from HWY 74 travels west, back flows to the southeast and percolates in the well-drained soils. There is no evidence that the swale connects to the blue line stream located off-site to the west.

This roadside swale is a result of man-made roadside water diversion from HWY 74 and is not considered jurisdictional or riverine/riparian. Although the patch of willows growing in the mid-story of the swale are riparian by definition, it is not the intent of the MSHCP to conserve small patches of riparian species growing as a direct result of man-made features. The willows occur as a direct result of roadside runoff. If the run off was redirected, these willows would not exist.

### 5.1.3 Impacts

Based on the Project's Site Plan (Figure 4), 0.41 acre will be permanently impacted by grading and construction.

## 5.1.4 Mitigation

No mitigation or permitting is required because the swale is artificially created and artificially created are not included in the definitions of a Riverine/Riparian Area. Further investigation is not warranted.

## 5.2 Vernal Pools

Vernal pools are seasonally inundated, ponded areas that only form in regions where specialized soil and climatic conditions exist. During fall and winter rains typical of Mediterranean climates, water collects in shallow depressions where downward percolation of water is prevented by the presence of a hard pan or clay pan layer (duripan) below the soil surface. Later in the spring when rains decrease and the weather warms, the water evaporates and the pools generally disappear by May. The shallow depressions remain

relatively dry until late fall and early winter with the advent of greater precipitation and cooler temperatures.

Vernal pools provide unusual "flood and drought" habitat conditions to which certain plant and wildlife species have specifically adapted as well as invertebrate species such as fairy shrimp.

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

The MSHCP lists two general classes of soils known to be associated with special-status plant species; clay soils and Traver-Domino Willow association soils. The specific clay soils known to be associated with special-status species within the MSHCP plan area include Bosanko, Auld, Altamont, and Porterville series soils, whereas Traver-Domino Willows association includes saline-alkali soils largely located along floodplain areas of the San Jacinto River and Salt Creek. Without the appropriate soils to create the impermeable restrictive layer, none of the special-status species associated with vernal pools can occur on the project site.

### 5.2.1 Methods

Methods included a review of recent and historic aerial photographs (1996-2018) of the Project site and its immediate vicinity, a review of soils data, and a site visit on January 16, 2021 by Jericho biologist Shay Lawrey. Ms. Lawrey carefully assessed the site for depressions, inundation, presence of hydrophytic vegetation, staining, cracked soil, ponding, and indicators of active surface flow and corresponding 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.

## 5.2.2 Existing Conditions and Results

Aerial imagery did not provide visual evidence of an astatic or vernal pool conditions on or in the vicinity of the Project site.

Soils on the Project site area consist of Cortina cobbly loamy sand, 2-9% slopes (CmC), Lodo rocky loam, 25-50% slopes (LpF2), and Arbuckle gravelly loam, 2-9% slopes – dry, MLRA 19 (AIC), (Figure 6). Soils in the Arbuckle series are well-drained remnants of alluvial fans derived from numerous types of rock. Soils in the Cortina series are well-drained soils made from alluvium derived from metasedimentary rock. The Lodo series consists of shallow, somewhat excessively drained soils that formed in material weathered from hard shale and fine grained sandstone. Terrace escarpments are landforms (terraces) made

from alluvium derived from mixed sources.

No ponding was observed on-site. Soils are well drained and no mud/soil cracks or any other indicators of pooling was observed on site.

From this review of historic aerial photographs and observations during the field investigation, it is concluded that no vernal pools or suitable fairy shrimp habitat exist on site. Further, no special-status plant and/or wildlife species associated with vernal pools were observed during the field visit. Additionally, the routine disturbances on-site, and well drained soils also preclude vernal pools from existing on-site.

### 5.2.3 Impacts

There are no impacts to vernal pools because none exist on site, and the soil type on site does not support the potential for vernal pools.

## 5.2.4 Mitigation

No mitigation is required because no vernal pools exist on site.

## 5.3 Fairy Shrimp

Fairy shrimp can be found in non-vernal pool features such as stock ponds, ephemeral pools, road ruts, human- made depressions, or other depressions that may pond water. No habitat features suitable for fairy shrimp exist on site.

Therefore, evaluations for the presence of fairy shrimp were warranted or required. No further discussion on fairy shrimp is made in this report.

### 5.4 Riparian Birds

Riparian Birds covered under the MSHCP such as the Least Bell's vireo (*Vireo bellii pusillus*) [LBVI], Southwestern willow flycatcher (*Empidonax trallii extimus*) [SWWF] and Yellow-billed cuckoo (*Coccyzus americanus*) [YBCU] are found only in well-developed riparian habitat. No habitat features suitable for these species exist on site. However, due to the presence of a willow scrub thicket the following evaluations were made for MSHCP compliance.

### 5.4.1 Southwestern willow flycatcher

The SWWF is a small passerine bird measuring approximately 5.7 inches in length. It has a grayishgreen back and wings, whitish throat, a light gray-olive breast, and pale yellowish belly. It has two visible white wing bars and a faint or absent eye ring. The call consists of a repeated "whit" and their song is a sneezy "fitz-bew." (60 FR 10694). The SWWF is currently one of the four recognized subspecies of the willow flycatcher. This flycatcher is a neotropical migrant that breeds in the southwestern United States from mid-April to early-September. In the fall, it migrates south to its wintering grounds in portions of South America, Central America and Mexico. (60 FR 10694) The SWWF breeds in dense riparian habitats along rivers, streams, and other wetlands at elevations ranging from sea level to 8,500 feet (Sogge 1997). Occupied habitat is generally dominated by shrubs and trees 13 to 23 feet or more in height, which provide dense lower and mid-story vegetation approximately 10 to 13 feet aboveground. This dense vegetation is often interspersed with open water, small openings, or sparse vegetation, creating a mosaic that is not uniformly dense (62 FR 39129). Plant species closely associated with the flycatcher include willows (Salix spp.), boxelder (*Acer negungo*), seepwillow (*Baccharis* spp.), with an overstory of cottonwood (*Populus fremontii*) (62 FR 39129).

The SWWF has not been documented on site or within a one mile radius. The small willow scrub thicket onsite is highly degraded and occupied by transients. The habitat formed as a result of street run off and does not have the size or structure preferred by this species. They are found in habitat areas with a well-developed overstory, mid-story, understory, consisting of willow, mule fat and cottonwood, near water, with a minimum patch size of four (4) acres. This species requires a habitat structure of a 20-30-foot upper canopy, 15-12 foot mid-story and a lower story of 5-3 feet. This species is not found in salt cedar or eucalyptus. Although there is a willow component it is not the size or structure of 0.11 acre of eucalyptus trees approximately 35 feet in height, with a range in diameter at breast height (DBH) of 6 inches to 18 inches and a mid-story densely covered in 0.03 acre of salt cedar with a DBH of 8 inches and 0.27 acre of black willow shrubs with a DBH of 6 inches is not the type of habitat is not the type or structure that this species is found.

Nor are they found in high disturbance areas which is the case on site due to the transient encampments and cutting of the vegetation. The specific requirement for this species is the presence of water. These are not the conditions on site.

Therefore, SWWF has no potential to occur on site and /or in the Project vicinity. Further investigation is not warranted.

## 5.4.2 Least Bell's vireo

The LBVI is a small, olive-gray migratory songbird that nests and forages almost exclusively in riparian woodland habitats. Bell's vireos as a group are highly territorial and are almost exclusively insectivorous. LBVI generally begin to arrive from their wintering range in southern Baja California and establish breeding territories by mid-March to late-March. A large majority of breeding vireos depart their breeding grounds by the third week of September and only a very few have been found wintering in the United States.

Their nesting habitat typically consists of well-developed overstory, understory, and low densities of aquatic and herbaceous cover with an overstory of 15-20 feet, mid-story of 6-10 feet and a lower story of 3 feet. The midstory frequently contains dense sub-shrub or shrub thickets. The overstory usually contains black willow, cottonwood and Sycamore. These thickets are often dominated by plants such as narrow-leaf willow, mulefat, young individuals of other willow species such as arroyo willow or black willow, and one or more herbaceous species. Although LBVI use a variety of riparian plant species for nesting, it appears that the structure of the vegetation is more important than other factors such as species composition or the age of the stand. Vireos forage in riparian habitats up to 984 feet from the nest and use both high and low scrub layers as foraging substrate.

The LBVI has not been documented on site or within a 1- mile radius. The small willow scrub thicket onsite is highly degraded and occupied by transients. The habitat formed as a result of street run off and

does not have the structure or patch size preferred by this species. The acreage and structure of 0.11 acre of eucalyptus trees, approximately 35 feet in height, with a range in diameter at breast height (DBH) of 6 inches to 18 inches and a mid-story densely covered in 0.03 acre of salt cedar with a DBH of 8 inches and 0.27 acre of black willow shrubs, with a DBH of 6 inches is not the type of habitat that this species is found. This species is not found in salt cedar or eucalyptus.

Nor are they found in high disturbance areas. Although there is a willow component, it is not the size or structure where this species is found. They are located in well-developed overstory, mid-story, understory, and low densities of aquatic and herbaceous cover with a minimum patch size of two (2) acres, which is not the case for this site.

Therefore, LBVI has no potential to occur on site and /or in the Project vicinity. Further investigation is not warranted.

### 5.4.3 Yellow-billed cuckoo

The YBCU is a medium sized bird, with a long and slim profile. Its legs are short and bluish-gray, and its tail is gray-brown above and black below with three striking pairs of large white dots visible in flight. Its body is brown above with white under parts. The undersides of its pointed wings are rufous. Adult birds have a long-curved bill which is blue-black above and yellow at the base of the mandibles. Juveniles have a completely blue-black bill.

Though the YBCU will occupy a variety of marginal habitats, particularly at the edges of their range, YBCU in the West are overwhelmingly associated with relatively expansive stands of mature cottonwood willow forests with a minimum patch size of 40 acres. Upper canopy height ranges from 15-75 feet, canopy cover from 20-90 percent, and understory cover from 30-90 percent. Willows and open water are required and the habitat will vary from dense willow-cottonwood forests to marshy bottomlands with scattered willow thickets. According to the California Department of Fish and Wildlife (1980), remnant patches of suitable habitat in sizes sufficient to support breeding yellow-billed cuckoos are scarce.

The YBCU has not been documented on site or within a 1- mile radius. The small willow scrub thicket onsite is highly degraded and occupied by transients. The habitat formed as a result of street run off and does not have the structure or size preferred by this species. They are found in habitat areas with a well-developed overstory, mid-story, understory, consisting of willow and cottonwood, near water, with a minimum patch size of forty (40) acres. This species requires a habitat structure of a 30-75-foot upper canopy, 18-20 foot mid-story and a lower story of 5-3 feet. This species is not found in salt cedar or eucalyptus. Although there is a willow component, it is not the size or structure where this species is found. These conditions are absent from the site. The acreage and structure of 0.11 acre of eucalyptus trees approximately 35 feet in height, with a range in diameter at breast height (DBH) of 6 inches to 18 inches and a mid-story densely covered in 0.03 acre of salt cedar with a DBH of 8 inches and 0.27 acre of black willow shrubs with a DBH of 6 inches is not the type of habitat or structure that this species is found. Nor are they found in high disturbance areas which is the case on site due to the transient encampments and cutting of the vegetation. This species is very sensitive to disturbance and is only found in pristine environments. The specific requirement for this species is the presence of water which is absent from the site.

Therefore, YBCU has no potential to occur on site and /or in the Project vicinity. Further investigation is not warranted.

## 6 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3)

The MSHCP identifies the potential presence for a number of endemic plant species.

The MSHCP states that in general, habitat suitability assessments may be undertaken year-round, with the exception of vernal pool species for which habitat suitability assessments must be conducted during the rainy season. Species found in vernal pools and associated Habitats include the following Narrow Endemic Plant Species: San Diego ambrosia (Ambrosia pumila), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*). Species found in vernal pools and associated Habitats include the following Criteria Area Survey plant species: San Jacinto Valley crownscale (*Atriplex coronator* var. *notatior*), Parish's brittlescale (*Atriplex parishii*), Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), thread-leaved brodiaea (*Brodiaea filifolia*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), little mousetail (*Myosurus minimus*), and prostrate navarretia (*Navarretia prostrata*) (MSHCP, Section 6.1.3)

The Project site does not fall within a Narrow Endemic Plant Species Survey Area (NEPSSA). No further analysis or discussion is needed or warranted.

### 6.1 Impacts

There are no impacts to the narrow endemic plants because the soils and vegetation communities do not support potential for Narrow Endemic Plant Species.

### 7 ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)

The Project site is not mapped in a Criteria Cell or survey area for plants, mammals or amphibians. However, a portion of APN 347-130-028 is within burrowing owl survey area. A burrowing owl habitat suitability assessment was conducted, and no suitable habitat was observed, and there was no evidence of burrowing owl.

### 7.1 Criteria Area Plant Species

The Proposed Project Site does not fall within a mapped survey area for Criteria Area Plant Species. No surveys or further discussion is warranted.

### 7.2 Amphibians

The Proposed Project Site does not fall within a mapped survey area for Amphibian. No surveys or further discussion is warranted.

## 7.3 Burrowing Owl

A portion of the the Project site is within a mapped survey area for burrowing owl, in accordance with MSHCP Figure 6-4 and a recent review of the RCA MSHCP Information GIS map.

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

Under the MSHCP burrowing owl is considered an adequately conserved covered species that may still require focused surveys in certain areas as designated in Figure 6-4 of the MSHCP. The survey for burrowing owl requires a systematic survey of all areas that provide suitable habitat plus a 150-meter (approximately 500 feet) zone of influence on all sides of suitable habitat, where applicable.

## 7.3.1 Methods

The RCA Mapping Information System identified that APN 347-130-028 (0.49 acre), located in the Project's northeastern portion is within a survey area required for the western burrowing owl (*Athene cunicularia hypugaea*) [BUOW]) (Figure 5).

On January 16, 2021, Ms. Lawrey conducted a burrowing owl habitat suitability assessment in accordance with the Western Riverside County MSHCP, which follows the 1993 "*Burrowing Owl Survey Protocol and Mitigation Guidelines*" prepared by the California Burrowing Owl Consortium.

Step 1 of the survey protocol is the habitat suitability assessment. If suitable habitat is present, this protocol requires four (4) surveys between April 15 and July 15 with the first site survey counting as one survey period. Burrowing owl habitat generally includes, but is not limited to, short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey.

BUOW are known to occur locally within suitable habitat areas, with the closest occurrence being 3.6 miles northeast from the Project site along Highway 74 near Ethanac Road and Eugene Street in 1999.

Natural and non-natural substrates were examined for potential burrow sites. The site was searched for molted feathers, whitewash, cast pellets and/or prey remains. Disturbance characteristics and all other animal sign encountered within the survey area were recorded. Date time and weather conditions were logged. A hand-held, global positioning system (GPS) unit was used to survey to identify survey area boundaries. Representative photographs of the survey area were taken, and Google Earth Pro was accessed to provide recent aerial photographs of the Project site and surrounding area.

## 7.3.2 Existing Conditions and Results

The area on site requiring BUOW surveys is densely vegetated in a three story canopy cover structure that includes eucalyptus trees, salt cedar and willows, and non-native grasses and weeds. The habitat composition and structure is not suitable for BUOW. No burrows, feathers, whitewash, castings, prey remains or BUOW individuals were observed on site or in the survey buffer area which was surveyed by

binoculars. (The adjacent properties are private property and access was not granted to survey). Based on the survey results BUOW are absent, the habitat within the required survey area is unsuitable and therefore, further investigation is not recommended or warranted

### 7.3.3 Impacts

No impacts can be identified in that no BUOW or BUOW sign was observed on the Project site.

#### 7.3.4 Mitigation

Burrowing owl were not present, and there was not suitable habitat found in the survey, therefore, no mitigation is required.

#### 7.4 Mammals

The Proposed Project Site does not fall within a mapped survey area for Mammals. No surveys or further discussion is warranted.

#### 8 INFORMATION ON OTHER SPECIES

#### 8.1 Delhi Sands Flower Loving Fly

The Project site does not fall within the Delhi soils mapped within the MSHCP baseline data. No further discussion is warranted.

#### 8.2 Species Not Adequately Conserved

MSHCP Table 9-3 identifies 28 species where requirements must be met for those to be considered not adequately conserved. None of the species listed in the MSHCP Table 9-3 occur on or near the Project site. Therefore, there is no further action required.

#### 9 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (SECTION 6.1.4)

The MSHCP Section 6.1.4 Guidelines are intended to address indirect effects associated with locating Development in proximity to the MSHCP Conservation Area, where applicable. The Project Site is not located in proximity to an MSHCP Conservation Area.

The Project Site is not located in proximity to an MSHCP Conservation Area, therefore the analysis for this criterion does not apply.

### **10 BEST MANAGEMENT PRACTICES (VOLUME I, APPENDIX C)**

This section of the report is designed to describe and comment as to the necessity of implementation of the BMPs identified in Volume 1, Appendix C. The BMPs and their applicability to the Project are identified in Table 2.

Table 2	
MSHCP Best Management Practices Applicability (Volume 1, Appendix	(C)

BMP No.	BMP	Applicable Yes or No	Comment
1	A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.	No	There are no sensitive species within or near the Project site.
2	Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.	Yes	The site will include grading and paving.
3	The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.	No	The site is in an urban area and the remnants of vacant habitat do not provide suitable habitat for species.
4	The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.	No	No natural stream resources occur on site
5	Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.	No	No natural stream resources occur on site
6	Projects that cannot be conducted without placing equipment or personnelin sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.	No	No natural stream resources occur on site
7	When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.	No	No natural stream resources occur on site
8	Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS, and CDFG, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas	No	No natural stream resources occur on site

BMP No.	BMP	Applicable Yes or No	Comment
9	Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.	No	No natural stream resources occur on site
10	The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.	No	There are no sensitive species or habitat on the Project site.
11	The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.	No	Vegetation on-site is ruderal.
12	Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.	Yes	Vegetation on-site is ruderal.
13	To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).	No	There are no sensitive species on site or adjacent to the site.
14	Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.	No	There are no sensitive species on site or adjacent to the site.
15	The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.	No	No restoration areas are required.

### 11 REFERENCES

- USFWS (United States Fish and Wildlife Service). 2000. Southwestern Willow Flycatcher Protocol Revision 2000. Sacramento, California: USFWS. https://www.fws.gov/pacific/ ecoservices/endangered/recovery/documents/SWWFlycatcher.2000.protocol.pdf
- USFWS. 2001. Least Bell's Vireo Survey Guidelines. January 19, 2001. Sacramento, California: USFWS. https://www.fws.gov/cno/es/Recovery\_Permitting/birds/least\_bells\_vireo/ LeastBellsVireo\_SurveyGuidelines\_20010119.pdf
- USFWS. 2015. A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-Billed Cuckoo. Prepared by M. Halterman, M.J. Johnson, J.A. Holmes, and S.A. Laymon. Sacramento, California: USFWS. April 2015. https://www.fws.gov/southwest/es/Documents/R2ES/YBCU\_SurveyProtocol\_FINAL\_DR AFT\_22Apr2015.pdf

### 12 SUPPORTING APPENDICES

The following supporting reports are attached:

Figure 1 - Regional Overview Site Vicinity Figure 2 - Site Location – Topo Base Figure 3 - Site Location- Aerial Base Figure 4 – Site Plan Figure 5 – Soils Figure 6 – Vegetation Map Figure 7 CNDDB Results

Appendix A – Photos Appendix B – Biological Resources Assessment, February 2021















Appendix A – Photos









Appendix A – Site Photos



Appendix B – Biological Resources Assessment, February 2021



47 1st Street, Suite 1 Redlands, CA 92373-4601 (909) 915-5900

February 23, 2021 (Revised May 1, 2021)

Joseph Karaki, President Karaki WS 4887 E. La Palma Ave, Suite 707 Anaheim, CA 92807

RE: Biological Resources Assessment, Jurisdictional Delineation Commercial Retail (76 Station) – APN: 347-130-029 & 347-130-028 Central Avenue (Hwy 74) and Eighth Street City of Lake Elsinore, Riverside County, California

Dear Mr. Karaki:

Jericho Systems, Inc. (Jericho) is pleased to provide this Biological Resources Assessment and Jurisdictional Delineation for the above-referenced Project.

The results of Jericho's field survey are intended to provide sufficient baseline information to the County of Riverside, City of Lake Elsinore, and, if required, to federal and State regulatory agencies, including U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW), respectively, to determine if impacts will occur, quantify those impacts and to identify mitigation measures to offset any impacts.

The Project site is located within the Western Riverside County Multiple Species Habitat Plan (MSHCP) area and as such, is subject to the conditions and conservation requirements identified in the MSHCP. Riverside County adopted the MSHCP on June 17, 2003. The City of Lake Elsinore is signatory to the MSHCP Implementing Agreement and thereby a permittee responsible for meeting the terms and conditions outlined in the MSHCP and the Biological Opinion issued for the MSHCP. Therefore, the City of Lake Elsinore has the responsibility to ensure the projects they approve are consistent the MSHCP and will not preclude the overall conservation goals and reserve design from being accomplished.

The MSHCP is a criteria-based plan and identification of planning units on which to base the Criteria is necessary for such a criteria-based plan. The MSHCP Conservation Area is comprised of a variety of existing and proposed Cores, Extensions of Existing Cores, Linkages, Constrained Linkages and Non-contiguous Habitat Blocks. The MSHCP coverage area is divided into Area Plans (AP) based on the Riverside County's General Plan Area Plan boundaries. Each of the AP's has: established conservation criteria, species specific surveys that may be required based on on-site Habitat Assessment, and resources and areas identified for conservation. In each Area Plan text, applicable Cores and Linkages are identified.

There are 146 species covered by the MSHCP. Surveys are not required for 106 of these covered species. The remaining 40 covered species may require focused surveys for proposed development

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projects include 4 birds, 3 mammals, 3 amphibians, 3 crustaceans, 14 Narrow Endemic Plants, and 13 other sensitive plants within the Criteria Area. The need to conduct focused surveys for all but six of these 40 species is determined by the presence of suitable habitat within designated 'survey areas' mapped for each of the species. The remaining six species that require focused surveys throughout the entire MSHCP area are associated with riparian/riverine areas and vernal pools and include least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, Riverside fairy shrimp, Santa Rosa Plateau fairy shrimp, and vernal pool fairy shrimp.

The MSHCP requires that a project comply with the MSHCP policies identified in Section 6 of the MSHCP. For this Project site, a habitat suitability assessment for burrowing owl (MSHCP section 6.3.2) and MSHCP Riparian/Riverine resources (MSHCP section 6.1.2) was required and conducted.

The Project site was also evaluated for the presence jurisdictional waters, subject to the federal Clean Water Act (CWA), Porter-Cologne (Porter-Cologne) and California Fish and Game Code (FGC) regulations. Jurisdictional resources subject to the CWA regulations include non-wetland waters and wetland waters of the U.S. (WoUS) whereas jurisdictional resources subject to Porter-Cologne include non-wetland waters and waters of the State (WoS). The California FGC encompasses the resources that constitute a stream or river, including associated riparian vegetation and floodplain.

Evaluation of Riparian/Riverine resources followed guidance provided in the MSHCP Section 6.1.2. Potential federal jurisdiction followed the regulations set forth in 33CFR part 328 and the USACE guidance documents and evaluation of potential State jurisdiction followed guidance in the Fish and Game Code and A Review of Stream Processes and Forms in Dryland Watersheds (CDFW, 2010).

#### **PROJECT LOCATION**

The approximately 1.9-acre Project site is made up of two parcels: APN 347-130-029 (1.12 acre) and 347-130-028 (0.49 acre) and is located in the City of Lake Elsinore, Riverside County, California. The Project site is bounded on the north by 8<sup>th</sup> Street, on the south by Ardenwood Way and rural industrial land use, on the east by Hwy 74 (Central Avenue), and on the west by vacant land. The project site can be found on the *Lake Elsinore* U. S. Geological Survey (USGS) 7.5-minute topographic map within Section 29 of Township 5 South, Range 4 West (Figure 1-3).

#### **PROJECT UNDERSTANDING**

The Project proposes a gas station consisting of a 3,516 square foot (sf) convenience store, 3,160 sf fueling canopy with six multi-product dispensers, and two underground storage tanks. See Figure 4 for site layout.

#### **METHODS**

Prior to the field investigation, reference materials and databases relevant to the Project site were reviewed for the *Lake Elsinore* 7.5-minute USGS quadrangle. The sources reviewed included:

- California Natural Diversity Database (CNDDB) Rarefind 5);
- CNDDB Biogeographic Information and Observation System (BIOS);
- California Native Plant Society Electronic Inventory (CNPSEI) database;
- Calflora Database;
- USDA Natural Resources Conservation Service (NRCS) Web Soil Survey;

- USF-WS National Wetland Inventory;
- Environmental Protection Agency (EPA) Water Program "My Waters" data layers;
- RCA/MSHCP Information Map

On January 16, 2021, Jericho Principal Ecologist, Shay Lawrey conducted a field survey of the Project site with focus on potential habitat for listed species, sensitive species, migratory birds, burrowing owl and riverine/riparian/vernal pool resources. Ms. Lawrey is a qualified biologist with advanced degrees in Biology and 25 years of experience surveying for the sensitive species known to in California and riverine/riparian/vernal pool resources. Ms. Lawrey surveyed the Project site on a calm weather, overcast day, during peak animal activity, between 8:30 a.m. and 10:30 am.

Ms. Lawrey conducted the survey by walking transects spaced in approximately 15 meters (approximately 50 feet) intervals to provide 100 percent visual coverage of the ground surface. Wildlife species were detected during field surveys by sight, calls, tracks, scat, or other signs. In addition to species observed, expected wildlife usage of the site was determined according to known habitat preferences of local wildlife species and knowledge of their relative distributions in the area. Ms. Lawrey assessed the Project site for habitat type, structure, species composition/association, condition, and human disturbances. Attention was focused on identifying potential habitat for special status species known to occur locally and identifying potential jurisdictional waters and/or riverine/riparian/vernal pool resources within and/or adjacent to the Project site.

Riverside County also requires that any survey limitations be identified. No limitations affected the results and conclusions given herein. The buffer survey area located on adjacent private property was surveyed via binoculars to avoid trespass. Surveys were conducted during the appropriate season to observe the target species, in good weather conditions, by a qualified biologist who followed all pertinent protocols.

#### Stephen's kangaroo rat Habitat Assessment

The RCA Mapping Information System identified that the Project parcel is not in a Stephen's kangaroo rat (*Dipodomys stephensi*, [SKR]) fee area. Therefore, this analysis was not applicable.

#### **Burrowing Owl Habitat Assessment**

The RCA Mapping Information System identified that APN 347-130-028 (0.49 acre), located in the Project's northeastern portion is within a survey area required for the western burrowing owl (*Athene cunicularia hypugaea*) [BUOW]) (Figure 5).

The BUOW habitat suitability assessment was conducted in accordance with the Western Riverside County MSHCP, which follows the 1993 "*Burrowing Owl Survey Protocol and Mitigation Guidelines*" prepared by the California Burrowing Owl Consortium. Step 1 of the survey protocol is the habitat suitability assessment. If suitable habitat is present, this protocol requires four (4) surveys between April 15 and July 15 with the first site survey counting as one survey period. Burrowing owl habitat generally includes, but is not limited to, short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey.

Per the literature review, the closest documented BUOW occurrence is approximately 3.8 miles northeast from the Project site along Highway 74 near Ethanac Road and Eugene Street. There are no BUOW occurrences documented in the Project area,

Natural and non-natural substrates were examined for potential burrow sites. The site was searched for molted feathers, whitewash, cast pellets and/or prey remains. Disturbance characteristics and all other animal sign encountered within the survey area were recorded. Date time and weather conditions were logged. A hand-held, global positioning system (GPS) unit was used to survey to identify survey area boundaries. Representative photographs of the survey area were taken, and Google Earth Pro was accessed to provide recent aerial photographs of the Project site and surrounding area.

#### **Riverine/Riparian Areas and Jurisdictional Waters**

The site was also assessed for State and /or federal jurisdictional waters that are subject to Sections 404 and 401 of the federal CWA regulated by the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) respectively; and/or Section 1602 of the California Fish and Game Code (FCG) administered by the CDFW and Riverine/Riparian and Vernal Pool habitat subject to Section 6.1.2 of the MSHCP.

The methods used in this study to delineate the non-wetland WoUS at the Ordinary High Water Mark (OHWM) in variable, ephemeral, intermittent, or perennial non-wetland waters followed guidance described in *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States* (Lichvar and McColley 2008) and the *Updated Datasheet for the Identification of the Ordinary High Water Mark in the Arid West Region of the Ordinary High Water Mark in the Arid West Region of the Western United States* ("Updated Datasheet", Curtis and Lichvar 2010).

The RWQCB maintains jurisdiction over all waters of the State, including wetlands. For the purposes of Porter-Cologne, the methods used to determine federal jurisdiction over non-wetland waters were also used to determine the extent of RWQCB jurisdiction over non-wetland waters within the property.

Evaluation of FGC Section 1600 Streambed Waters followed guidance in the Mapping Episodic Stream Activity (MESA) protocols *[MESA Field Guide*], pursuant to which CDFW claims jurisdiction beyond traditional stream banks and the outer edge of riparian. Under MESA, the term stream is defined broadly to include "a body of water that flows perennially or episodically and that is defined by the area in which water currently flows, or has flowed, over a given course during the historic regime [i.e., 'circa 1800 to the present'], and where the width of its course can reasonably be identified by physical or biological indicators."

The methods used to determine any riparian/riverine or vernal pool areas were based on the above techniques as well as soils evaluations and vegetation classifications. This is because an area may be characterized as riparian based on its vegetative composition but does not meet the criteria of being federal or state jurisdictional water.

#### RESULTS

#### **Regional Setting**

According to the U.S. EPA Regional map, the Project site is located in the Inland Valleys (85k) ecoregion. An ecoregion is a regional area that has similar ecosystems in terms of type, quality, and quantity of environmental resources. The Inland Valleys ecoregion is influenced less by marine processes, and more by alluvial processes. The ecoregion consists of alluvial fans and basin floors at the base of the San Bernardino and San Gabriel mountains and the San Jacinto and Perris Valleys in the south. Soil moisture is generally xeric, and historically, the region was composed of Riversidean coastal sage scrub, valley grasslands, and riparian woodlands. The ecoregion is now heavily urbanized with some remaining agriculture.

Hydrologically, the Project site is located within the Lake Mathews hydrologic area, in the 14,217acre hydrologic sub-area (HSA 801.35) within the Temescal Wash watershed (HUC 180702030601) (Figure 6).

The City of Lake Elsinore is located in southwestern Riverside County at the foothills of the Cleveland National Forest. Topographically, Lake Elsinore is located on the east side of the Santa Ana mountains. The general climate of Lake Elsinore includes hot summers (99°F average maximum in August) and mild winters (38°F average minimum) with cool ocean breezes and sparse winter rainfall, averaging 12.09 inches of precipitation per year.

According to the database searches, 53 sensitive species (24 plants ,24 vertebrates, 5 invertebrates) and 3 sensitive habitats have been documented in the *Lake Elsinore* USGS quadrangle (Table 1). Figure 7 depicts the sensitive species within a one mile radius of the Project site.

#### **Existing Site Conditions**

Weather conditions during the survey were overcast with no wind. Survey hours of spanned from 8:30 a.m. to 10:30 a.m. with temperatures ranging from 65 degrees Fahrenheit (° F) to  $70^{\circ}$  F

The topography of the Project site is relatively flat, with elevation increasing in the northern portion of the parcel. Site elevation ranges from 1,414 feet to 1,389 feet above mean sea level (MSL).

The Project site is vacant and is surrounded by flat bladed disturbed land on the west, south, and north, and by Hwy 74 (Central Avenue) to the east. The site does not connect to native, undisturbed areas.

Soils on the Project site area consist of Cortina cobbly loamy sand, 2-9% slopes (CmC), Lodo rocky loam, 25-50% slopes (LpF2), and Arbuckle gravelly loam, 2-9% slopes – dry, MLRA 19 (AIC), (Figure 8). Soils in the Arbuckle series are well-drained remnants of alluvial fans derived from numerous types of rock. Soils in the Cortina series are well-drained soils made from alluvium derived from metasedimentary rock. The Lodo series consists of shallow, somewhat excessively drained soils that formed in material weathered from hard shale and fine grained sandstone. Terrace escarpments are landforms (terraces) made from alluvium derived from mixed sources.

The entire site is mapped by the RCA MSHCP Vegetation (2012) layer as developed/disturbed land, and the site survey confirmed these findings for all but the northeast corner, which consists of a mix of

salt cedar, eucalyptus and willow scrub. The vegetation here is used as cover for a homeless encampment that supports approximately 10 transients. This area is heavily littered and disturbed. Many of the bushes and trees on site have had trunks/branches sawed off and used for cover in the homeless encampment.

#### Habitat

The northeast corner of the Project site supports an over-story canopy of eucalyptus trees (*Eucalyptus* ssp) approximately 35 feet in height, with a range in diameter at breast height (DBH) of 6 inches to 18 inches. The mid-story is densely covered in salt cedar (*Tamarix ramossima*) with a small thicket of black willow shrubs (*Salix gooddingii*). The average height of the mid-story is approximately 12 feet. The dense understory primarily consists of short-podded mustard (*Hischfeldia incana*), tocalote (*Centaurea melitensis*), and non-native grasses (*Bromus* ssp.). A few native plants are found scattered along the eastern and western edges of the Project site including California buckwheat (*Erioginum faciculatum*), encilia (*Encilia farinosa*) and telegraph weed (*Heterotheca grandiflora*). The remainder of the Project site is bare and compacted due to blading.

Although, the vegetation in the northeastern corner of the Project site is mostly non-native (salt cedar and eucalyptus) and heavily impacted by a homeless encampment, it provides potentially suitable habitat for nesting birds, including raptor species.

#### Wildlife

Wildlife observed at the time of survey included yellow-rumped warbler, black phoebe, whitecrowned sparrow, common raven, American crow, lesser goldfinch, house finch, European starling and mourning dove.

#### **MSHCP Surveys**

The Regional Conservation Authority (RCA) Information Map identifies the following for both APN 347-130-029 and 347-130-028:

- The parcels are located in the Elsinore Area Plan of the MSHCP.
- APN 347-130-028 is located in an area that requires focused BUOW surveys be conducted if suitable habitat is present. APN 347-130-029 is not located in an BUOW survey area (Figure 4)
- The parcels are not located in or adjacent to a Criteria Cell
- The parcels are not in a criteria species survey area
- The parcels are not in a mammal survey area
- The parcels are not in a narrow endemic plant survey area
- The parcels are not in a cellgroup

#### **Burrowing owl (BUOW)**

BUOW are known to occur locally within suitable habitat areas, with the closest occurrence being 3.6 miles northeast from the Project site along Highway 74 near Ethanac Road and Eugene Street in 1999.

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

Under the MSHCP burrowing owl is considered an adequately conserved covered species that may still require focused surveys in certain areas as designated in Figure 6-4 of the MSHCP. The survey for burrowing owl requires a systematic survey of all areas that provide suitable habitat plus a 150-meter (approximately 500 feet) zone of influence on all sides of suitable habitat, where applicable.

The area on site requiring BUOW surveys is densely vegetated in a three story canopy cover structure that includes eucalyptus trees, salt cedar and willows, and non-native grasses and weeds. The habitat composition and structure is not suitable for BUOW. No burrows, feathers, whitewash, castings, prey remains or BUOW individuals were observed on site or in the survey buffer area which was surveyed by binoculars. (The adjacent properties are private property and access was not granted to survey). Based on the survey results BUOW are absent, the habitat within the required survey area is unsuitable and therefore, further investigation is not recommended or warranted

#### **Heritage Trees**

The City of Lake Elsinore's Palm Tree Preservation Program is limited to palm species within the city limits. Palm trees are not on site; therefore, the Project will not impact heritage trees.

#### **Riverine/Riparian Areas and Jurisdictional Waters**

A roadside swale originating from HWY74 and N. Frontage road located along the northeastern boundary of the site, enters the Project site in the northern portion of APN 347-130-028 and continues westerly along the property boundary between the Project site and the parcel north of the Project site (Figure 7). This swale collects street runoff and is not a natural or jurisdictional feature subject to Sections 1600 of the FGC or 404/401 of the federal CWA. There is no bed or bank associated with this swale indicating a flow of water. The water runoff from HWY 74 travels west, back flows to the southeast and percolates in the well-drained soils. There is no evidence that the swale connects to the blue line stream located off-site to the west.

This roadside is a result of man-made roadside water diversion from HWY 74 and is not considered jurisdictional or riverine/riparian. Although the patch of willows growing in the mid-story of the swale are riparian it is not the intent of the MSHCP to conserve small patches of riparian species growing as a direct result of man-made features. The willows occur as a direct result of roadside runoff. If the run off was redirected, these willows would not exist. For further clarification as defined under Section 6.1.2 of the MSHCP, *Protection of Species Associated with Riparian/Riverine* 

*Areas and Vernal Pools*, riparian/riverine areas are areas dominated by trees, shrubs, persistent emergent plants, or emergent mosses and lichens which occur close to or are dependent upon nearby freshwater, or areas with freshwater flowing during all or a portion of the year. Conservation of these areas is intended to protect habitat that is essential to a number of listed or special-status water-dependent fish, amphibian, avian, and plant species.

Based on the Project's Site Plan (Figure 8), 0.41 acre will be permanently impacted by grading and construction.

Due to the presence of a willow scrub thicket the following three bird species must be addressed according to the MSHCP.

- Southwestern willow flycatcher (*Empidonax trallii extimus*) [SWWF]
- least Bell's vireo (Vireo bellii pusillus) [LBVI]
- yellow-billed cuckoo (*Coccyzus americanus*) [YBCU]

#### Southwestern willow flycatcher

The southwestern willow flycatcher (SWWF) is a State and federally listed species. In 1992, it was listed by the California Fish and Game Commission endangered, under the California Endangered Species Act (CESA) of 1970. It was federally listed as endangered on February 27, 1995, under the ESA (60 FR 10694). The USFWS designated critical habitat for the species on July 22, 1997. This habitat includes 18 units with a total of 599 miles of river in California, New Mexico, and Arizona. In California, critical habitat was designated along portions of the Santa Ana River, San Luis Rey River, San Diego River, Santa Margarita River, Tijuana River, and south fork of the Kern River (62 FR 39129). On May 11, 2001, the critical habitat designation from 1997 was struck down by the U.S. 10th Circuit Court of Appeals who required further economic analysis. A recovery plan was finalized by USFWS in March of 2003. Critical habitat designations for this species were re-proposed and finalized in June 2004 (USFWS, 2003c).

The species historical range included Arizona, California, Colorado, New Mexico, Texas, and Utah. Southwest Region (Region 2) Counties in California in which this population is known to or is believed to occur: Fresno, Imperial, Inyo, Kern, Los Angeles, Madera, Mono, Monterey, Orange, Riverside, San Benito, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Santa Cruz, Tulare, Tuolumne, Ventura.

The SWWF is a small passerine bird measuring approximately 5.7 inches in length. It has a grayishgreen back and wings, whitish throat, a light gray-olive breast, and pale yellowish belly. It has two visible white wing bars and a faint or absent eye ring. The call consists of a repeated "whit" and their song is a sneezy "fitz-bew." (60 FR 10694). The SWWF is currently one of the four recognized subspecies of the willow flycatcher. This flycatcher is a neotropical migrant that breeds in the southwestern United States from mid-April to early-September. In the fall, it migrates south to its wintering grounds in portions of South America, Central America and Mexico. (60 FR 10694)

The SWWF breeds in dense riparian habitats along rivers, streams, and other wetlands at elevations ranging from sea level to 8,500 feet (Sogge 1997). Occupied habitat is generally dominated by shrubs and trees 13 to 23 feet or more in height, which provide dense lower and mid-story vegetation approximately 10 to 13 feet aboveground. This dense vegetation is often interspersed with open water, small openings, or sparse vegetation, creating a mosaic that is not uniformly dense (62 FR

39129). Plant species closely associated with the flycatcher include willows (Salix spp.), boxelder (*Acer negungo*), seepwillow (*Baccharis* spp.), with an overstory of cottonwood (*Populus fremontii*) (62 FR 39129).

The SWWF has not been documented on site or within a one mile radius. The small willow scrub thicket onsite is highly degraded and occupied by transients. The habitat formed as a result of street run off and does not have the size or structure preferred by this species. They are found in habitat areas with a well-developed overstory, mid-story, understory, consisting of willow, mule fat and cottonwood, near water, with a minimum patch size of four (4) acres. This species requires a habitat structure of a 20-30-foot upper canopy, 15-12 foot mid-story and a lower story of 5-3 feet. This species is not found in salt cedar or eucalyptus. Although there is a willow component it is not the size or structure of 0.11 acre of eucalyptus trees approximately 35 feet in height, with a range in diameter at breast height (DBH) of 6 inches to 18 inches and a mid-story densely covered in 0.03 acre of salt cedar with a DBH of 8 inches and 0.27 acre of black willow shrubs with a DBH of 6 inches is not the type of habitat is not the type or structure that this species is found.

Nor are they found in high disturbance areas which is the case on site due to the transient encampments and cutting of the vegetation. The specific requirement for this species is the presence of water. These are not the conditions on site.

Therefore, SWWF has no potential to occur on site and /or in the Project vicinity. Further investigation is not warranted.

#### Least Bell's vireo

Least Bell's vireo (LBVI) was first proposed for listing as endangered by the USFWS on May 3, 1985, (50 FR 18968) and was subsequently listed as federally endangered on May 2, 1986 (60 FR 10694). Critical habitat units were designated by the USFWS on February 2, 1994 (59 FR 4845) and included reaches of ten streams in six counties in southern California and the surrounding approximately 38,000 acres. The critical habitat units exist in the Santa Ynez River, Santa Clara River, Santa Ana River, Santa Margarita River, San Luis Rey River, Sweetwater River, San Diego River, Tijuana River, Coyote Creek, and Jumul-Dulzura Creek.

The species historical range included California; California/Nevada Region (Region 8)Counties in California in which this population is known to or is believed to occur includes: Imperial, Inyo, Kern, Los Angeles, Monterey, Orange, Riverside, Sacramento, San Benito, San Bernardino, San Diego, San Joaquin, San Luis Obispo, Santa Barbara, Santa Clara, Santa Cruz, Stanislaus, Tulare, Ventura, Yolo.

The LBVI is a small, olive-gray migratory songbird that nests and forages almost exclusively in riparian woodland habitats. Bell's vireos as a group are highly territorial and are almost exclusively insectivorous. LBVI generally begin to arrive from their wintering range in southern Baja California and establish breeding territories by mid-March to late-March. A large majority of breeding vireos depart their breeding grounds by the third week of September and only a very few have been found wintering in the United States.

Nests are usually placed in forks of branches between 2 and 5 feet from the ground. Females lay two to five eggs with both parents incubating the clutch for approximately 14 days and the young fledging

after 10 to 12 days. The fledglings will remain in the parental territory for up to a month. LBVI leave the breeding grounds and migrate south mid to late September.

Their nesting habitat typically consists of well-developed overstory, understory, and low densities of aquatic and herbaceous cover. The understory frequently contains dense sub-shrub or shrub thickets. The overstory usually contains black willow, cottonwood and Sycamore. These thickets are often dominated by plants such as narrow-leaf willow, mulefat, young individuals of other willow species such as arroyo willow or black willow, and one or more herbaceous species. Although LBVI use a variety of riparian plant species for nesting, it appears that the structure of the vegetation is more important than other factors such as species composition or the age of the stand. Vireos forage in riparian habitats up to 984 feet from the nest and use both high and low scrub layers as foraging substrate.

The LBVI has not been documented on site or within a 1- mile radius. The small willow scrub thicket onsite is highly degraded and occupied by transients. The habitat formed as a result of street run off and does not have the structure or patch size preferred by this species. The acreage and structure of 0.11 acre of eucalyptus trees, approximately 35 feet in height, with a range in diameter at breast height (DBH) of 6 inches to 18 inches and a mid-story densely covered in 0.03 acre of salt cedar with a DBH of 8 inches and 0.27 acre of black willow shrubs, with a DBH of 6 inches is not the type of habitat that this species is found. This species is not found in salt cedar or eucalyptus.

Nor are they found in high disturbance areas. Although there is a willow component, it is not the size or structure where this species is found. They are located in well-developed overstory, mid-story, understory, and low densities of aquatic and herbaceous cover with a minimum patch size of two (2) acres, which is not the case for this site.

Therefore, LBVI has no potential to occur on site and /or in the Project vicinity. Further investigation is not warranted.

#### Yellow-billed cuckoo

The YBCU is listed as endangered in the state of California and was federally listed as threatened in 2014. Designation of critical habitat for the western distinct population segment of the Yellow-Billed Cuckoo (*Coccyzus americanus*) was made by the USFWS in 2014 (50 CFR Part 17). In 1971 it was listed by the California Department of Fish and Game as Rare. By 1977 it had become "one of the rarest birds" in the state. A 1977 survey of historical sites and suitable habitat at six widely scattered rivers turned up 54 birds in the Sacramento Valley (Tehama, Putte, Glenn, Colusa, and Sutter counties), 9 on the South Fork of the Kern River near Weldon, 3 along the Santa Ana River, Riverside County, 4 in Owens Valley, Inyo County, 6 on the Armargosa River south of Tecopa, Inyo and San Bernardino County, and 65 on both sides of the Colorado River from the Nevada state line to the Mexican border (Gaines 1977). By 1986 the entire breeding population in California had dropped to 31-42 pairs (Laymon and Halterman 1987).

The YBCU was once common in riparian habitat throughout the western United States. In California the YBCU has declined from a "fairly common breeding species" throughout most of the state to a current population of less than 50 pairs (Gaines and Laymon 1984; Laymon and Halterman 1991). The geographical breeding range of the YBCU in the western United States North America includes suitable habitat within the low- to moderate-elevation areas, including the upper and middle

Rio Grande, the Colorado River Basin, the Sacramento and San Joaquin River systems, the Columbia River system, and the Fraser River.

The species historical range included Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington, Wyoming. The California/Nevada Region (Region 8) Counties in California in which this population is known to or is believed to occur include: Alameda, Butte, Colusa, Contra Costa, Del Norte, El Dorado, Fresno, Glenn, Humboldt, Kern, Lake, Lassen, Madera, Marin, Mendocino, Modoc, Mono, Plumas, Sacramento, San Francisco, San Joaquin, San Luis Obispo, San Mateo, Santa Clara, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Sutter, Tehama, Trinity, Tulare, Tuolumne, Yolo, and Yuma.

The YBCU is a medium sized bird, with a long and slim profile. Its legs are short and bluish-gray, and its tail is gray-brown above and black below with three striking pairs of large white dots visible in flight. Its body is brown above with white under parts. The undersides of its pointed wings are rufous. Adult birds have a long-curved bill which is blue-black above and yellow at the base of the mandibles. Juveniles have a completely blue-black bill.

Though the YBCU will occupy a variety of marginal habitats, particularly at the edges of their range, YBCU in the West are overwhelmingly associated with relatively expansive stands of mature cottonwood willow forests. Canopy height ranged from 5-25 m, canopy cover from 20-90 percent, and understory cover from 30-90 percent. Willows and open water are required and the habitat will vary from dense willow-cottonwood forests to marshy bottomlands with scattered willow thickets. Today, five of the remaining eight populations in California are in immediate danger of extinction, including 2 sites in Owens Valley, the Armargosa River near Tecopa, the Mojave River and the Santa Ana River. These populations only harbor 1-2 individuals in some years and none in others, making them highly vulnerable to extirpation from both stochastic and systemic processes. According to the California Department of Fish and Wildlife (1980), remnant patches of suitable habitat in sizes sufficient to support breeding yellow-billed cuckoos are scarce.

The YBCU has not been documented on site or within a 1- mile radius. The small willow scrub thicket onsite is highly degraded and occupied by transients. The habitat formed as a result of street run off and does not have the structure or size preferred by this species. They are found in habitat areas with a well-developed overstory, mid-story, understory, consisting of willow and cottonwood, near water, with a minimum patch size of forty (40) acres. This species requires a habitat structure of a 30-75-foot upper canopy, 18-20 foot mid-story and a lower story of 5-3 feet. This species is not found in salt cedar or eucalyptus. Although there is a willow component, it is not the size or structure where this species is found. These conditions are absent from the site. The acreage and structure of 0.11 acre of eucalyptus trees approximately 35 feet in height, with a range in diameter at breast height (DBH) of 6 inches to 18 inches and a mid-story densely covered in 0.03 acre of salt cedar with a DBH of 8 inches and 0.27 acre of black willow shrubs with a DBH of 6 inches is not the type of habitat or structure that this species is found. Nor are they found in high disturbance areas which is the case on site due to the transient encampments and cutting of the vegetation. This species is very sensitive to disturbance and is only found in pristine environments. The specific requirement for this species is the presence of water which is absent from the site.

Therefore, YBCU has no potential to occur on site and /or in the Project vicinity. Further investigation is not warranted.

#### **Vernal Pools**

No vernal pool resources occur on site. The soils are well drained and no evidence of pooling/ponding is present. Further historical imagery provides no evidence of past ponding or pooling.

#### CONCLUSIONS AND RECOMMENDATIONS

The Project site is currently vacant and has been subject to human disturbances. Parcel APN 347-130-028, the northeastern corner of the Project site has two occupied homeless encampments with trash littering the entire area and an old Porta Potty. Soils on site have been bladed, and many of the eucalyptus trees on site have had trunks/branches sawed off.

The Project site is within an MSHCP required survey area for BUOW. Based on the survey results BUOW are absent from the Project site and survey buffer. The habitat type, structure and composition is not suitable for BUOW and there is no potential for them to occur here. Therefore, no further action relative to BUOW is required.

The small patch of willow scrub located in the northest corner of the Project site is not suitable to support LBVI, SWWF or YBCU. Therefore, protocol surveys are not warranted. These migratory songbirds nest and forage almost exclusively in riparian woodland habitats with nesting habitat typically consisting of well-developed overstory, understory, and low densities of aquatic and herbaceous cover. The understory frequently contains dense sub-shrub or shrub thickets. These thickets are often dominated by plants such as narrow-leaf willow, mulefat, young individuals of other willow species such as arroyo willow or black willow, and one or more herbaceous species. These conditions do not occur on site. Although these song birds use a variety of riparian plant species for nesting, it appears that the structure of the vegetation is more important than other factors such as species composition or the age of the stand. Territories for these three species range in size from 0.5 to 7.5 acres, with an average size of approximately 2 acres. The willow scrub on site is 0.27 acre in size and does not meet the habitat structure requirements of these three species. Further, the consistent presence of transients in the willow thicket presents a major disturbance that is not conducive to bird nesting in general.

The eucalyptus and salt cedar vegetation growing in the northeast corner of the property does however, provide potentially suitable nesting habitat for birds, including raptor species. Therefore, the following is recommended to avoid potential impacts to nesting birds and/or raptors:

<u>Recommendation</u>: Bird nesting season generally extends from February 1 through September 15 in southern California and specifically, April 15 through August 31 for migratory passerine birds. In general, Projects should be constructed outside of this time to avoid impacts to nesting birds. If a Project cannot be constructed outside of nesting season, the project site shall be surveyed for nesting birds by a qualified avian biologist prior to initiating the construction activities. If active nests are found during the pre-construction nesting bird surveys, a Nesting Bird Plan (NBP) will be prepared and implemented. At a minimum, the NBP will include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. The NBP will include a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be determined by the

biologist, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist has determined the young birds have successfully fledged or that the nest has otherwise become inactive.

Should you have any questions or require further information, please contact me at (909) 915-5900 or <u>shay@jericho-systems.com</u> should you have any questions or require further information.

Sincerely,

Stray Justing

Shay Lawrey, President

Attachments:

- A. Site Photographs
- B. Species Occurrence Table
- C. Figures





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Scientific Name	Common Name	Federal Status State Status Other Status	Habitats	Potential To Occur			
Plants							
Allium munzii	Munz's onion	Endangered Threatened G1 S1 1B.1	Chaparral, coastal scrub, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Heavy clay soils; grows in grasslands & openings within shrublands or woodlands. 375-1040 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .			
Ambrosia pumila	San Diego ambrosia	Endangered None G1 S1 1B.1	Chaparral, coastal scrub, valley and foothill grassland. Sandy loam or clay soil; sometimes alkaline. In valleys; persists where disturbance has been superficial. Sometimes on margins or near vernal pools. 3-580 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .			
Atriplex coronata var. notatior	San Jacinto Valley crownscale	Endangered None G4T1 S1 1B.1	Playas, valley and foothill grassland, vernal pools. Alkaline areas in the San Jacinto River Valley. 35-460 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .			
Brodiaea filifolia	thread-leaved brodiaea	Threatened Endangered G2 S2 1B.1	Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Occurs in openings on clay soils. 15-1030 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .			
Calochortus plummerae	Plummer's mariposa- lily	None None G4 S4 4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .			
Carex buxbaumii	Buxbaum's sedge	None None G5 S3 4.2	Bogs and fens, meadows and seeps, marshes and swamps. Mesic sites. 3-3300 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .			
Caulanthus simulans	Payson's jewelflower	None None G4 S4 4.2 USFS: Sensitive	Chaparral, coastal scrub. Frequently in burned areas, or in disturbed sites such as streambeds; also on rocky, steep slopes. Sandy, granitic soils. 90-2200 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .			
Centromadia pungens ssp. laevis	smooth tarplant	None None G3G4T2 S2 1B.1	Wetland Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland. Alkali meadow, alkali scrub; also in disturbed places. 5- 1170 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .			

Scientific Name	Common Name	Federal Status State Status Other Status	Habitats	Potential To Occur
Chorizanthe leptotheca	Peninsular spineflower	None G3 S3 4.2	Chaparral, coastal scrub, lower montane coniferous forest. On granitic soils, in alluvial fans. 300-1900 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Chorizanthe parryi var. parryi	Parry's spineflower	None None G3T2 S2 1B.1 BLM: Sensitive USFS: Sensitive	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Chorizanthe polygonoides var. longispina	long-spined spineflower	None None G5T3 S3 1B.2 BLM: Sensitive	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools. Gabbroic clay. 30-1630 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Convolvulus simulans	small-flowered morning-glory	None G4 S4 4.2	Chaparral, coastal scrub, valley and foothill grassland. Wet clay, serpentine ridges. 30-700 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Dodecahema leptoceras	slender-horned spineflower	Endangered Endangered G1 S1 1B.1	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). Flood deposited terraces and washes; associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils. 200-765 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Dudleya multicaulis	many-stemmed dudleya	None None G2 S2 1B.2 USFS: Sensitive	Chaparral, coastal scrub, valley and foothill grassland. In heavy, often clayey soils or grassy slopes. 1-910 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Harpagonella palmeri	Palmer's grapplinghook	None None G4 S3 4.2	Chaparral, coastal scrub, valley and foothill grassland. Clay soils; open grassy areas within shrubland. 20-955 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .

Scientific Name	Common Name	Federal Status State Status Other Status	Habitats	Potential To Occur
Hordeum intercedens	vernal barley	None None G3G4 S3S4 3.2	Valley and foothill grassland, vernal pools, coastal dunes, coastal scrub. Vernal pools, dry, saline streambeds, alkaline flats. 5- 1000 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Juglans californica	southern California black walnut	None None G4 S4 4.2	Chaparral, coastal scrub, cismontane woodland, riparian woodland. Slopes, canyons, alluvial habitats. 50-900 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	None None G4T2 S2 1B.1 BLM: Sensitive	Coastal salt marshes, playas, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. 1-1375 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Lepechinia cardiophylla	heart-leaved pitcher sage	None None G3 S2S3 1B.2 USFS: Sensitive	Closed-cone coniferous forest, chaparral, cismontane woodland. 115-1345 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
<i>Myosurus minimus</i> ssp. <i>apus</i>	little mousetail	None None G5T2Q S2 3.1	Vernal pools, valley and foothill grassland. Alkaline soils. 20-640 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Navarretia fossalis	spreading navarretia	Threatened None G2 S2 1B.1	San Diego hardpan and San Diego claypan vernal pools; in swales & vernal pools, often surrouded by other habitat types. 15-850 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Orcuttia californica	California Orcutt grass	Endangered Endangered G1 S1 1B.1	Wetland Vernal pools. 10-660 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Romneya coulteri	Coulter's matilija poppy	None None G4 S4	Desert wash Coastal scrub, chaparral. In washes and on slopes; also after burns. 20-1200 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .

Scientific Name	Common Name	Federal Status State Status Other Status	Habitats	Potential To Occur
		4.2		
Tortula californica	California screw moss	None None G2G3 S2? 1B.2 BLM: Sensitive	Chenopod scrub, valley and foothill grassland. Moss growing on sandy soil. 45-750 m.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Birds				
Accipiter cooperii	Cooper's hawk	None None G5 S4 CDFW: Watch List IUCN: Least Concern	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	Marginally suitable habitat occurs on site. Potential to occur is <b>moderate</b> .
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	None None G5T3 S3 CDFW: Watch List	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Artemisiospiza belli belli	Bell's sage sparrow	None None G5T2T3 S3 CDFW: Watch List USFWS: Birds of Conservation Concern	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Athene cunicularia	burrowing owl	None None G4 S3 BLM: Sensitive CDFW: Species of Special Concern	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .

		Federal Status		
Scientific Name	Common Name	State Status	Habitats	Potential To Occur
		Other Status		
		IUCN: Least		
		Concern		
		USFWS: Birds		
		of		
		Conservation		
		Concern		
		Threatened		
		None		
		G3T3		
		S2S3		
		CDFW:		
Ch ana duina		Species of	Sandy basehos solt nand layaas & shares of lance allyali	Habitat on site consists of dense, annual, primarily
Charaarius	wastam an aver nlavan	Special	Sandy beaches, sait pond levees & shores of large alkali	invasive species with stands of gum trees. The
alexanarinus	western snowy plover	ConcernNABC	lakes.	habitat requirements for this species are not on site.
nivosus		I: Red Watch	Needs sandy, graveny or mable sons for nesting.	Potential to occur is <b>low</b> .
		List		
		USFWS: Birds		
		of		
		Conservation		
		Concern		
		None		
		None		
		G5		Marginally suitable habitat for this species occurs
		S3S4		
Flamus lououmus	white-tailed kite	BLM:	Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching. Marginally suitable habitat for this spec on site. Potential to occur is <b>moderate</b> .	
Etanus teucurus		Sensitive		on site. Potential to occur is moderate.
		CDFW: Fully		
		Protected		
		IUCN: Least		
		Concern		
		Endangered		Habitat on site consists of dense, annual, primarily
		Endangered		invasive species with stands of gum trees. The
Empidonax traillii	southwestern willow	G5T2	Riparian woodlands with multiple canopy layers in	dense canopy layers of riparian vegetation this
extimus	flycatcher	S1	Southern California.	species requires is not on site. The habitat
		NABCI: Red		requirements for this species are not on site.
		Watch List		Potential to occur is <b>low</b> .
		None		
		None		
		G5T4Q		Habitat on site consists of dense, annual, primarily
Eremophila	California horned lark	S4	Short-grass prairie, "bald" hills, mountain meadows, open	invasive species with stands of gum trees. The
alpestris actia	Cantornia nomea lurk	CDFW: Watch	coastal plains, fallow grain fields, alkali flats.	habitat requirements for this species are not on site.
		List	Potential to occur is low.	
		IUCN: Least		
		Concern		

Scientific Name	Common Name	Federal Status State Status	Habitats	Potential To Occur
Icteria virens	yellow-breasted chat	Other StatusOther StatusNoneG5S3CDFW:Species ofSpecialConcernIUCN:	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	The willows on site are not in great enough quality and quantity to provide suitable habitat for this species. Potential to occur is <b>low</b> .
Lanius ludovicianus	loggerhead shrike	Least Concern None G4 S4 CDFW: Species of Special Concern IUCN: Least Concern USFWS: Birds of Conservation Concern	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub & washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Plegadis chihi	white-faced ibis	None None G5 S3S4 CDFW: Watch List IUCN: Least Concern	Shallow freshwater marsh. Dense tule thickets for nesting, interspersed with areas of shallow water for foraging.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Polioptila californica californica	coastal California gnatcatcher	Threatened None G4G5T2Q S2 CDFW: Species of Special Concern NABCI: Yellow Watch List	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .

Scientific Name	Common Name	Federal Status State Status Other Status	Habitats	Potential To Occur
Vireo bellii pusillus	least Bell's vireo	Endangered Endangered G5T2 S2 IUCN: Near Threatened NABCI: Yellow Watch List	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	The willows on site are not in great enough quality and quantity to provide suitable habitat for this species. Potential to occur is <b>low</b> .
Mammals				
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None None G5T3T4 S3S4 CDFW: Species of Special Concern	Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Dipodomys merriami parvus	San Bernardino kangaroo rat	Endangered Candidate Endangered G5T1 S1 CDFW: Species of Special Concern	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains. Needs early to intermediate seral stages.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Dipodomys stephensi	Stephens' kangaroo rat	Endangered Threatened G2 S2 IUCN: Endangered	Primarily annual & perennial grasslands, but also occurs in coastal scrub & sagebrush with sparse canopy cover. Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None None G5T3T4 S3S4 CDFW: Species of Special Concern	Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges. Coastal sage scrub habitats in Southern California.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Reptiles				

Scientific Name	Common Name	Federal Status State Status Other Status	Habitats	Potential To Occur
Arizona elegans occidentalis	California glossy snake	None None G5T2 S2 CDFW: Species of Special Concern	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Aspidoscelis hyperythra	orange-throated whiptail	None None G5 S2S3 CDFW: Watch List IUCN: Least Concern USFS: Sensitive	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food: termites.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Crotalus ruber	red-diamond rattlesnake	None None G4 S3 CDFW: Species of Special Concern USFS: Sensitive	Chaparral, woodland, grassland, & desert areas from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	The microhabitat conditions required for this species are not on site. Potential to occur is <b>low</b> .
Phrynosoma blainvillii	coast horned lizard	None None G3G4 S3S4 BLM: Sensitive CDFW: Species of Special Concern IUCN: Least Concern	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Salvadora hexalepis virgultea	coast patch-nosed snake	None None G5T4 S2S3	Brushy or shrubby vegetation in coastal Southern California. Require small mammal burrows for refuge and overwintering sites.	Small mammal burrows were not detected on site. Potential to occur is <b>low</b> .

		<b>Federal Status</b>		
Scientific Name	Common Name	State Status	Habitats	Potential To Occur
		Other Status		
		CDFW:		
		Species of		
		Special		
		Concern		
Amphibians				
		None		
Spea hammondii	western spadefoot	None G3 S3 BLM: Sensitive CDFW:	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
		Species of Special Concern IUCN: Near Threatened		
Crustaceans				
Branchinecta lynchi	vernal pool fairy shrimp	Threatened None G3 S3 IUCN: Vulnerable	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Streptocephalus woottoni	Riverside fairy shrimp	Endangered None G1G2 S1S2 IUCN: Endangered	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Insects				
Bombus crotchii	Crotch bumble bee	None Candidate Endangered G3G4 S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Cicindela senilis frosti	senile tiger beetle	None None G2G3T1T3 S1	Mud shore/flats Wetland Inhabits marine shoreline, from Central California coast south to salt marshes of San Diego. Also found at Lake Elsinore Inhabits dark-colored mud in the lower zone and dried salt pans in the upper zone.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .

Scientific Name	Common Name	Federal Status State Status Other Status	Habitats	Potential To Occur
Euphydryas editha quino	quino checkerspot butterfly	Endangered None G5T1T2 S1S2	Sunny openings within chaparral & coastal sage shrublands in parts of Riverside & San Diego counties. Hills and mesas near the coast. Need high densities of food plants Plantago erecta, P. insularis, and Orthocarpus purpurescens.	Habitat on site consists of dense, annual, primarily invasive species with stands of gum trees. The habitat requirements for this species are not on site. Potential to occur is <b>low</b> .
Habitats	Habitats			
Southern Coast Live Oak Riparian Forest		None None G4 S4	Riparian forest	This habitat is not on site
Southern Cottonwood Willow Riparian Forest		None None G3 S3.2	Riparian forest	This habitat is not on site
Southern Sycamore Alder Riparian Woodland		None None G4 S4	Riparian woodland	This habitat is not on site

Coding and Terms				
E = Endangered $T = Threatened$ $C = Candidate$ $FP = Fully Protected$ $SSC = Species of Special Concern$ $R = Rare$				
State Species of Special Concern: An administrative designation given to vertebrate species that appear to be vulnerable to extinction because of declining populations, limited acreages, and/or continuing threats. Raptor and owls are protected under section 3502.5 of the California Fish and Game code: "It is unlawful to take, possess or destroy any birds in the orders Falconiformes or Strigiformes or to take, possess or destroy the nest or eggs of any such bird."				
State Fully Protected: The classification of Fully Protected was the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians and reptiles. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.				
Global Rankings (Species or Natural Community Level):         G1 = Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.         G2 = Imperiled – At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.         G3 = Vulnerable – At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.         G4 = Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.         G5 = Secure – Common; widespread and abundant.				
Subspecies Level: Taxa which are subspecies or varieties receive a taxon rank (T-rank) attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies. For example: the Point Reyes mountain beaver, <i>Aplodontia rufa</i> ssp. <i>phaea</i> is ranked G5T2. The G-rank refers to the whole species range i.e., <i>Aplodontia rufa</i> . The T-rank refers only to the global condition of ssp. <i>phaea</i> .				
<ul> <li>State Ranking:</li> <li>S1 = Critically Imperiled – Critically imperiled in the State because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.</li> <li>S2 = Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the State.</li> <li>S3 = Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the State.</li> <li>S4 = Apparently Secure – Uncommon but not rare in the State; some cause for long-term concern due to declines or other factors.</li> <li>S5 = Secure – Common, widespread, and abundant in the State.</li> </ul>				
California Rare Plant Rankings (CNPS List):         1A = Plants presumed extirpated in California and either rare or extinct elsewhere.         1B = Plants rare, threatened, or endangered in California and elsewhere.         2A = Plants presumed extirpated in California, but common elsewhere.         2B = Plants rare, threatened, or endangered in California, but more common elsewhere.         3 = Plants about which more information is needed; a review list.         4 = Plants of limited distribution; a watch list.				
Threat Ranks: .1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat) .2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat) .3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)				

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