# Appendix 4.0

# **Western Riverside MSHCP Consistency Analysis**

# Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis

**Won Meditation Center** 

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#### 1 EXECUTIVE SUMMARY

This report contains the findings of Jericho Systems, Inc. (Jericho's) Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis for the proposed Won Meditation (Project) in Wildomar, Riverside County. Compliance with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is provided as a separate report due MSHCP report submittal requirements.

The Project site is located within the southeast corner of Criteria Cell 5342 of the Elsinore Plan Area, which is designated to contribute to assembly of the Proposed Extension of Existing Core E, which consists of Lake Elsinore located in the west-central region of the Plan Area. Core E provides Live-In Habitat for a variety of species and provides for movement of common mammals such as bobcat. Conservation within Criteria Cell 5342 is designed to focus on coastal sage scrub habitat. Areas conserved within this Cell will be connected to coastal sage scrub habitat proposed for conservation in Cell 5240 to the north. Conservation within this Cell will range from 5%-15% of the Cell focusing in the northern central portion of the Cell. The Project site is in the southern portion of the Cell and is not identified for conservation.

Review of the Western Riverside County Regional Conservation Authority (RCA) MSHCP Information Map determined that the Project site is located within the designated survey area for burrowing owl (*Athene cunicularia*) [BUOW] but is not located in an area that requires surveys for amphibians, criteria area species, mammals, or narrow endemic plants. The Project site also lies within the Stephen's Kangaroo Rat Plan Fee area. The project site primarily consists of mature chaparral habitat. This habitat is not suitable for burrowing owl.

No riverine riparian or vernal pool areas occur onsite and no special status species were observed or expected to occur on Site.

The format of this report follows the Regional Conservation Agency's guidance document for the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP; Plan) Consistency Analysis Report Template.

#### 2 INTRODUCTION

The purpose of this Consistency Analysis (Analysis) is to summarize the biological data for the proposed Won Meditation Center and to document project's consistency with the goals and objectives of the Western Riverside County Multiple Species Habitat Conservation Plan. The proposed project consists of the developing a meditation center on 0.05 acre of an approximate 8-acre parcel, Assessor's Parcel Number (APN) 382-140-002.

#### 2.1 General Survey Methods

Prior to the field investigation reference materials and databases relevant to the Project site were reviewed for the *Wildomar* and *Lake Elsinore* 7.5-minute USGS quadrangles to determine which species and/or habitats would be expected to occur on site. The literature review sources 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;

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

On June 9, 2019, Jericho biologists and ecological specialists Shay Lawrey, Todd White, Christian Nordal, and Craig Lawrey conducted a field survey of the 0.5-acre Project area proposed for development and access road plus a 200-foot buffer survey area with focus on potential habitat for sensitive biological and hydrological resources. Each surveyor is a qualified biologist with advanced degrees in Biology and several years of experience surveying for the sensitive species known to in California. Ms. Lawrey is a small mammal and regulatory specialist who lead the examination for riverine riparian areas and the Stephen's kangaroo rat habitat suitability assessment.

# 2.2 Project Area

The proposed Project would occur on approximately 0.5 acre within Accessors Parcel Number (APN) 382-140-002, which is 16.4 acres. The applicant also owns APN 382-150-001, located adjacent of APN 382-140-002 and is approximately 8 acres, but no development is planned for that parcel. The Project site occurs within the Wildomar USGS 7.5' quadrangle within Township 6S, Range 4W. (Figure 1 and Figure 2).

The Project site is located within the southeast corner of Criteria Cell 5342 of the Elsinore Plan Area, which is designated to contribute to assembly of the Proposed Extension of Existing Core E, which consists of Lake Elsinore located in the west-central region of the Plan Area. Conservation within Criteria Cell 5342 is concentrated in the northern portion of the cell and is focused on coastal sage scrub habitat.

The Project area is defined as follows:

Assessor Parcel Numbers: 382-140-002 – 8 acres, owned by applicant

Project Acreage Onsite: 0.5 acres

<u>Project Acreage Offsite</u>: 0.82 access road improvements. Corydon Road will be extended 600 feet from Grand Avenue, at a width of 60 feet wide.

Project Acreages that Occur Outside a Cell Group:

Project Acreages that Occur Inside a Cell Group: 1.32

# 2.3 Project Description

The Project would create a meditation center that includes: 1) a 7,185 square foot meditation hall with kitchen and operational facilities; 2) a 3,157 square foot guesthouse with 12 rooms; 3) a 1,657 square foot meditation building; 4) two manufactured homes for housing and administrative staff already on the site location.

Off-site improvements include the extension of the undeveloped Corydon Road, from Grand Avenue, to the site entrance. The road improvements include construction of a paved, two-lane roadway, approximately 600 feet long, approximately 60 feet wide and cross APNs 3702-100-44 and 3702-100-36.

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#### 2.4 Covered Roads

The Project does not occur on a Covered Road or require access from a Covered Road as identified by MSHCP Table 7-4. Therefore, this section is not applicable.

## 2.5 General Setting

Soils in the survey area consist of Cienaba-Rock outcrop complex (30-70 percent slopes) and Handford sandy loam (2-9 percent slopes) (Figure 3). The topography of the Project site is gently to moderately sloped from the north/northeast to the south/southwest, with most of the parcel (APN 382-140-002) occurring in the hills/mountains and development occurring on the flatland and lower limits of the hillslopes. Site altitudes range from approximately 1,335 feet above mean sea level (MSL) to 1,395 feet above MSL, and parcel altitudes range from 1,335 feet above MSL to 1,610 feet above MSL.

The Project site currently has an existing structure at the end of Corydon Road on the flatland north of the base of the Santa Ana Mountains. Vegetation in this area is primarily developed land and ruderal/weedy vegetation. Species observed in this habitat type include red brome (*Bromus madritensis* ssp. *rubens*), ripgut brome (*Bromus diandrus*), star thistle (*Centaurea melitensis*), black mustard (*Brassica nigra*), summer mustard (*Hirschfeldia incana*), Peruvian pepper (*Schinus molle*), Russian thistle (*Salsola ssp.*), oleander (*Nerium oleander*), China berry (*Melia azedarach*), tree of heaven (*Alianthus altissima*), storksbill filaree (*Erodium circutarium*) and tree tobacco (*Nicotiana glauca*).

Mature chaparral covers the slopes behind the existing residential structure. Soils in the chapparal consist of sandy-loam and a few patches of barren ground. Shrub canopy cover is approximately 70 percent and consists of chamise (*Adenostema fasciculatum*), cliff aster (*Malocothrix saxatilis*), deerweed (*Acmispon glaber*), red brome, spineflower (*Chorizanthe ssp.*), California buckwheat (*Eriogonum fasciculatum*), star thistle, summer mustard, black mustard, black sage (*Salvia mellifera*), fiddleneck (*Amsinkia menziesii*), Storksbill filaree, slender wild oat (*Avena fontinalis*), slender buckwheat (*Eriogonum gracile*), vinegar weed (*Trichostemma lanciolatum*), inland scrub oak (*Quercus berberidifolia*), and common cryptantha (*Cryptantha intermedia*) (Figure 4)

Surrounding land uses include rural residential development to the north, east and west with open space to the south.

#### 3 RESERVE ASSEMBLY ANALYSIS

Habitat linkages provide links between larger undeveloped habitat areas that are separated by development. Wildlife corridors are like linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of enough width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The Project site is located within the southern portion of Criteria Cell 5342 of the Elsinore Plan Area, which is designated to contribute to assembly of the Proposed Extension of Existing Core E, which consists of Lake Elsinore located in the west-central region of the Plan Area. Core E provides Live-In Habitat for species as noted in the table below and likely provides for movement of common mammals such as bobcat.

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Existing Core E is connected to other MSHCP conserved lands via Proposed Extension of Existing Core 3 (Lake Elsinore Soils). Proposed Extension of Existing Core 3 (Lake Elsinore Soils) consists of two blocks of land extending from the southern border of Existing Core E (Lake Elsinore). The northern portion of the proposed extension is also connected to Proposed Linkage 8. Proposed Extension of Existing Core 3 conserves soils of the Traver series, which is important to the maintenance of several species of Narrow Endemic Plants.

Conservation within Criteria Cell 5342 is designed to focus on coastal sage scrub habitat. Areas conserved within this Cell will be connected to coastal sage scrub habitat proposed for conservation in Cell 5240 to the north. Conservation within this Cell will range from 5%-15% of the Cell focusing in the northern central portion of the Cell.

The Project site is mapped in the southeast corner of the cell and is not connected to Proposed Linkage 8.

Planning species in the Proposed Extension of Existing Core 3 are identified in the MSHCP and their potential to occur on sit is identified in Table 1.

Table 1
Occurrence Potential Onsite of
Planning Species Associated with Proposed Extension of Existing Core 3

Planning Species	Primary habitat Characteristics	Potential To Occur On Project Site
Riverside fairy shrimp	Vernal Pool	Soils on site are of Cienaba- Rock outcrop complex (30-70 percent slopes), Hanford sandy loam (2-9 percent slopes), which are not conducive for fairy shrimp. Potential to Occur: None
Quino checkerspot butterfly	Grasslands, coastal scrub, chaparral, juniper woodland, and semi-arid scrub that support the species' host plant for larva.  Observed host plants are inconspicuous annuals that include <i>Plantago erecta</i> , <i>Plantago patagonica</i> , <i>Antirrhinum coulterianum</i> , <i>Cordylanthus rigidus</i> , and <i>Castilleja exserta</i> .	Host plants absent from site. Potential to Occur: Low.
western pond turtle	Ponded water	Habitat not present. Potential to Occur: None
Bell's sage sparrow	Chaparral and sagebrush scrub	Suitable habitat south of Project site. Potential to Occur: High
American bittern	Riparian/Marsh	Habitat not present. Potential to Occur: None
mountain plover	Bodies of water or even on wet soil; it prefers dry habitat with short grass (usually due to grazing) and bare ground	Habitat not present. Potential to Occur: None
northern harrier	Prairie grasslands to fields and marshes	Habitat not present. Potential to Occur: None

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Planning Species	<b>Primary habitat Characteristics</b>	Potential To Occur On Project Site
white-tailed kite	Savannas, open woodlands, marshes, desert grasslands, partially cleared lands, and cultivated fields	Habitat not present. Potential to Occur: Low
southwestern willow flycatcher	Riparian with intricate habitat structure.	Habitat not present, but habitat structure and food base are present. Potential to Occur: Low
loggerhead shrike	Agricultural fields, orchards, riparian habitats, desert scrublands, prairies, and golf courses.	Habitat not present. Potential to Occur: None
black-crowned night heron	Riparian/Marsh	Habitat not present. Potential to Occur: None
osprey	Near open water	Habitat not present. Potential to Occur: None
double-crested cormorant	Mangrove swamps to large reservoirs to small inland ponds	Habitat not present. Potential to Occur: None
white-faced ibis	Marshlands	Habitat not present. Potential to Occur: None
least Bell's vireo	Riparian with intricate habitat structure.	Habitat not present. Potential to Occur: None
bobcat	Wildlands including chaparral.	Suitable habitat south of Project site. Potential to Occur: High
Munz's onion	Seasonally moist microsites in grassy openings in coastal sage scrub, chaparral, juniper woodland, valley and foothill grasslands. Restricted to clay soils.	Habitat not present. Potential to Occur: None
San Diego ambrosia	Upper terraces of rivers and drainages, open grasslands, openings in coastal sage scrub, and occasionally adjacent to vernal pools; may also be found in fire fuel breaks and edges of dirt roadways.	Habitat not present. Potential to Occur: Low
smooth tarplant	Riparian, meadows, playas, shadscale scrub, alkali sink, valley grassland	Habitat not present. Potential to Occur: None

#### 3.1 Public Quasi-Public Lands

The majority of the cities in western Riverside County as well as the County have contributed open space/land to the County to help establish the MSHCP Conservation Area. These lands are described in the MSHCP as Public/Quasi-Public (PQP) Lands. P/QP Lands are a subset of MSHCP Conservation Area lands totaling approximately 347,000 acres of lands known to be in public/private ownership and expected to be managed for open space value and/or in a manner that contributes to the Conservation of Covered Species (including lands contained in existing reserves). The acreage of PQP Lands has been accounted for in the MSHCP tracking process for assembling the Conservation Area. If impacts to PQP Lands will result from development or implementation of a project, the project applicant must prepare an equivalency analysis that shows the impacts will either not affect the total acreage of PQP Lands or that the applicant

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can provide other compensatory mitigation that is biologically equivalent or superior to offset the loss of the PQP Lands.

## 3.1.1 Public Quasi-Public Lands in Reserve Assembly Analysis

The south east corner of the Project parcel site abuts PQP lands. The Project foot print is located approximately 1,000 feet to the north of the Cleveland National Forest, a public forest and PQP.

# 3.1.2 Project Impacts to Public Quasi-Public Lands

The Project will not directly impact any PQP lands because the project site is not located with PQP Lands (Figure 5). Project development will not indirectly impact the PQP lands beyond what uses are allowed by the Cleveland National Forest, such as non-motorized vehicle use and hiking

#### 4 VEGETATION MAPPING

North of the Project site is an existing residence at the end of Corydon Road on the flatland north of the base of the Santa Ana Mountains. Vegetation north of the Project site is primarily developed land and ruderal/weedy vegetation. Plant Species observed here include red brome (*Bromus madritensis* ssp. *rubens*), ripgut brome (*Bromus diandrus*), star thistle (*Centaurea melitensis*), black mustard (*Brassica nigra*), summer mustard (*Hirschfeldia incana*), Peruvian pepper (*Schinus molle*), Russian thistle (*Salsola ssp.*), oleander (*Nerium oleander*), China berry (*Melia azedarach*), tree of heaven (*Alianthus altissima*), storksbill filaree (*Erodium circutarium*) and tree tobacco (*Nicotiana glauca*).

Mature chaparral occure on the Project site behind the existing residential structure. Soils in the chapparal consist of sandy-loam and a few patches of barren ground. Shrub canopy cover is approximately 70 percent and consists of chamise (*Adenostema fasciculatum*), cliff aster (*Malocothrix saxatilis*), deerweed (*Acmispon glaber*), red brome, spineflower (*Chorizanthe ssp.*), California buckwheat (*Eriogonum fasciculatum*), star thistle, summer mustard, black mustard, black sage (*Salvia mellifera*), fiddleneck (*Amsinkia menziesii*), Storksbill filaree, slender wild oat (*Avena fontinalis*), slender buckwheat (*Eriogonum gracile*), vinegar weed (*Trichostemma lanciolatum*), inland scrub oak (*Quercus berberidifolia*), and common cryptantha (*Cryptantha intermedia*).

# 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 freshwater 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. 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 determinations should consider the length of the time the area exhibits upland and wetland characteristics and the way 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.

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"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 several listed or special-status water-dependent fish, amphibian, avian, and plant species. Any alteration or loss of riparian/riverine habitat from development of a Project will require the preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) analysis to ensure the replacement of any lost functions and values of habitats regarding the listed species. This assessment is independent from considerations given to waters of the United States and waters of the State under the CWA, the California Porter-Cologne Water Quality Control Act, and CDFW jurisdictional streambed under the California Fish and Game Code.

#### 5.1.1 Methods

The site was evaluated July 23, 2019, by Jericho ecologist Todd White for the presence of riverine/riparian and vernal pool areas and jurisdictional waters, i.e. waters of the U.S. as regulated by the USACE and RWQCB, and/or streambed and associated riparian habitat as regulated by the CDFW.

Aerial photography was reviewed prior to conducting the field investigation. The aerials were used to locate and inspect potential natural drainage features, ponded areas, or water bodies that may be considered riparian/riverine habitat and/or fall under the jurisdiction of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to State and federal regulatory authorities.

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 Western United States ("Updated Datasheet", Curtis and Lichvar 2010).

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."

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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 not meet the criteria of being federal or state jurisdictional water.

## 5.1.2 Existing Conditions and Results

Although the City identified the possibility for several drainages to be on site, the biological team noted no drainages within the 0.5-acre portion of the site, 200-foot survey buffer or road extension identified for the Project. According to the USGS National Hydrography Dataset (NHD), there are no current or historical drainages on, adjacent to or near the survey area and no evidence of such was observed during the site surveys. No hydric vegetation, hydric soils, signs of surface flow, and/or wetland hydrology are present in, adjacent to or near any portion of the survey area. Therefore, no riparian areas occur site

# 5.1.3 Impacts

There is no impact to riparian resources because no evidence of any soils, plants or other features that meet the definition of 6.1.2 of the MSHCP visible on site.

# 5.1.4 Mitigation

There is no mitigation for riparian resources because there is no impact to riparian resources.

#### 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 way 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.

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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 (1994-2018) of the project site and its immediate vicinity, a review of soils data, and 100 percent visual coverage site survey. The survey team, looked for signs of clayey soils, ponding, cracking, mottling, etc.

## 5.2.2 Existing Conditions and Results

A review of recent and historic aerial photographs (1994-2018) of the project site and its immediate vicinity did not provide visual evidence of an astatic or vernal pool conditions on or in the vicinity of the project site.

No ponding was observed on-site. The hydrologic regime on site does not support vernal pools, or astatic ponds.

From the review of historic aerial photographs and observations during the field investigations, it is concluded no vernal pools or suitable fairy shrimp habitat occur on the Project site. Further, no special-status plant species associated with vernal pools were observed during the field visit.

### 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

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any riparian birds exist on site. Therefore, evaluations for the presence of riparian birds were not warranted or required. No further discussion on riparian birds is made in this report.

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

The MSHCP identifies the potential presence for several endemic plant species.

The MSHCP states that in general, habitat suitability assessments may be undertaken year-round, except for 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) and no further discussion is made in this document.

# 7 ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)

The Project site is not mapped in a Criteria survey area for plants, mammals or amphibians. It is however, mapped in a Criteria survey area for burrowing owl - *Athene cunicularia hypugaea*. Surveys must be conducted within suitable habitat for species according to accepted protocols.

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.

# 7.1 Burrowing Owl

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 manmade cavities, such as buried and non-functioning drainpipes, stand-pipes, and dry culverts. They also require low growth or open vegetation allowing line-of-sight observation of the surrounding habitat to

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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.

#### 7.1.1 Methods

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. 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.

Natural and non-natural substrates were examined for potential burrow sites. All potential BUOW burrows encountered were examined for shape, size, 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 straight transects, to identify survey area boundaries, and for other pertinent information. 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.

#### 7.1.2 Conditions and Results

Habitat in the vicinity of the project site primarily consists of chaparral. The density, structure, density, canopy cover and type of vegetation on site is not preferred by this species. Further, no potential surrogate burrows were found during survey. Therefore, habitat on site or in the survey buffer is not suitable for BUOW. BUOW are absent from the Project site.

# 7.1.3 Impacts

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

# 7.1.4 Mitigation

To ensure there will be no impact to BUOW, a pre-construction survey is required. The suggested mitigation is as follows:

"Prior to issuance of a grading permit, the applicant shall perform a preconstruction survey that shall be conducted within 30 days prior to ground disturbance to avoid direct take of burrowing owls. If the results of the survey indicate that no burrowing owls are present on-site, then the project may move forward with grading, upon Planning Department approval. If burrowing owls are found to be present or nesting on-site during the preconstruction survey, then the following recommendations must be adhered to: Exclusion and relocation activities may not occur during the breeding season, which is defined as March 1 through August 31, with the following exception: From March 1 through March 15 and from August 1 through August 31 exclusion and relocation activities may take place if it is proven to the Lead Agency and/or appropriate agencies (if any) that egg laying or chick rearing is not taking place. This determination must be made by a qualified biologist."

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#### 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.

#### 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 located within Criteria Cell 5342, therefore, the MSHCP guidelines pertaining to Urban/Wildlands Interface for the management of edge factors such as lighting, urban runoff, toxics, and domestic predators applies.

The effect criteria include the following:

#### **Drainage**

Requirement: Proposed Developments in proximity to the MSHCP Conservation Area shall incorporate measures, including measures required through the National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged to the MSHCP Conservation Area is not altered in an adverse way when compared with existing conditions. Measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into the MSHCP Conservation Area. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the MSHCP Conservation Area. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. Regular maintenance shall occur to ensure effective operations of runoff control systems

#### **Toxics**

Requirement: Land uses proposed in proximity to the MSHCP Conservation Area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife species, Habitat or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Conservation Area. Measures such as those employed to address drainage issues shall be implemented.

#### Lighting

Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. Shielding shall be incorporated in project designs to ensure ambient lighting in the MSHCP Conservation Area is not increased.

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#### Noise

Proposed noise generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations and guidelines related to land use noise standards. For planning purposes, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards.

#### **Invasive Plant Species**

When approving landscape plans for Development that is proposed adjacent to the MSHCP Conservation Area, Permittees shall consider the invasive, non-native plant species listed in Table 6-2and shall require revisions to landscape plans (subject to the limitations of their jurisdiction) to avoid the use of invasive species for the portions of Development that are adjacent to the MSHCP Conservation Area. Considerations in reviewing the applicability of this list shall include proximity of planting areas to the MSHCP Conservation Areas, species considered in the planting plans, resources being protected within the MSHCP Conservation Area and their relative sensitivity to invasion, and barriers to plant and seed dispersal, such as walls, topography and other features.

#### **Barriers**

Proposed land uses adjacent to the MSHCP Conservation Area shall incorporate barriers, where appropriate in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass or dumping in the MSHCP Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage and/or other appropriate mechanisms.

#### **Grading/Land Development**

Manufactured slopes associated with proposed site development shall not extend into the MSHCP Conservation Area.

# 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 is identified in Table 2.

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

BMP No.	ВМР	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 and a paved surface for RV storage.
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.	Yes	The south east corner of the Project Parrcel abuts PQP lands and impacts will be avoided
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	There are no streambed resources on or near the 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	There are no streambed resources on or near the site.
6	Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.	No	There is no riparian resources or streambed resources 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	There are no streambed resources on or near the 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 in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the	No	There is no streambed or riparian resources on or near the site.

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BMP No.	ВМР	Applicable Yes or No	Comment
	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.		
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	There are no streambed resources on or near the 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.	Yes (as needed on periodic basis)	Vegetation on-site is native chaparral.
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.	Yes	Vegetation on-site is native chaparral.
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).	Yes	Standard measure.
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.	Yes	Standard measure.
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.	Yes	Standard measure.

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#### 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\_DRAFT\_22Apr2015.pdf

USFWS. May 31, 2015. Survey Guidelines for Listed Large Branchiopods.

#### 12 SUPPORTING APPENDICES

Appendix A –Biological Resources and Habitat Suitability Assessment

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