

MSHCP Compliance Analysis and Focused Habitat Assessment for the Burrowing Owl

*Located in Section 8 of Township 3 South, Range 3 West
of the Sunnymead, CA USGS 7.5 minute Topographic Map
APN # 479631010*

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I. INTRODUCTION

This report describes the findings of a general biological assessment as part of compliance with the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) including a focused habitat assessment for the burrowing owl (*Athene cunicularia*) (Section II) conducted by Kelly Rios, Senior Biologist. This biological assessment is intended to provide information about the potential for various sensitive resources, including burrowing owl, to occur on site based on the current site conditions. If there is a potential for burrowing owl to occur, additional focused surveys for may be necessary.

Project Site Location

The 8.37-acre project site (APN # 479631010), hereafter referred to as “site”, is located north of State Route (SR) 74, south of SR 60, west of SR 79, and east of Interstate 215 (Exhibit 1). The site location can also be described as being in Section 8 of Township 3 South, Range 3 West of the Sunnymead, CA USGS 7.5-minute topographic map (Exhibit 2). Specifically, the site is located at the northwest corner of Alessandro Boulevard and Lasselle Street, and bounded to the north by Timo Street (Exhibit 3).

Project Description

The proposed commercial center project consists of a fueling station, express carwash, fast-food, and retail space, as well as associated infrastructure, on a 3.37-acre portion of the 8.37-acre lot. The parcel is currently an undeveloped, disturbed lot.

Figure 1. Regional Vicinity Map, Aerial Base

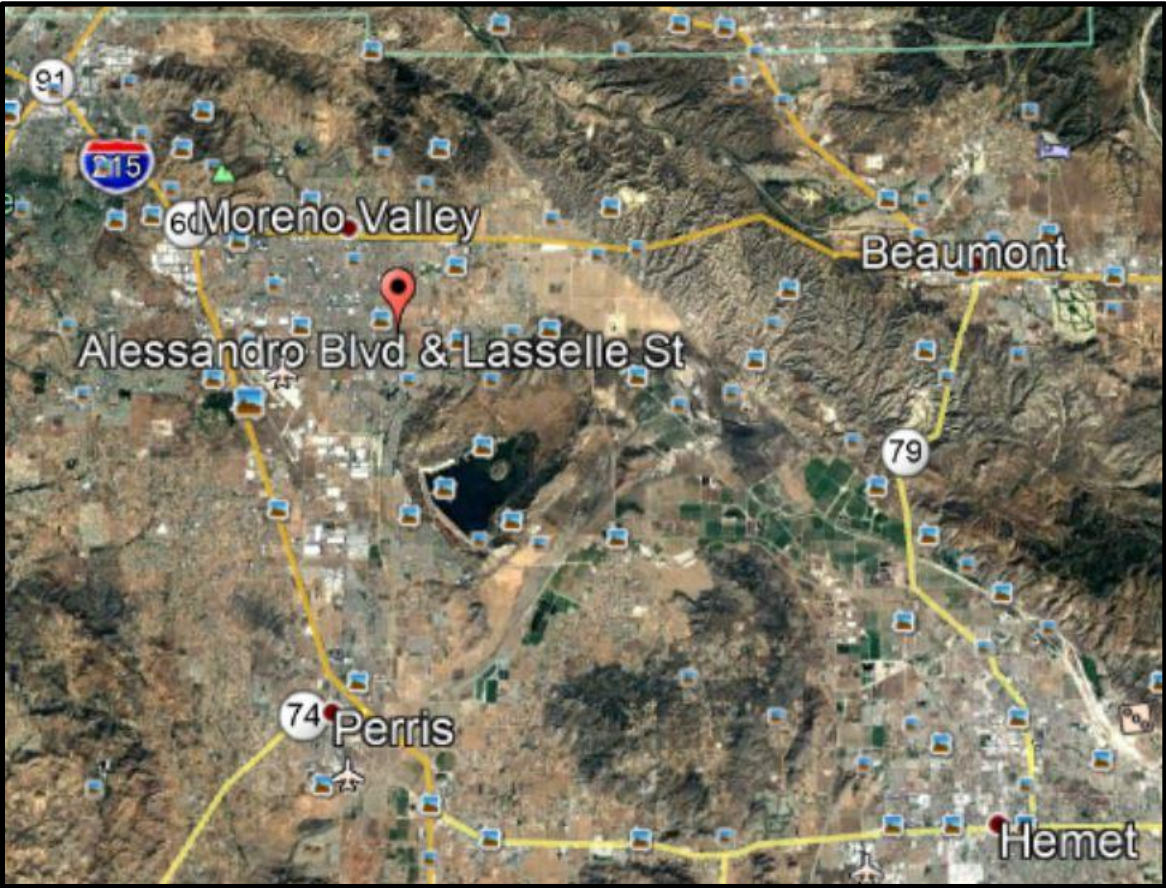


Figure 1: Regional Location Map
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Figure 2. Regional Vicinity Map, Topographic Base

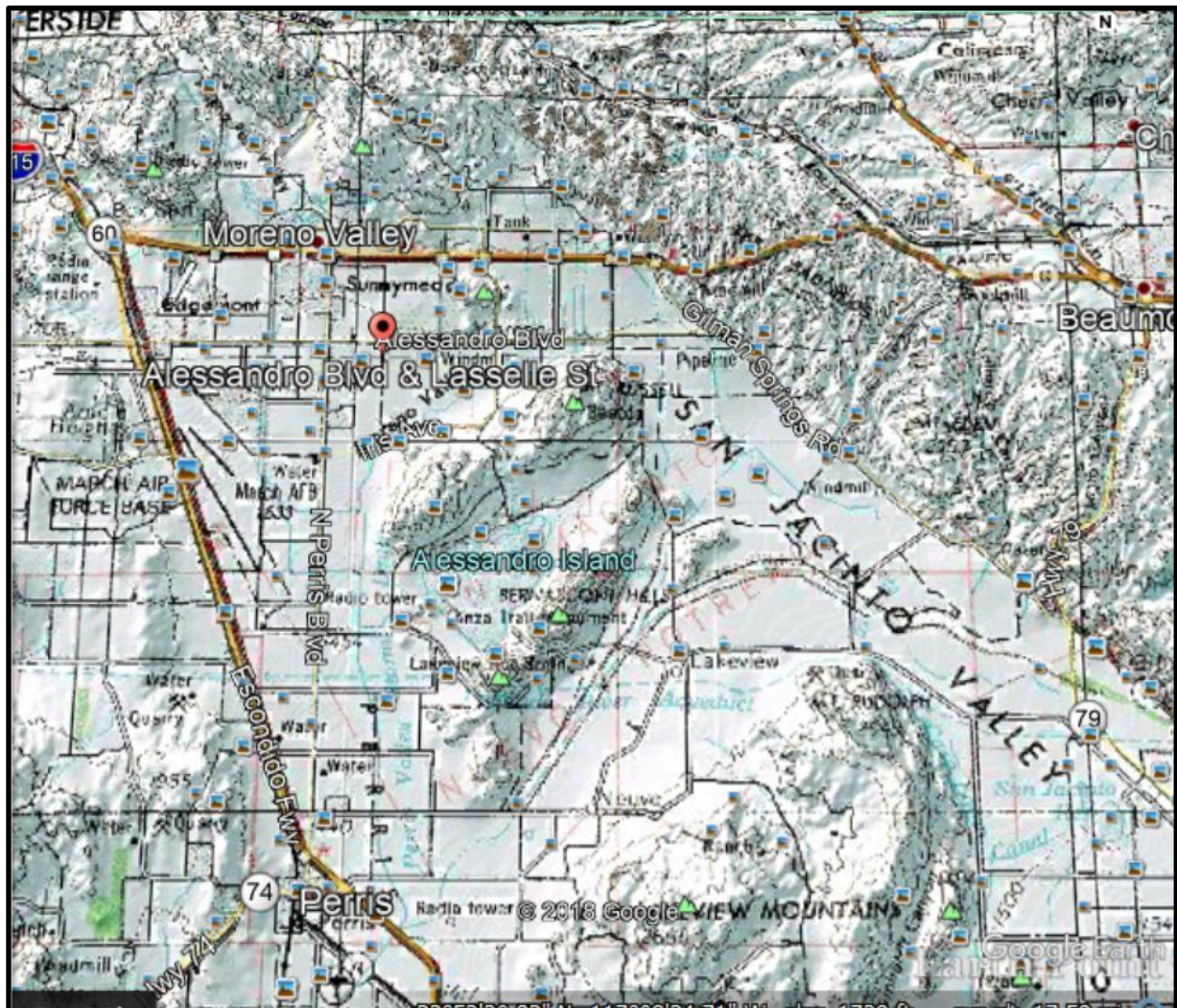


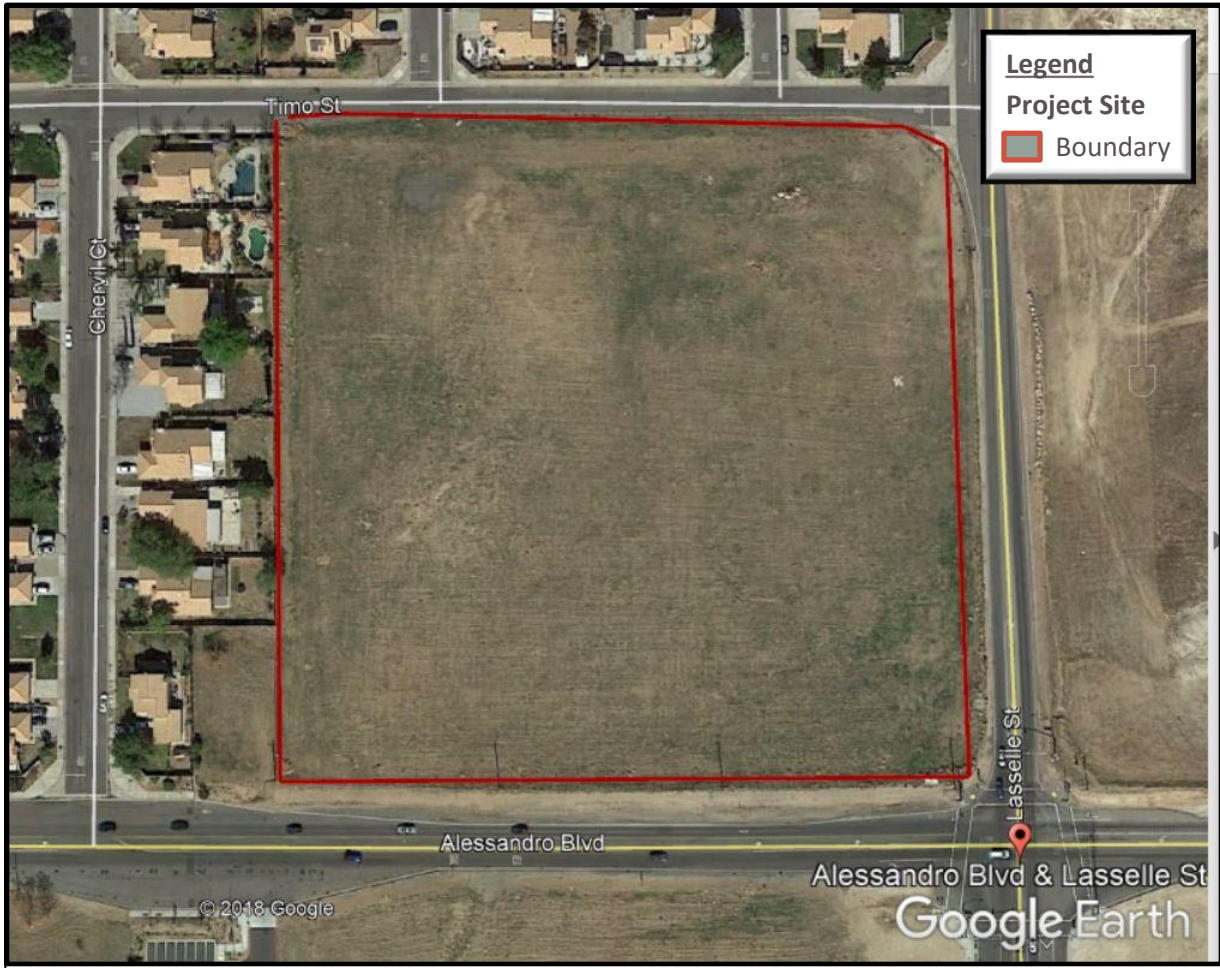
Figure 2: Regional Vicinity Map

Topographic Base

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Figure 3. Project Site



Legend
Project Site
Boundary

Figure 3: Project Site
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II. GENERAL BIOLOGICAL ANALYSIS

Literature Review

A compilation of sensitive biological resources, including the burrowing owl, was derived from the California Department of Fish and Wildlife (CDFW) Natural Diversity Database (CNDDDB 2018) and the Riverside County Multiple Species Habitat Conservation Plan (MSHCP 2003). This information was used to help determine if sensitive resources were previously reported on or directly adjacent to the site. The literature review also included a review of field guides, web sites, and site plans provided by the Client.

Sensitive Resources

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The CDFW, U.S. Fish and Wildlife Service (USFWS), and groups like the California Native Plant Society (CNPS) maintain special watch lists of such resources. Once the field survey was conducted, it was determined from several criteria, which sensitive resources have a low, moderate or high potential to occur on site. Criteria used to determine potentials of occupancy include, but are not limited to, soil types and conditions, habitat types and quality, disturbance, site history, adjacent land uses and proximity to nearest known extant populations of each respective species.

Field Survey

This biological assessment focused primarily on conducting the burrowing owl habitat assessment on the entire 8.37 site. During the assessment, vegetation communities, adjacent land use(s) and detected plant and wildlife species (Appendix A – Species Compendium) were also documented. Typical habitats found throughout the project site were photographed for reference (Appendix B – Site Photos).

The site was surveyed by Senior Biologist, Kelly Rios, on May 31, 2018 between the hours of 0900 and 1130. The temperature 61°Fahrenheit; with 100 percent overcast skies, and winds of 2-4 miles per hour. The site was systematically surveyed by pedestrian transects starting from the northeast corner and ending in the northwest corner of the parcel. Transects were spaced to ensure 100 percent visual coverage. Ground squirrel burrows were thoroughly examined for presence of burrowing owl sign. All suitable perches were inspected for owl pellets and whitewash. Presence of burrowing owl was determined by direct observations and presence of sign, including pellets, white wash, feathers, or prey remains. The location of all suitable burrowing owl habitats, potential owl burrows, including suitable man-made structures that could support owls, burrowing owl sign, and any owls observed was recorded using a GPS unit.

RESULTS

Literature Review

The CNDDDB identified 31 sensitive species (26 animals, 5 plants) and one sensitive plant community as having been previously reported within the vicinity of the project site (Sunnymead topographic map). A discussion of the potential for these sensitive species to occur onsite is included in Table 1 below. A more detailed discussion of the Burrowing Owl can be found in Section III.

A review of the MSHCP determined that the site is not located in a Criteria Cell; therefore the County will not require the applicant or City to enter into the Habitat Acquisition Negotiation Strategy (HANS) or conserve portions of the parcel. There are also no Narrow Endemic Plant Species that occur within the project site.

Natural Communities

The site is heavily disturbed and has been previously graded and disked. Therefore, the site is dominated by ruderal vegetation. A few native plant species were observed on the project site that are considered “weedy” in nature such as western ragweed (*Ambrosia psilostachya*), telegraph weed (*Heterotheca grandiflora*), jimson weed (*Datura stramonium*), and Canadian horseweed (*Erigeron canadensis*). Additional non-native plant species observed on the site include Russian thistle (*Salsola tragus*) and short-pod mustard (*Hirschfeldia incana*). A list of all species detected during the site visit is provided in Appendix A – Species Compendium.

The parcel is mostly flat the exception of an asphalt debris pile in the northwest corner of the site and a rock pile in the northeast portion of the site.

Soils and Topography

The soils on the project site consists of four soil types. The majority of soils onsite (77.9 %) are mapped as Ramona sandy loam (RaB2, 2-5% slopes). Additional soils include Cieneba sandy loam (ChF2, 15-50% slopes), Ramona sandy loam (RaA, 0-2% slope), Vista Coarse sandy loam (VsD2; 8-15% slopes), (Figure 4). Soil classifications were provided by the USDA Soils Conservation Service Maps (USDA 1968) and the Natural Resources Conservation Service – Web Soil Survey (2015). These are well drained soils that are not subject to pond.

Elevation on-site is approximately 483 feet above mean sea level. Surrounding land use consists of residential communities to the north and west and vacant lots to the south and east of the project site.

Figure 4. USDA Soils Map



Sensitive or Protected Species

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The CDFW, USFWS, and groups like the CNPS maintain special watch lists of such resources. After reviewing aerial photos, maps, site photos, and conducting the site visit, it was determined from several criteria which sensitive resources have a low, moderate or high potential to occur on site. Criteria used to determine potentials of occupancy include, but are not limited to, soil types and conditions, habitat types and quality, levels of disturbance, site history, adjacent land uses and proximity to nearest known extant populations of each respective species. Table 1, below, lists the species that were reported to occur within the vicinity of the project site and the potential these species have to occur on or adjacent (within 500 feet) to the site. A total five sensitive plant species, 26 wildlife species, and one sensitive plant community, Southern sycamore alder riparian woodland, were reported to occur within the Sunnymead topographic map. Of these, burrowing owl, has a moderate potential to occur onsite.

Table 1. List of Species Reported to Occur within Sunnymead Topographic Quadrangle

Species		Status			Potential for Impact from Project Implementation ¹
Scientific Name	Common Name	USFWS	CDFG	CNPS	
PLANTS					
<i>Centromadia pungens ssp. laevis</i>	smooth tarplant	None	None	1B.1	Low potential onsite. Low potential adjacent.
<i>Chorizanthe parryi var. parryi</i>	Parry's spineflower	None	None	1B.1	Low potential onsite. Low potential adjacent.
<i>Lasthenia glabrata ssp. Coulteri</i>	Coulter's goldfields	None	None	1B.1	Low potential onsite. Low potential adjacent.
<i>Lepidium virginicum var. robinsonii</i>	Robinson's pepper-grass	None	None	4.3	Low potential onsite. Low potential adjacent.
<i>Symphotrichum defoliatum</i>	San Bernardino aster	None	None	1B.2	Low potential onsite. Low potential adjacent.
WILDLIFE					
<i>Accipiter Cooperii</i>	Cooper's hawk	None	WL	-	Low potential onsite. Low potential adjacent.
<i>Agelaius tricolor</i>	Tricolored blackbird	None	SC	-	Low potential onsite. Low potential adjacent.
<i>Aimophila ruficeps canescens</i>	So. CA rufous-crowned sparrow	None	WL	-	Low potential onsite. Low potential adjacent.

¹ "Adjacent" indicates within 500 feet of the project site.

<i>Artemisospiza belli belli</i>	Bell's sage sparrow	None	WL	-	Low potential onsite. Low potential adjacent.
<i>Aspidoscelis hyperythra</i>	Orange-throated whiptail	None	SC	-	Low potential onsite. Low potential adjacent.
<i>Aspidoscelis tigris stejnegeri</i>	Coastal whiptail	None	SC	-	Low potential onsite. Low potential adjacent.
<i>Athene cunicularia</i>	burrowing owl	None	SC	-	Suitable burrows observed onsite. Moderate potential to occur onsite.
<i>Buteo regalis</i>	Ferruginous hawk	None	WL	-	Low potential onsite. Low potential adjacent.
<i>Chaetodipus fallax fallax</i>	Northwestern San Diego pocket mouse	None	SC	-	Low potential onsite. Low potential adjacent.
<i>Coccyzus americanus occidentalis</i>	Western yellow-billed cuckoo	FT	FE	-	Low potential onsite. Low potential adjacent.
<i>Crotalus ruber</i>	Red-diamond rattlesnake	None	SC	-	Low potential onsite. Low potential adjacent.
<i>Dipodomys merriami parvus</i>	San Bernardino kangaroo rat	FE	SC	-	Low potential onsite. Low potential adjacent.
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	FE	ST	-	Low potential onsite. Low potential adjacent.
<i>Emys marmorata</i>	Western pond turtle	None	SC	-	Low potential onsite. Low potential adjacent.
<i>Eremophila alpestris actia</i>	California horned lark	None	SC	-	Observed foraging onsite. No nesting potential onsite. Low potential nesting onsite.
<i>Eumops perotis californicus</i>	Western mastiff bat	None	SC	-	Low potential onsite. Low potential adjacent.
<i>Icteria virens</i>	Yellow-breasted chat	None	SC	-	Low potential onsite. Low potential adjacent.
<i>Lasiurus xanthinus</i>	Western yellow bat	None	SC	-	Low potential onsite. Low potential adjacent.
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	None	SC	-	Low potential on site. Low potential adjacent.
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	None	SC	-	Low potential onsite. Low potential adjacent.

<i>Phrynosoma blainvillii</i>	Coast horned lizard	None	SC	-	Low potential onsite. Low potential adjacent.
<i>Polioptila californica californica</i>	Coastal California Gnatcatcher	FT	SC	-	Low potential onsite. Low potential adjacent.
<i>Salvadora hexalepis virgulata</i>	Coast patch-nosed snake	None	SC	-	Low potential onsite. Low potential adjacent.
<i>Spea hammondi</i>	Western spadefoot	None	SC	-	Low potential onsite. Low potential adjacent.
<i>Taxidea taxus</i>	American badger	None	SC	-	Not likely to occur onsite. Not likely to occur adjacent.
<i>Vireo bellii pusillusi</i>	Least Bell's vireo	FE	FE	-	Not likely to occur onsite. Not likely to occur adjacent.
<p>California Native Plant Society (CNPS) Rare Plant Rank 1B Plants rare, threatened, or endangered in California and elsewhere. 4 Plants of limited distribution- a watch list. Threat ranks: 0.1-Seriously threatened in California (over 80% of occurrences threatened) 0.2-Moderately threatened in California (20-80% occurrences threatened /) 0.3-Not very threatened in California (less than 20% of occurrences threatened)</p>					
<p>U.S. Fish and Wildlife Service FE-Federal Endangered FT-Federal Threatened</p>		<p>California Department of Fish and Wildlife SE- State Endangered ST- State Threatened SC- State Species of Special Concern FPS- Fully Protected Species WL- Watch list (either by CDFW or other conservation group such as Audubon)</p>			
<p>Not Likely to Occur - There are no present or historical records of the species occurring on or in the immediate vicinity (within 3 miles) of the site and the diagnostic habitats strongly associated with the species do not occur on or in the immediate vicinity of the site. Low Potential to Occur - There is a historical record of the species in the vicinity of the site and potentially suitable habitat onsite, but existing conditions (e.g., density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation) substantially reduce the possibility that the species may occur. The site is above or below the recognized elevation limits for this species. Moderate Potential to Occur - The diagnostic habitats associated with the species occur on or in the immediate vicinity of the site, but there is not a recorded occurrence of the species within the immediate vicinity (within 3 miles). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity. High Potential to Occur - There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the site (within 3 miles). Species Present - The species was observed in the WLCSP at the time of the survey or during a previous biological survey.</p>					

Of the list of 31 species reported to occur within the vicinity of the site, California horned lark, was observed foraging onsite. This species is a California State listed species of special concern. No nesting habitat was observed onsite for this species. Therefore, impacts to this species foraging habitat will be less than significant and no mitigation will be required.

Burrowing owl was determined to have a moderate potential to occur on the site due to the presence of suitable burrows and is addressed in greater detail in the following sections.

III. BURROWING OWL HABITAT ASSESSMENT

Natural History of the Burrowing Owl

The burrowing owl is a small, pale, buffy-brown owl that is unique in its habit of nesting in subterranean burrows. The burrowing owl is designated as a California species of concern due to its alarming decline in the state of over the past 30 years. Burrowing owls are not considered a long-lived species as they are subject to numerous avian predators (e.g. golden eagles, red-tailed hawks, and prairie falcons) and other causes of mortality including vehicle collisions, poisoning, feral animals, human persecution, disking, and urban developments.

Burrowing owl require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows. Typical habitat associated with burrowing owls includes short-grass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas as a year-round resident. Burrowing owls may also use golf courses, cemeteries, road allowances within cities, airports, vacant lots in residential areas, and irrigation ditches. Although open areas with short vegetation are critical for nesting, there is some evidence that the owls prefer a vegetation mosaic with nesting habitat interspersed with taller vegetation for hunting. However, the primary requirement for suitable burrowing owl foraging habitat appears to be low vegetation cover that allows visibility and access to prey.

In California, the species is often found in areas containing California ground squirrels (*Spermophilus beecheyi*) and other burrowing animals, whose burrows are used by the owls. It is opportunistic in its use of burrow sites and can use pipes or other suitable cavities at or below ground level. The entrances to burrows are often decorated with bits of animal dung, feathers, litter, and other objects. One burrow is typically selected for use as the nest; however, satellite burrows are usually found within the immediate vicinity of the nest burrow within the defended territory of the owl. Burrowing owls are generally considered a monogamous species. Both parents take part in incubation for about 28 days. If left undisturbed, they will use the same burrow year after year for nesting. Clutches of up to 12 eggs are laid, primarily from February to May. The young emerge from the nest and spend daylight hours at the burrow entrance with one or both adults.

Results

Based on the literature review, no burrowing owls have been reported within several miles of the project site. Several ground squirrel burrows were observed in the southcentral and norther portion of the site. Additionally, a few ground squirrel burrows were observed in the rock pile located in the northeastern portion of the site. However, no burrowing owl sign, such as whitewash, pellets or feathers were observed in the vicinity of any of these burrows. Due to the presence of suitable burrows for burrowing owl, a focused survey for burrowing owl is recommended.

IV. MSHCP AREA ANALYSIS

This project site does not fall within a Criteria Cell; therefore no HANS is required and the parcel is not subject to conservation.

V. RIPARIAN/ RIVERINE, VERNAL POOL ASSESSMENT (RRVP)

This section of the report is intended to cover Section 6.1.2 of the MSHCP which includes the description and mapping of all Riparian/Riverine Areas and Vernal Pool (RRVP) habitats found on and directly adjacent to the site. This section is also intended to provide an analysis of the “functions and values” of the RRVP areas and language about the presence/absence of the numerous sensitive species that may occur in these habitats as provided within the Section 6.1.2.

The project site does not contain any vernal pools or drainage features that meets the definition of Riparian/Riverine or Vernal Pools under Section 6.1.2 of the MSHCP.

VI. CONCLUSIONS

This project site is an undeveloped, disturbed lot containing non-native ruderal plant species. The potential for sensitive species to occur on the site is unlikely; however, there is suitable habitat for burrowing owls due to the presence of ground squirrel burrows. Therefore, focused burrowing owl surveys are recommended.

The site does not fall within an MSHCP Criteria Cell; therefore, conservation of this site is not required under the MSCHP. Birds may be seen flying overhead and may use the site for foraging. In consideration of the site’s location and current condition, it is not expected that the proposed development would conflict with the conservation objectives set forth in the MSHCP.

Recommendations

General Recommendations

RM 1 – A focused survey for burrowing owl is recommended following the County of Riverside Burrowing owl Survey Protocol.

RM 2 – This survey and report is good for a period of 1 year. If project implementation has not taken place within 1 year from the date of this report, a report update may be required by the lead agency.

Conclusion Statement

Implementation of this project while following the recommendations identified above will help reduce the potential for significant adverse impacts to those below a level of significance.

CERTIFICATION: *I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.*

Date: June 18, 2018

Signed: 

VII. REFERENCES

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APPENDIX A

FLORAL AND FAUNAL COMPENIA

Scientific Name	Common Name
PLANTS	
Asteraceae	Sunflower Family
<i>Ambrosia psilostachya</i>	western ragweed
<i>Erigeron canadensis</i>	Canadian horseweed
<i>Heterotheca grandiflora</i>	telegraph weed
* <i>Lactuca serriola</i>	prickly lettuce
Brassicaceae	Mustard Family
* <i>Hirschfeldia incana</i>	short-pod mustard
Chenopodiaceae	Goosefoot Family
* <i>Salsola tragus</i>	Russian thistle
Euphorbiaceae	Spurge Family
<i>Eremocarpus setigerus</i>	dove weed
Solanaceae	Nightshade Family
<i>Datura wrightii</i>	jimson weed
* <i>Nicotiana glauca</i>	tree tobacco
Poaceae	Grass Family
* <i>Schismus barbatus</i>	Mediterranean schismus
WILDLIFE	
<i>Uta stansburiana</i>	side-blotched lizard
<i>Zenaida macroura</i>	mourning dove
<i>Calypte anna</i>	Anna's hummingbird
<i>Eremophila alpestris</i>	horned lark
<i>Sayornis saya</i>	Say's phoebe
<i>Haemorphous mexicanus</i>	house finch
*Indicates non-native species	



APPENDIX B

SITE PHOTOS

1. *Panoramic View from the Southeast Corner of the site*
2. *Facing west from top of knoll*
3. *Facing southwest at drainage feature near eastern boundary*
4. *Looking north from eastern boundary*
5. *Facing west from eastern boundary*
6. *Facing south from knoll top at northern boundary*