APPENDIX 3

General Biological Habitat Assessment, MSHCP Consistency Analysis, and Jurisdictional Delineation

for

HOTEL MURRIETA

APN's 910-020-009 and 910-020-014

Prepared for:

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And

AGK Group

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Report Summary: A protocol Habitat Assessment and 100 % cover survey for burrowing owl was conducted. No sign of burrowing owl was encountered. Breeding season surveys are not recommended.

Certification: I hereby certify that the statements furnished herein and in the attached exhibits present data and information required for this Biological Survey to the best of my ability, and the facts, statements and information presented are true and correct to the best of my knowledge and belief.

LISA M. Patterson

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INTRODUCTION AND SUMMARY OF FINDINGS

The following is a General Biological, Focused Burrowing Owl, and Jurisdictional Wetland, Waters, and California Streambed Delineation for the proposed hotel center. The City of Murrieta (City) in conjunction with AGK Group is proposing a hotel development. This report discusses the general background information, methodologies, and a discussion of the rational for the report conclusions.

The project area is located in the City of Murrieta, Riverside County, California. The property is located along Monroe Avenue between future Jordan and and Fig Street. The site is mapped in an unsectioned portion of Township 6 South, Range 3 West San Bernardino Base Meridian (USGS 7.5 Minute Series quadrangle, "Murrieta"). See (Figures 1 and 2 for site location)

A preliminary jurisdictional delineation was prepared using the Rapanos Guideline in order to determine what areas on the site will likely be subject to jurisdiction under Sections 404 and 401 of the Clean Water Act. The U.S. Army Corps of Engineers has authority in conjunction with EPA to determine jurisdiction. Additionally, a Lake and Streambed Alteration Agreement (LSAA) of the Fish and Game Code jurisdictional determination was made. The result of this preliminary determination is none of the drainage features on site will be regulated by the U.S. Army Corps. Further, due to development and detention of drainage to the east of the proposed project, the fish and wildlife values of the erosional features have been lost, and do not have connectivity to features up or down slope from the proposed project site. Therefore, a California Department of Fish and Wildlife (CDFW) Lake and Streambed Alteration Agreement will not likely be required. Finally, although some remnant riparian trees remain in the northerly channel, they do not meet the function and values described under Section 6.1.2 of the Southwestern Riverside County Multi-Species Habitat Conservation Plan (MSHCP) to be considered Riparian Riverine.

A habitat assessment for burrowing owl was conducted on the site. Since suitable burrowing owl habitat occurred along the proposed site, a 100% cover survey was conducted. The site occurs in an area that is rapidly developing. The adjacent parcels were viewed from the subject parcel using Diamondback 10X42 binoculars. The result of this protocol survey is that neither burrowing owl nor evidence thereof was encountered within the project area of potential effect. No owl burrows were encountered on the site. The finding of this survey is that burrowing owls are not present on this site. Further, there is no evidence to suggest historical use of the property by burrowing owls.

While no bird nests were encountered during the surveys, the State of California prohibits the take of active bird nests. Thus, any grubbing or brushing to occur on the property should be conducted outside of the State identified breeding season of February 15 through September 1. Alternatively, the site would need to be evaluated by a qualified biologist to determine if birds were nesting in the shrubs or trees to be removed prior to initiation of ground disturbance.

MSHCP

Riverside County adopted the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) on June 17, 2003. The permit was issued in June 2004. The site is not mapped within a criteria cell, and therefore not targeted for conservation. However, the plan requires that a project comply with the plan policies identified in Section 6 of the Plan. This project must

comply with the following policies: 1) Riparian/Riverine Areas/ Vernal Pools; 2) Narrow Endemic Plant Species (List 4); 3) Urban/Wildlands Interface; and 4) Surveys for Special Status Species (burrowing owls);

Table 1. MSHCP Consistency Summary. This is a summary of the MSHCP Conservation Goals and Policies as they relate to this parcel.

Southwest Area Conservation Goals	Within/ Adjacent	Not Within / Adjacent
Proposed Constrained Linkages: **9,10,11,12,13,14, 15,16, 17, 18,**		X
Proposed Core Areas: **2, 7,**		X
Linkages: **8, 9, 10, 13, 14, 17, 18**		X
Constrained Linkage: **E**		X
Habitat Block: **Proposed Noncontiguous Block 1,2, 3**		X
Core: **5,6,7, and J**		X
Criteria Cell:		X
Pre-existing conservation Area		X
Riparian/Riverine or Vernal Pool Habitat		X
Narrow Endemic Plant Survey Area		X
Urban/Wildlife Interface (adjacent to Riparian/Riverine Areas)		X
Mammal Survey Area		X
Amphibian Survey Area		X
Burrowing Owl Survey Area	X	

Riparian/Riverine Areas/ Vernal Pools; A Determination of Biological Equivalent or Superior Preservation (DBESP) will not be required for any impacts proposed to Riparian/Riverine habitat.

Narrow Endemic Plant Species; The site is not mapped within an area identified for narrow endemic plant surveys.

Urban/Wildlands Interface; Urban/Wildland interface best management practices will not be required.

Surveys for Special Status Species (burrowing owls); Burrowing owls were not observed in the project area.

Figure 1 – Regional Location Map

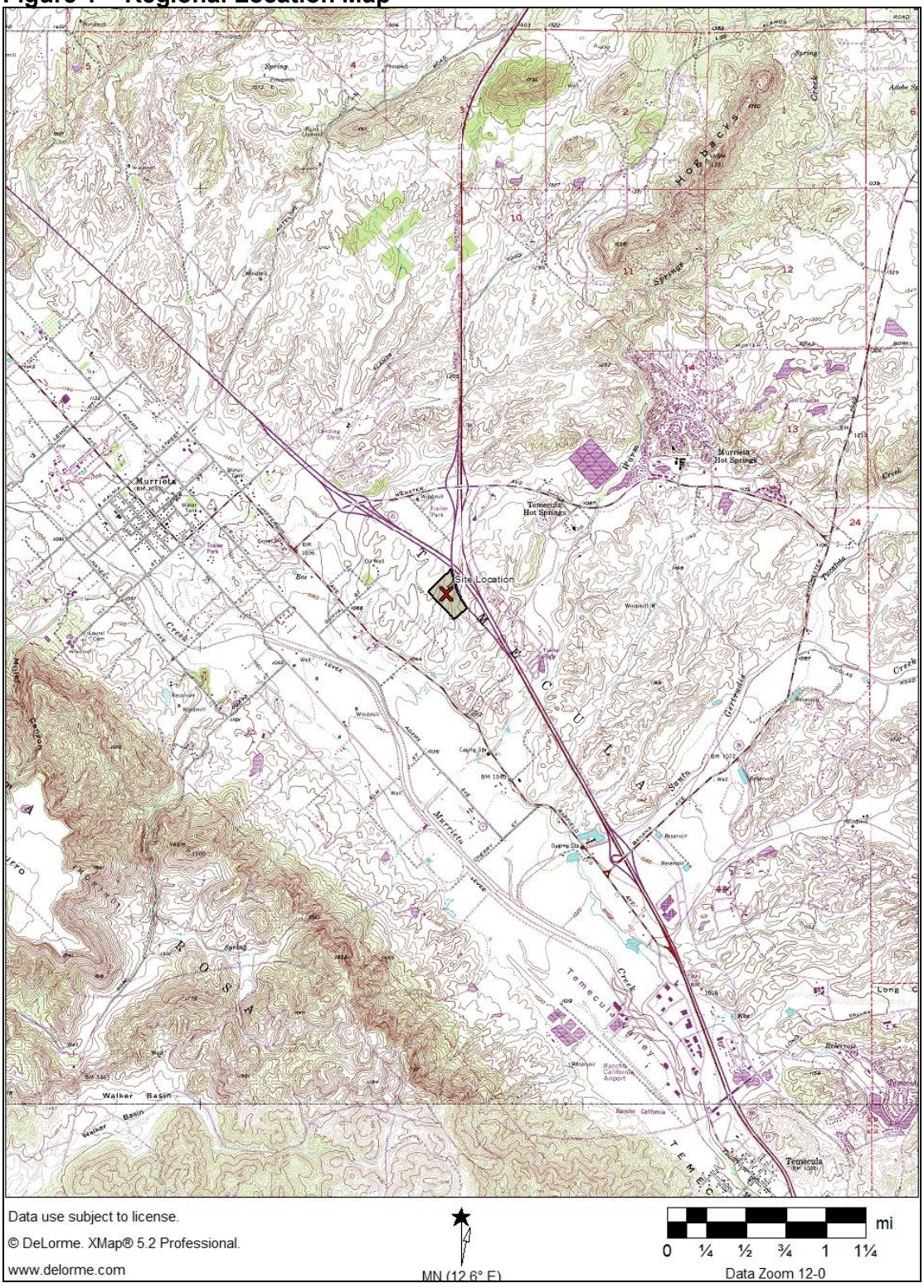
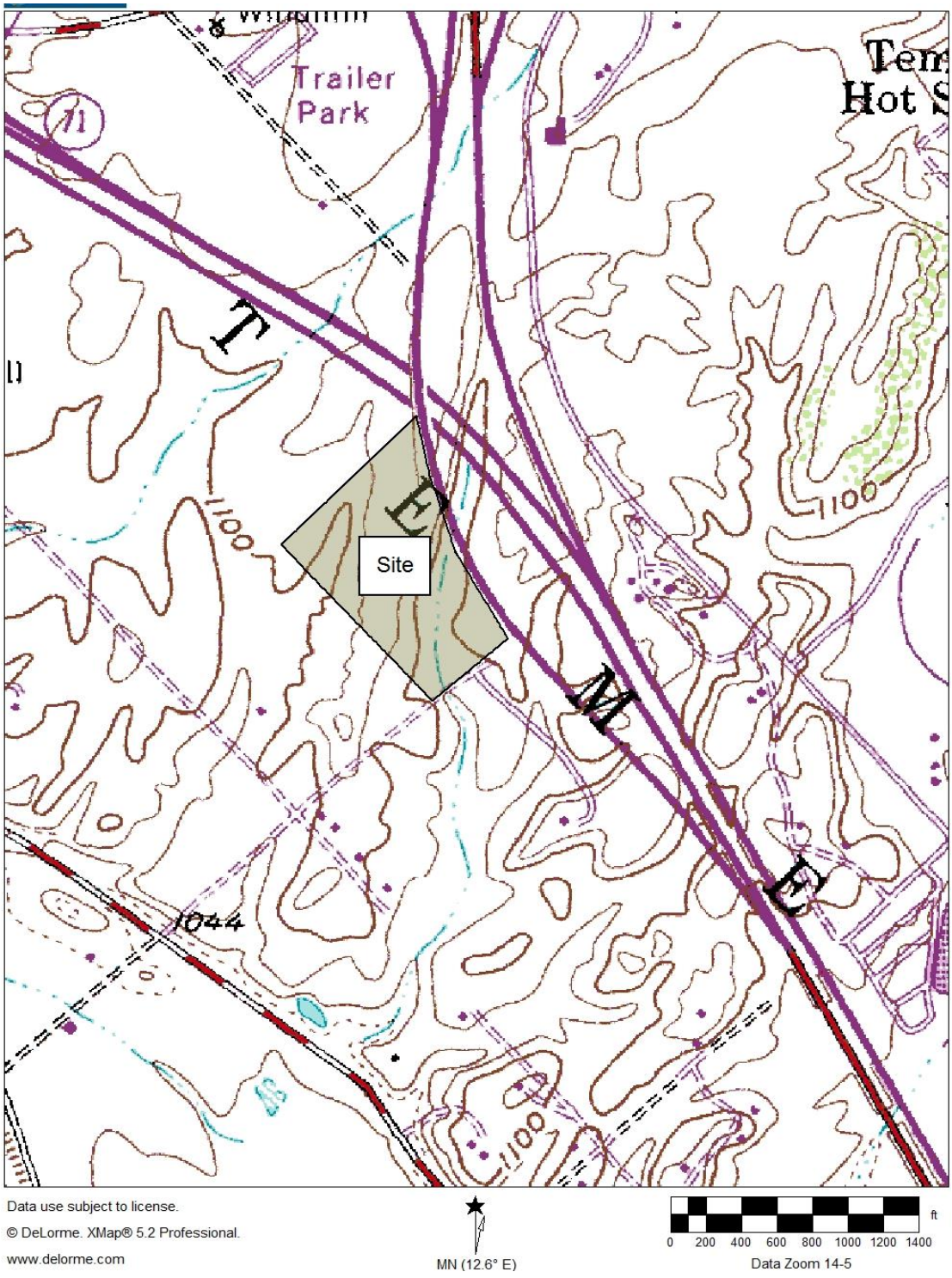


Figure 2: Site Location Map



SITE DESCRIPTION

The site is located between Fig Street and Jordan Lane west of and adjacent to the I-15 in the City of Murrieta. Figure 1 shows the regional location and Figure 2 shows the specific site. This site is characterized by rolling hill topography which has been disturbed by plowing, grazing, dumping, and off-road vehicle use. The site is characterized by non-native grasses, with some scattered remnant coastal sage scrub species.

There are two drainage features that traverse the project site from pipes under I-15. The flow from these features have been greatly reduced due to the development of the parcel located to the east between I-15, I-215, and Murrieta Hot Springs Road, locally known as the “golden triangle”. Storm water retention basins are part of this new development.

The southerly channel retains some older willow trees (Salix sp.) and mulefat (*Baccharis salisafolia)*, but they are beginning to show stress and there is no new recruitment. The northern feature is unvegetated, and appears to be an erosional feature emanating from freeway runoff. Neither of these features have a clear or significant nexus with Murrieta Creek, a relatively permanent water of the US. Figure 4 depicts the site and identifies these drainage features.

In addition to the onsite improvements, the project will be required to improve Monroe Avenue, Jordan Lane, Guava Street, and No-Name Street. These are existing dirt roads that are heavily used by local residents. There is a culvert crossing across an unnamed channel between Guava Street and Jordan Lane. This channel does not have any riverine/riparian habitat, nor are there any down-stream values. This channel will not likely be subject to jurisdiction by the US Army Corps of Engineers or under the MSHCP’s riverine/riparian/vernal pools policy. It may, however, be subject to California Department of Fish and Wildlife’s LSAA.

Observations of wildlife include scat, tracks, burrows, nest, calls, and individual animals. Common mammals are cotton-tail rabbit (*Sylvalegus audoboni*), Beechy ground squirrels (*Otospermophilus beecheyi*), and canines (*Canis lupus familiaris*). Common bird species observed were raven (*Corvus corax*) and mourning dove (*Zenaida macroura*). A species list is included in Appendix A.

METHODOLOGY

General Biological

The California Natural Diversity Data Base (CNDDB) and literature references including the Western Riverside County MSHCP were examined to obtain information on species occurrences in the project vicinity. Lisa Patterson conducted a site visit May 24, 2018. Photos were taken to characterize habitat conditions. Disturbance characteristics, plant, and animal species were recorded. This determination of Waters of the United States is a preliminary determination, the U.S. Army Corps of Engineers has authority in conjunction with EPA to determine jurisdiction.

California Department of Fish and Game Section 1602

The California Department of Fish and Wildlife takes jurisdiction over water flow areas, i.e., streams. These water flow areas are identified in the code as:

> "...natural flow or bed, channel or bank of any river stream of lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit or will use material from the streambeds..."

U.S. Army Corps of Engineers "Waters of the United States", excluding wetlands

The limits of "waters of the United States", excluding wetland, are defined in 33 CFR 328.3(a) as those areas within the "ordinary high water mark" (OHWM). The OHWM is defined as:

> "...that line on the shore established by the fluctuations of the water and indicated by physical characteristics such as clear natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."

U.S. Army Corps of Engineers "Wetlands"

The conclusions of the Jurisdictional Delineation conducted in 2018 are based upon The U.S. Army Corps of Engineers' Wetland Delineation Manual, January 1987, Technical Report Y-87-1 (Manual). This Manual outlines a comprehensive approach based upon the presence of the following three parameters: wetland hydrology, hydrophytic vegetation, and hydric soils.

Wetland hydrology is present if the "sum total of wetness characteristics in areas that are inundated or have saturated soils for a sufficient duration to support hydrophytic vegetation" (Manual). Hydrophytic vegetation is "the sum total of macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content" (Manual). A positive hydrophytic vegetation indicator is present if the prevalence, characterized by the dominant species of a plant community or communities, of the vegetation is classified as hydrophytic vegetation. Dominant plant species are those that contribute more to the character of a plant community than other species present, as estimated or measured in terms of some ecological parameter (i.e., %cover, %density, etc.). Hydric soil is "soil that is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation."

Using this Manual, a wetland determination is made when, under "normal circumstances," an area has all three parameters present. An area is not functioning under normal circumstances if a positive indicator for one of the three parameters could not be found due to effects of recent human activities. If a particular site has been recently disturbed by natural or human activities, it may not meet the criteria of "normal circumstances". If this occurs, it would be classified as an "Atypical Situation" meaning one or more parameters are not reliable indicators.

To complete this Jurisdictional Wetland Delineation, all three parameters were investigated: soils, hydrology, and vegetation. The Manual describes inundation greater than one month to be a "very long duration", therefore areas that were ponded or were saturated at the surface or within the root zone (usually 1-12 inches). The hydrophytic vegetation is characterized by plant species that have "demonstrated an ability to achieve maturity and reproduce in an environment where all or portions of the soil within the root zone become, periodically or continuously,

saturated or inundated during the growing season." (Reed) The National List of Plant Species That Occur in Wetlands was used to determine the indicator status of the dominant species of a community. Wetland areas are delineated by looking for vegetation boundaries in the field between communities dominated by Facultative Wetland Species – Obligate Wetland Species and those dominated by Facultative Upland - Upland species and comparing the hydrological and soils data along the vegetation transition.

Burrowing Owl

Burrowing owls may use a site for breeding, wintering, foraging, and/or migration stopovers. Occupancy of suitable burrowing owl habitat can be verified at a site by an observation of at least one burrowing owl, or, alternatively, its molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance. Burrowing owls exhibit high site fidelity, often reusing burrows year after year. A site should be assumed occupied if at least one burrowing owl has been observed occupying a burrow there within the last three years.

The Phase II burrow survey is required if burrowing owl habitat occurs on the site. If burrowing owl habitat is not present on the project site and buffer zone, the Phase II burrow survey is not necessary. A written report of the habitat assessment should be prepared (Phase IV), stating the reason(s) why the area is not burrowing owl habitat.

A survey for burrows and owls should be conducted by walking through suitable habitat over the entire project site and in areas within 150 meters (approx 500 ft.) of the project impact zone. This 150-meter buffer zone is included to account for adjacent burrows and foraging habitat outside the project area. The rational for this is that the proposed project my cause indirect impacts to adjacent burrowing owl from such factors as noise and vibration due to heavy equipment.

Pedestrian survey transects should be spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (approx. 100 ft.) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more surveyors conduct concurrent surveys. Surveyors should maintain a minimum distance of 50 meters (approx. 160 ft.) from any owls or occupied burrows. It is important to minimize disturbance near occupied burrows during all seasons.

If burrows or burrowing owls are recorded on the site, a map should be prepared of the burrow concentration areas, and a breeding season survey and census (Phase III) of the burrowing owls shall be conducted. The final phase (Phase IV) is to prepare a report of the burrow survey stating whether or not burrows are present. Finally, a preconstruction survey may be required by project-specific mitigations no more than 30 days prior to ground disturbing activity.

Narrow Endemic Plant Species

The proposed project is not located within an area identified for narrow endemic plant species focused surveys, nor is it located in an area identified for criteria area species surveys. Therefore, no focused surveys were conducted for narrow endemics or criteria area species

RESULTS AND DISCUSSION

General Biological

Three vegetation types were identified during this investigation. The following is a discussion of these communities in order of relative area covered by the assemblages.

1. Non-Native Disturbed/Graded Areas

This community occurs at the top of the slopes and in disturbed areas. The community is characterized by storksbill (*Erodium cicutarium*), foxtail chess (*Bromus madritensis*), wild oats (*Avena barbata*), ripgut brome grass (*Bromus diandris*), and foxtail fescue (*Vulpia myuros*). Other species occurring in this community are short-pod mustard (*Brassica geniculata*), barley (*Hordium vulgare*), *Amsinkia sp*., and star thistle (*Centaurea melitensis*).

Due to chronic disturbances, this area does not support a diverse fauna. The most common species observed on the site was Beachy ground squirrels (*Otospermophilus beecheyi*). Other common species include western meadowlark (*Sturnella magna*), cotton-tail rabbits (*Sylvalegus audobonii*), mourning doves (*Zenaida macroura*), and foraging red-tailed hawks (*Buteo jamaicensis*).

2. Disturbed Coastal Sage Scrub/Chaparral

This community is characterized by two dominant species, California buckwheat (*Eriogonum fasciculatum*) and California sage (*Artemisia californica*). California buckwheat represents more than 50 percent of the vegetative cover in this community, sage accounts for less than 30 percent.

3. Riparian

The southerly channel retains some older willow trees (Salix sp.) and mulefat (*Baccharis salisafolia*), but they are beginning to show stress and there is no new recruitment. The northern feature is unvegetated, and appears to be an erosional feature emanating from freeway runoff. Neither of these features have a clear or significant nexus to Murrieta Creek, a relatively permanent water of the US. Figure 4 depicts the site and identifies these drainage features. A species list is included as Appendix A.

Site Conditions

Survey Dates

Biological surveys were conducted on the site and May 24, 2018. The focus of these field surveys was to document the presence or absence of special status species identified in the MSHCP, and to determine the limits of jurisdictional waters and streambed within the project area.

Weather

The weather during the survey was mostly sunny and high scattered clouds and winds from the southwest between 3 and 5 miles per hour. The temperature was approximately 70°F for the survey period.

Soils and Topography

This site is characterized by rolling hill topography which has been disturbed by annual discing dumping, and off-road vehicle use.

Disturbances

Disturbances on the proposed site include: dumping, grazing, dirt roads, fences, litter, historic home site, annual plowing, and off-road vehicle use. These disturbance levels range from moderate to severe.

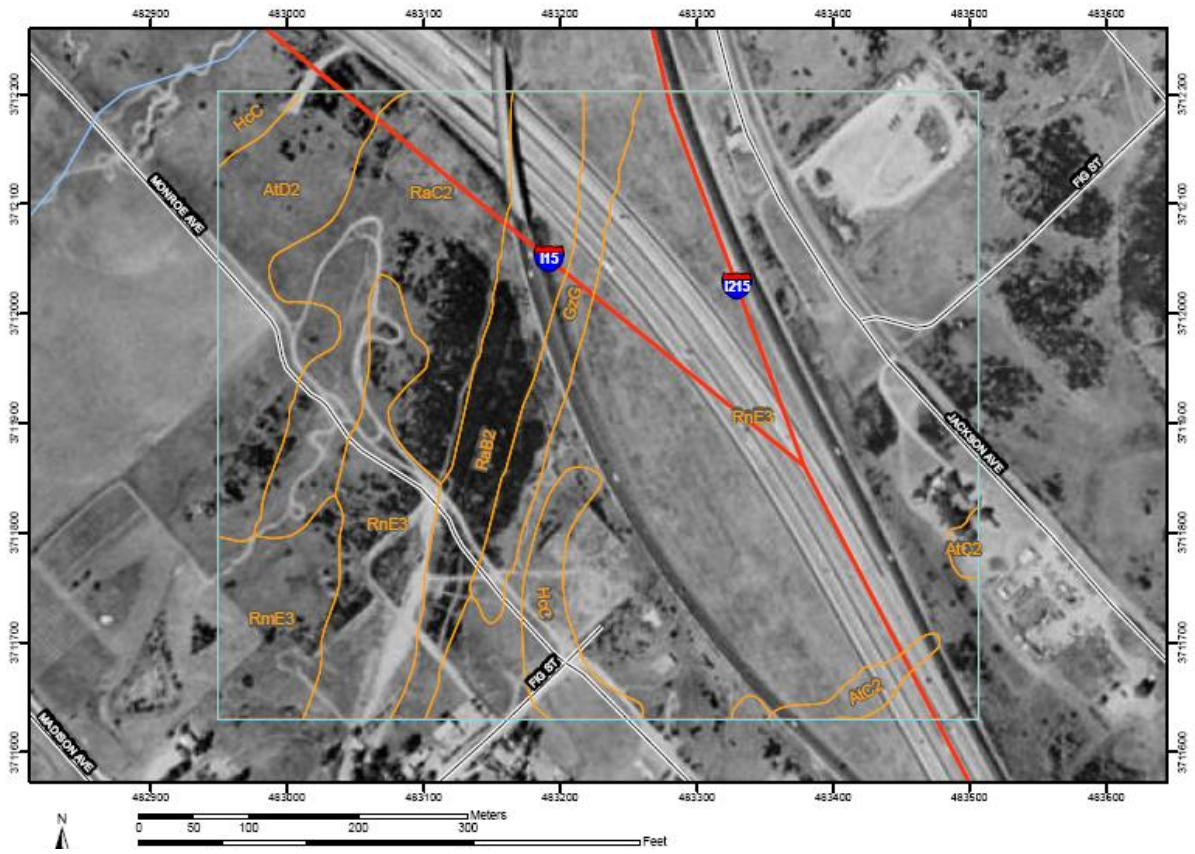
Burrowing Owl

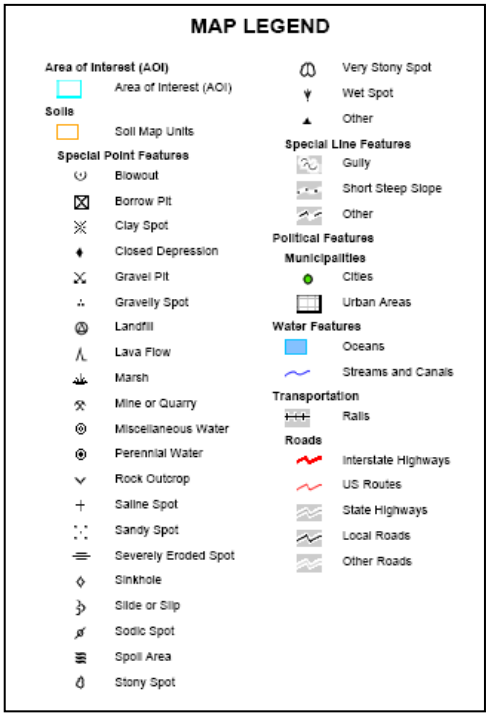
Focused burrowing owl surveys were conducted in accordance with the "Burrowing Owl Survey Protocol and Mitigation Guidelines" prepared by the California Burrowing Owl Consortium in April 1993. The protocol survey identities a four-phased process with phase four being the report. The first phase is a Habitat Assessment. This phase calls for the identification of burrowing owl habitat on site. If borrowing owl habitat is observed, then Phase II is conducted. Phase II is a 100% coverage of the site plus a transect on adjacent properties when possible. This 100% coverage survey includes surveying a 150-meter (approximately 500 foot) zone of influence on all sides of the project at no more than 30-meter (approximately 100 foot) intervals. Natural and non-natural substrates were examined for potential burrow sites. All burrows encountered were examined for shape, scat, pellets, and tracks.

A Habitat Assessment and burrow survey was conducted on June 16, 2018, by biologist Lisa Patterson. Although the site is regularly disced, a 100% cover walk-over was conducted at the same time as the Habitat Assessment. Disturbance characteristics and other animal sign encountered on the site were recorded. Ground squirrels and ground squirrel burrows were observed on the project site, but none had been enlarged by an owl nor did they show signs of owl use such as pellets or whitewash. No burrowing owls or sign of owls were observed on the property or in the zone of influence transects. Adjacent lands already developed for residential uses were not surveyed in the zone of influence. Adjacent open land west of the site was surveyed as well, but no owl sign was found. All natural (berms, dirt, and grub piles, etc.) and artificial substrates (culverts on adjacent properties) were checked for sign of burrowing owl, but no pellets, whitewash or burrows were found. No owl burrows were encountered on the site or in the zone of influence, and therefore, breeding season burrowing owl surveys were not conducted and are not recommended. It is the finding of this survey that burrowing owls are not presently found on this property, and no evidence was found to suggest historical use of the property by burrowing owls.

If burrows that could be used by burrowing owls occur on the site, a Phase III survey is warranted. Because no burrows that could be used by burrowing owls were observed, a Phase III survey was not conducted.

Figure 3 – Soils Map





Western Riverside Area, California (CA679)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AtC2	Arlington and Greenfield fine sandy loams, 2 to 8 perce nt slopes , eroded	1.2	1.2%
AtD2	Arlington and Greenfield fine sandy loams, 8 to 15 perc ent slopes, eroded	7.8	8.0%
GzG	Gullied land	4.0	4.1%
HcC	Hanford coarse sandy loam, 2 to 8 percent slopes	3.5	3.6%
RaB2	Ramona sandy loam, 2 to 5 percent slopes, eroded	7.4	7.5%
RaC2	Ramona sandy loam, 5 to 8 percent slopes, eroded	12.4	12.6%
RmE3	Ramona and Buren sandy loams, 15 to 25 percent slopes, severely eroded	4.3	4.3%
RnE3	Ramona and Buren loams, 5 to 25 percent slopes, severel y eroded	57.5	58.6%
Totals for Area of Interest (AOI)		98.0	100.0%

Database Search Results

The following species were identified by the CDFW's NDDB and the U.S. Fish and Wildlife Service (USFWS) as having the potential to occur onsite.

Table 2. CNDDB Occurrence Overlay for USGS - Murrieta Quadrangle

Scientific Name	Status Federal/ State/CNPS	Typical Habitat	Occurrence Potential
Accipiter cooperii Cooper's Hawk	N / SC	Nests in live oak woodlands and streamside groves of deciduous trees, especially in canyon bottoms on river floodplains.	This species was not observed foraging on the project site. Marginally suitable roosting habitat occurs on the site.
Agelaius tricolor tricolored blackbird	SC / SC	Highly colonial species, most numerous in central valleys and the vicinity and largely endemic to California. Requires open water, protected nesting substrate and foraging area with insect prey within a few km of the colony.	This species was not observed on the site. There is no suitable nesting habitat on site. Occurrence potential is zero.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	N / SC	Inhabits steep rocky hillsides with grass and forb patches in coastal sage scrub and sparse chaparral.	This species was not observed during the surveys. The coastal sage scrub on this site is very disturbed and surrounded by development. There is a low potential for it to occur on the site.
Allium munzii Munz's onion	E / T	Grows on heavy clay soils in grasslands or openings within shrubs and woodlands.	There is no suitable habitat on the site. Occurrence potential is zero.
Amphispiza belli belli Bell's sage sparrow	SC / SC	Nests on the ground beneath a shrub or in a shrub 6-18 inches above ground in chaparral dominated by fairly dense stands of chamise. It is also found in coastal sage scrub in south of range.	No suitable habitat occurs on the site. Occurrence potential is low.
Asphidoscelis hyperythrus Orange-throated whiptail	N / SC	Inhabits washes and other sandy areas with patches of brush and rocks with sufficient perennial plants to sustain termite populations in low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats.	This species was not observed on the site. No suitable habitat for this species occurs on the site. Occurrence potential for this species is low.
Asphidoscelis tigris stejnergeri Coastal western whiptail	N / SC	Found in deserts and semiarid areas with sparse vegetation and open areas with firm sandy or rocky soils. Also found in woodland and riparian areas.	This species was not observed on the site. No suitable habitat for this species occurs on the site. Occurrence potential for this species is low.
Athene cunicularia burrowing owl	SC / SC	Subterranean nester, dependent upon burrowing animals such as ground squirrels and desert tortoise for burrow sites. Inhabits open, dry annual or perennial grasslands as well as deserts and scrublands characterized by low-growing vegetation.	Marginal habitat occurs within the road site. Focused surveys were negative. No further surveys are recommended.

Scientific Name	Status Federal/ State/CNPS	Typical Habitat	Occurrence Potential
Branchinecta lynchi vernal pool fairy shrimp	T / SC	Found in vernal pools and ponds.	This species was not observed on the site. No suitable habitat for this species occurs on the site. Occurrence potential for this species is zero.
Buteo regalis Ferruginous hawk	SC / SC	Nests in live oaks woodlands and streamside groves of deciduous trees, especially in canyon bottoms on river floodplains.	This species was not observed on the site. No suitable habitat for this species occurs on the site. Occurrence potential for this species is low.
Campylorhynchus brunneicapillus couesi coastal cactus wren	N / SC	This species nests and roosts in tall *Opuntia* cactus found in scrub communities.	There is no suitable habitat for this species on the project site. No *Opuntia* stands occur on the site. Occurrence potential is low.
Centromadia pungens ssp. *laevis* smooth tarplant	N / S2.1 / 1B: 2-3-3	Grows in alkali meadows, scrub and disturbed areas.	This species was not observed on the project site. No suitable habitat occurs on the site. Occurrence potential is zero.
Chaetodipus fallax fallax northwestern San Diego pocket mouse	N / SC	Inhabits sandy, herbaceous areas, usually in association with rocks or coarse gravel in coastal scrub, chaparral, grasslands and sagebrush habitats of western San Diego County.	There is no suitable habitat for this species on the project site. Occurrence potential is extremely low.
Chorizanthe polygonoides var *longispina* long-spined spineflower	N / S2.2 / 1B: 2-2-2	Grows on gabbroic clay between 900 and 4,800 feet (30 and 1350 m) in chaparral, coastal sage scrub, meadows and valley and foothill grasslands.	There is no suitable habitat for this species on the project site. Occurrence potential is extremely low.
Circus cyaneus nothern harrier	N / SC	Inhabits coastal salt and fresh-water marshes. Nests and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests in a large mound of sticks on the ground in shrubby vegetation, usually at a marsh edge.	No suitable habitat occurs on the portion of the project site. Occurrence potential on the site is low.
Diadophis punctatus modestus San Bernardino ringneck snake	N / S2	Most common in open, relatively rocky areas and often in somewhat moist microhabitats near intermittent streams. Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous vegetation.	No suitable habitat occurs on the portion of the project site. Occurrence potential on the site is low.
Dipodomys stephensi Stephens' kangaroo rat	E / T	Prefers grasslands but also inhabits coastal scrub and sagebrush with sparse canopy coverage. Will burrow into firm soil. Prefers buckwheat, chamise, brome grass and filaree dominated annual and perennial grasslands, but also inhabits coastal scrub and sagebrush with sparse canopy coverage. Capable of burrowing into firm soil.	This site is east of the mandatory fee area for the Stephen's kangaroo rat. This species is not documented to have occurred in the vicinity of the project site. Occurrence potential for this species is low.

Scientific Name	Status Federal/ State/CNPS	Typical Habitat	Occurrence Potential
Elanus leucurus White-tailed kite	SC / S3	Nests in isolated trees with dense foliage near marshes, grasslands or meadows for foraging.	Habitat for this species is marginal. None were observed during the survey. Occurrence potential for this species is low.
Empidonax traillii Willow Flycatcher	N / E	Inhabits extensive thickets of low, dense willows on edges of wet meadows, ponds, or backwaters between 2000-8000 elevation.	No suitable habitat occurs on the site. Occurrence potential is zero.
Erodium macrophyllum round-leaved filaree	N / N / 2	Grows on clay soils in cismontane woodland, valley and foothill grasslands between 15-1200m.	No suitable habitat occurs on the site. Occurrence potential on the site is low.
Euphydryas editha quino quino checkerspot butterfly	E / S1	Associated primarily with *Plantago erecta* and *P. insularis* in sunny openings of chaparral and coastal sage scrub in Riverside and San Diego counties.	No suitable habitat occurs on the site. Occurrence potential on the site is low.
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	N / N	Found on dry soils, in chaparral and coastal scrub between 1-945 meters in elevation.	This species was not observed on the site. No suitable habitat occurs on the site. Occurrence potential is zero.
Lepus californicus bennettii San Diego black-tailed jackrabbit	N / SC	Inhabits coastal sage scrub in southern California.	Moderately suitable habitat occurs in the portions of the site. Occurrence potential is low.
Navarretia fossalis spreading navarretia	T / S2.1 / 1B: 2-3-2	Grows in San Diego hardpan and San Diego claypan vernal pools and in swales, often surrounded by other habitat types, between 30-1300 meters.	This species was not observed on the site. No suitable habitat occurs on the site. Occurrence potential is zero.
Neotoma lepida intermedia San Diego desert woodrat	N / SC	Abundant in rock outcrops and rocky cliffs and slopes with moderate to dense canopies preferred in coastal southern California from San Diego County to San Luis Obispo County.	This species was not observed on the site. No suitable habitat occurs on the site. Occurrence potential is extremely low.
Orcuttia californica California orcutt grass	E / E	Grows in vernal pools in southern California and Baja.	This species was not observed on the site. No suitable habitat occurs on the site. Occurrence potential is extremely low.
Opuntia basilaris var. *brachyclada* Short-joint beavertail	N / S1.2 / 1B: 3-2-3	Occurs in sandy soil or coarse, granitic loam in chaparral, joshua tree woodland, Mohavean desert scrub, pinyon juniper woodland and riparian woodland between 425-1800m.	This species was not observed on the site.
Perognathus longimembris bangsi *Palm Springs pocket mouse*	N / SC	Occurs on level to gently sloping topography with sparse to moderate vegetative cover and loosely packed or sandy soils. This subspecies occurs in the lower Sonoran life zone from the San Gorgonio Pass area east to the Little San Bernardino Mountains and south along the eastern edge of the Peninsular Range to Borrego Valley and the east side of San Felipe Narrows.	This species was not observed on the site. No suitable habitat occurs on the site. Occurrence potential is low.

Scientific Name	Status Federal/ State/CNPS	Typical Habitat	Occurrence Potential
Perognathus longimembris brevinasus Los Angeles pocket mouse	N / SC	Inhabits open ground with fine sandy soils in low elevation grasslands and coastal sage communities in the Los Angeles basin. May not dig extensive burrows, hiding under weeds and dead leaves instead.	This species was not observed on the site. No suitable habitat occurs on the site. Occurrence potential is extremely low.
Phrynosoma coronatum blainvillei San Diego Horned Lizard	N / SC	Inhabits friable, rocky, or shallow sandy soils in coastal sage scrub and chaparral in arid and semi-arid climate conditions. Requires open areas for sunning and is most frequent in sparsely vegetated washes.	This species was not observed on the site. No suitable habitat occurs on the site. Occurrence potential is extremely low.
Polioptila californica californica coastal California gnatcatcher	T / SC	Inhabits various successional stages of the sage scrub communities characterized by California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), brittlebush (*Encelia farinosa*), sage species (*Salvia* spp.), and cactus species (*Opuntia* spp.). CAGN will also utilize chaparral, grassland, and riparian plant communities where they occur adjacent to or intermixed with sage scrub.	No suitable habitat occurs in the portions of the site. Occurrence potential is low. This species is covered under the MSHCP. No further surveys are required.
Rana aurora draytonii California Red-legged frog	T / SC	Occurs in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation in the lowlands and foothills. Requires 11-20 weeks of permanent water for larval development and aestivation habitat.	There is not suitable habitat on the project Occurrence potential is extremely zero.
Rana muscosa mountain yellow-legged frog	E / SC	Adults are always encountered within a few feet of water. Tadpoles may require up to 2 years to complete their aquatic development.	No suitable habitat occurs on the site. Occurrence potential is extremely zero.
Spea (Scaphiopus) hammondii western spadefoot	SC / SC	Vernal pools or otherwise ephemeral ponds are essential for breeding and egg-laying. Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.	This species was not observed on the site. No suitable habitat occurs on the site. Occurrence potential is extremely low.
Streptocephalus woottoni Riverside fairy shrimp	E / S1	Inhabits seasonally aquatic pools filled by winter and spring rains in Western Riverside and San Diego counties	This species was not observed on the site. No suitable habitat occurs on the site. Occurrence potential is extremely low.
Vireo bellii pusillus Least Bell's vireo	E / E	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, *Baccharis*, mesquite. In low riparian, in vicinity of water or in dry river bottoms below 2000 feet.	This species was not observed on the site. Although marginally suitable habitat for this species occurs on the site; it is a small patch surrounded by development. Further, the potential habitat is avoided by this project. Therefore, occurrence potential for this species is low and potential habitat will be avoided.

Coding and Terms			
E= Endangered	T = Threatened	SC= Species of Concern	N= None
R= Rare	C= Candidate	PE= Proposed Endangered	N/A= Not Applicable

Federal Species of Concern: "taxa for which the U.S. Fish and Wildlife Service has information that indicates proposing to list the taxa as endangered or threatened is possibly appropriate, but for which substantial data on the biological vulnerability and threats are not currently known or on file to support the immediate preparation of rules." (Arnold). All of these species have a limited range. In fact, some species are limited to the San Bernardino Mountains area, however, they are locally common.

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, posses 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 Plant Rankings:

S1 - less than 6 element occurrences, or less than 1,000 individuals, or less than 2,000 acres
S2 - 6 to 20 element occurrences, or between 1,000 and 3,000 individuals, or between 2,000 and 10,000 acres
S3 - 21 to 100 element occurrences, or between 3,000 and 10,000 individuals, or between 10,000 and 50,000 acres
S4 - No Threat Rank
S5 - No Threat Rank

.1 - very threatened
.2 - threatened
.3 - no current threats known

SH - all sites in California are historical

Jurisdictional Determination

The drainage features on site do not have a significant nexus to a traditionally navigable water of the U.S., a significant nexus to a relatively permanent water, and they are not wetlands adjacent to a Water of the US. Therefore, there are no flow features on site that would be subject to the Sections 404 and 401 of the federal Clean Water Act. A Jurisdictional Determination has been prepared and is being processed by the US Army Corps of Engineers,

Under the MSHCP, riparian/riverine habitat is defined as lands which contain habitat dominated by trees, shrubs, persistent emergent, 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. Although there are remnant riparian tree species occurring on the site, the supporting hydrology emanating from under the freeway has been modified by adjacent development. The trees are beginning to senesce, and there is no new recruitment. Further, this area is not dominated by vegetation depending on soil moisture nor is it supporting a unique fauna of species adapted to habitats with higher moisture regimes. Therefore, these features do not meet the criteria of Riparian or Riverine under the MSHCP.

Figure 4a – Drainage Features Onsite

Drainage feature loses any evidence of OHWM in these areas.
Development has terminated any significant nexus to Murrieta Creek

Figure 4b: Location of Drainage Features

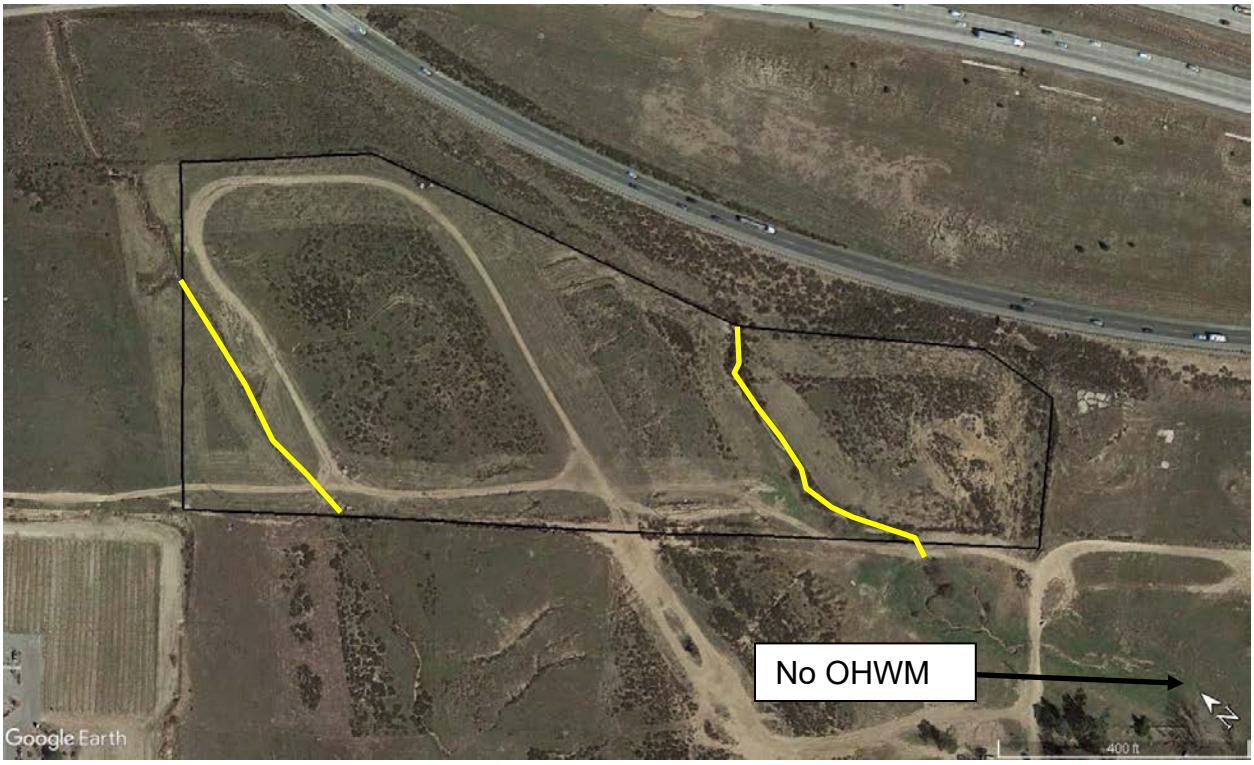
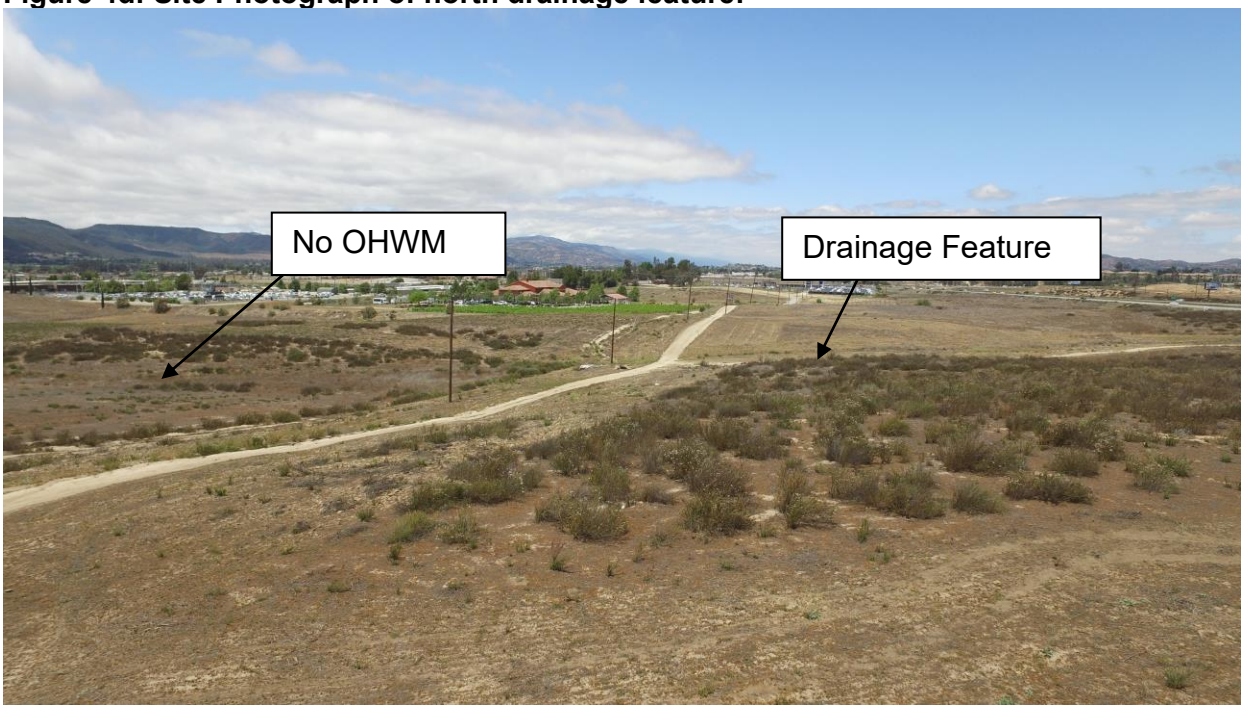


Figure 4c: Site Photograph of south drainage feature

Figure 4d: Site Photograph of north drainage feature:



MSHCP CONSISTENCY

Riverside County adopted the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) on June 17, 2003. The permit was issued in June 2004. The site is not mapped within a criteria cell, and therefore not targeted for conservation. However, the plan requires that a project comply with the plan policies identified in Section 6 of the Plan. This project must comply with the following policies: 1) Riparian/Riverine Areas/ Vernal Pools; 2) Narrow Endemic Plant Species (List 4); 3) Urban/Wildlands Interface; and 4) Surveys for Special Status Species (burrowing owls);

Plan Policies

Narrow Endemic Plant Species

> Pursuant to Section 6.1.3 of the MSHCP, focused surveys for narrow endemic plant species are required for properties within the mapped areas if appropriate habitat is present. The survey area maps have been reviewed and assessed, and the proposed project is within a mapped survey area for Narrow Endemics Plant Species. The site is not mapped within Narrow Endemic Plant Species area

No further surveys or conservation measures are required. The project is consistent with the conservation goals of the plan.

Riparian/Riverine Areas and Vernal Pools

Pursuant to Section 6.1.2 of the MSHCP, Riparian/Riverine areas are lands which contain habitat dominated by trees, shrubs, persistent emergent vegetation, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from nearby fresh water sources, 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.

The project has been reviewed and assessed and it has been determined that although the project site has remnant riparian vegetation persisting on site, the adjacent modifications to the hydrological regime no longer supports soil moisture level that influence the character of the habitat to those adapted to high moisture regimes. Therefore, A Determination of Biological Equivalent or Superior Preservation (DBESP) will not be required for any impacts proposed to these featrues.

Urban/ Wildlands Interface

Pursuant to Section 6.1.4 of the MSHCP, presents guidelines to minimize indirect effects of projects in proximity to the MSCHP Conservation areas. This section provides mitigation measures for impacts associated with: Drainage, Toxics, Lighting, Noise, Invasives, Barriers, and Grading/Land Development.

Best Management practices such as light shielding, drainage control, and water quality protection from toxics will need to be identified for those areas that are adjacent to or crossing undeveloped or open space areas.

Special Species Survey Areas

Pursuant to Section 6.3 of the MSHCP, the proposed project is located in an area mapped for Burrowing Owl surveys. The project proponent has conducted burrowing owl Habitat Assessment and Phase II Surveys. The result of these surveys is that no burrowing owls were identified on the parcel.

Burrowing owl surveys have been conducted and no burrowing owls or evidence of use by burrowing owls was detected. No further actions are recommended.

CONCLUSIONS

The result of this biological survey is that the majority of the site has been disturbed by land-clearing activities, dumping, and OHV use. Additionally, the site is immediately adjacent to Interstate 15 and is located in a high noise environment. This area is characterized by upland non-native weedy species, such as storksbill, mustard, and brome grasses. There are two channels on the site.

Riverside County adopted the Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) on June 17, 2003. The permit was issued in June 2004. The site is not mapped within a criteria cell, and therefore not targeted for conservation. However, the plan requires that a project comply with the plan policies identified in Section 6 of the Plan. This project must comply with the following policies: 1) Riparian/Riverine Areas/ Vernal Pools; 2) Narrow Endemic Plant Species (List 4); 3) Urban/Wildlands Interface; and 4) Surveys for Special Status Species (burrowing owls).

No jurisdictional features were identified on site. There is no ordinary high-water mark or significant nexus to Murrieta Creek, a Relatively Permanent Water. Further mesic vegetation that used to be supported by urban runoff form the I-15 and adjacent areas, is dying and no new recruitment was observed.

Best Management practices associated with the Urban/Wildlands Interface policy such as light shielding, drainage control, and water quality protection from toxics will need to be identified for those areas that are adjacent to or crossing undisturbed or open space areas.

Habitat Assessment and surveys for burrowing owl were conducted with the project area. The result of this survey is that there were no burrowing owls or sign of burrowing owl use observed in the parcel or in the surrounding areas.

REFERENCES

California Department of Fish and Wildlife. 2018. Natural Diversity Data Base.

City of Murrieta General Plan. 2035

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The Planning Center. May 1988. Biological Survey for Rancho California Parcel BP7-1.

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Stebbins, Robert C. 1985. A Field Guide to Western Reptiles and Amphibians. Houghton Mifflin Company, Boston, Massachusetts.

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APPENDIX A
Species List

ANIMAL SPECIES LIST

Mammalia	**Mammals**
Canidae	Canines
Canis lupus familiaris	Dog
Leporidae	Rabbits, Hares
Sylvalegus audubonii	Cotton-tail rabbit
Geomyidae	Gophers
Thomomys bottae	Pocket gopher
Sciuridae	Squirrels
Otospermophilus beecheyi	Beechey ground squirrel
Reptilia	**Reptiles**
Iguanidae	Iguana
Scelopoporus occidentalis	Western fence lizard
Aves Birds	
Accipitridae	Hawks, Falcons, Eagles
Buteo jamaicensis	Red-tail Hawk
Alandidae	Larks
Eremophila alpestris	Horned lark
Cathartidae	Vultures
Cathartes aura	Turkey Vulture
Columbidae	
Columba fasciata	Pigeon
Zenaida macroura	Mourning Dove
Corvidae	
Corvus brachyrhynchos	Crow
Emberizidae	Sparrow, Warblers, Tanangers
Pipilo crissalis	Brown Towhee
Melospiza melodia	Song sparrow
Tyrannidae	Tyrant Flycatchers
Tyrannus verticalis	Western Kingbird

PLANT SPECIES LIST

Angiosperms	**Flowering Plants**
Asteraceae	Composites
Artemisia californica	California Sage
Baccharis salicifolia	Mulefat
Centaurea melitensis	Star thistle
Heterotheca grandiflora	Telegraph weed
Boraginaceae	Borage Family
Amsinckia intermedia	Fiddleneck
Brassicaceae	Mustard Family
Brassica geniculata	Short-pod Mustard
Chenopodiaceae	Pig Weed Family
Salsola iberica	Russian Thistle
Fabaceae	Pea Family
Lotus scoparius	Deerweed
Geraneaceae	Geranium Family
Erodium cicutarium	Filaree
Polygonaceae	Buckwheat Family
Eriogonum fasciculatum	California Buckwheat
Salicaceae	Willow Family
Salix sp	Willow
Solanaceaea	Night Shade Family
Nicotiana glauca	Tobacco Tree

Monocots	
Poaceae	Grass Family
Avena barbata	Oats
Bromus diandris	Ripgut
Bromus rubins	Red Brome Grass

APPENDIX B
MSHCP Report for the Parcel

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

APN	Cell	Cell Group	Acres	Area Plan	Sub Unit
910020009	Not A Part	Independent	2.4	Southwest Area	Not a Part
910020014	Not A Part	Independent	10.45	Southwest Area	Not a Part

HABITAT ASSESSMENTS

Habitat assessment shall be required and should address at a minimum potential habitat for the following species:

APN	Amphibia Species	Burrowing Owl	Criteria Area Species	Mammalian Species	Narrow Endemic Plant Species	Special Linkage Area
910020009	NO	YES	NO	NO	NO	NO
910020014	NO	YES	NO	NO	NO	NO

Burrowing Owl

Burrowing owl.

If potential habitat for these species is determined to be located on the property, focused surveys may be required during the appropriate season.

Background

The final MSHCP was approved by the County Board of Supervisors on June 17, 2003. The federal and state permits were issued on June 22, 2004 and implementation of the MSHCP began on June 23, 2004.

For more information concerning the MSHCP, contact your local city or the County of Riverside for the unincorporated areas. Additionally, the Western Riverside County Regional Conservation Authority (RCA), which oversees all the cities and County implementation of the MSHCP, can be reached at:

Western Riverside County Regional Conservation Authority
4080 Lemon Street, 12th Floor
Riverside, CA 92502-1604

Phone: 951-955-9700
Fax: 951-955-8873

www.wrc-rca.org

http://www2.tlma.co.riverside.ca.us/cgi-bin/rciprepgen.pl 11/19/2007