
Burrowing Owl Focused Survey Report

Alessandro Project Site

City of Moreno Valley, Riverside County, California



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1.0 INTRODUCTION

This report presents the results of focused burrowing owl (*Athene cunicularia*) surveys conducted at the 17.66-acre (2.65-acre offsite) Alessandro project site (Project Site) in the City of Moreno Valley, Riverside County, California. The Project Site is located within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) planning area. The MSHCP is a regional multi-jurisdictional habitat conservation program that addresses multiple species' habitat needs in western Riverside County. According to MSHCP guidelines, surveys for the burrowing owl are to be conducted as part of the environmental review process. Specifically, the MSHCP Additional Surveys Needs and Procedures identify a burrowing owl Survey Area within the MSHCP Plan Area. The Project Site occurs within this predetermined Survey Area. Suitable low potential habitat was identified on the Project Site during an initial site reconnaissance conducted in May 21st, 2020. Subsequently, focused burrowing owl surveys were conducted during the breeding season in order to comply with MSHCP requirements. The purpose of this report is to document the results of the burrowing owl habitat assessment and focused burrow and burrowing owl surveys.

1.1 Project Location

The 17.66-acre (2.65-acre offsite) Project Site is located immediately south of Alessandro Boulevard in the City of Moreno Valley (City), Riverside County, California, Assessor Parcel Numbers (APNs) 297-170-002 and 279-170-003 (Figure 1 and Figure 2). Offsite impacts extend into the Alessandro right-of-way to the north and APNs 297-170-088 and 279-170-089 to the south (Figure 2). The Project Site occurs within the U.S. Geological Survey (USGS) 7.5' series Riverside East Quadrangle, Township 3 South, Range 4 West, Section 12.

The Project Site is located entirely within the MSHCP Reche Canyon/Badlands Area Plan and is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area.

2.0 METHODS AND RESULTS

The survey was conducted in accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (2006). Survey protocol consists of three steps: Step I – Habitat Assessment; Step II – Locating Burrows and Burrowing Owls; and Step III – Reporting Requirements. Each step conducted during this survey is briefly outlined below. Surveys were conducted during weather that is conducive to observing burrowing owls outside of their burrows and detecting burrowing owl sign. All surveys were conducted from two hours before sunset to one hour after or from one hour before to two hours after sunrise. Surveys were not conducted during rain, high winds (> 20 mph), dense fog, or temperatures over 90 °F. Surveys were not conducted within five days of measurable precipitation.

2.1 Step 1 – Habitat Assessment

Step 1 of the burrowing owl focused survey consists of walking the Project Site to determine if suitable habitat is present. This initial habitat assessment was conducted on May 21st, 2020 by MIG Senior Biologist Jonathan Campbell, PhD (Table 1. Summary of Focused Survey Weather Conditions during the Nesting Season). Upon arrival at the Project Site and prior to initiating the assessment survey, binoculars were used to scan all suitable habitats on and adjacent to the property, including perch locations, to ascertain owl presence.

All suitable areas of the Project Site were surveyed on foot by walking slowly and methodically across each habitat type while recording/mapping areas that may represent suitable owl habitat onsite. Primary indicators of suitable burrowing owl habitat include, but are not limited to: native and non-native grassland, grassland interspersed with shrubland along ecotonal areas, shrublands with low density shrub cover, concrete rubble, and earthen berms. Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels (*Otospermophilus beecheyi*) or badgers (*Taxidea taxus*), but they often utilize man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock or wood debris piles, or openings beneath cement or asphalt pavement. Burrowing owls are often found within, under, or near man-made structures. A majority of the habitat mapped onsite represents low potential habitat for burrowing owl.

According to the MSHCP (2006) guidelines, if suitable habitat is present, the biologist should also walk the perimeter of the property, which consists of a 150-meter (approximately 500 feet) buffer zone around the Project Site boundary. If permission to access the buffer area cannot be obtained, the biologist shall not trespass, but visually inspect adjacent habitats with binoculars.

The largest area and center of the Project Site is characterized as “disturbed/non-native grassland” and currently offers limited habitat value to plants and wildlife. The Project Site is heavily disturbed and annually disked as part of weed abatement requirements. The Project Site is flat and bordered to the south by industrial buildings, north by high density residential development, and east and west by disturbed lands. Two (2) drainage features bisect the property in a north to south direction which currently sustains disturbed wetland and riparian vegetation as described below. Natural community names and hierarchical structure follows List of Alliances and Associations (CDFW September 2010) which have been refined and augmented where appropriate to better characterize the habitat types observed onsite when not addressed by the classification system. Scientific nomenclature and common names used for plants in this report follows Hickman (1993). Vertebrate taxonomy follows Stebbins (2003) for amphibians and reptiles, the American Ornithologists’ Union (1998 and supplemental) for birds, and Jones et al. (1992) for mammals. The onsite plant communities are as follows (Figure 3, Vegetation Communities Map, Figures 4a/4b, Current Project Site Photographs):

Disturbed/Non-Native Grassland

The majority of the Project Site is characterized as disturbed/non-native grassland and experiences annual dicking activities. Dominant plant species observed within this vegetation community include hairy vetch (*Vicia villosa*), black mustard (*Brassica nigra*), field bindweed (*Convolvulus arvensis*), kochia (*Bassia scoparia*), prickly lettuce (*Lactuca serriola*), jointed charlock (*Raphanus sativus*), Italian rye (*Lolium multiflorum*), horseweed (*Erigeron canadensis*), Bermuda grass (*Cynodon dactylon*), puncture vine (*Tribulus terrestris*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), prickly sow thistle (*Sonchus asper*), jimsonweed (*Datura wrightii*), telegraph weed (*Heterotheca grandiflora*), cheeseweed (*Malva parviflora*), riggut grass (*Bromus diandrus*), foxtail chess (*Bromus madritensis*), mayweed (*Anthemis cotula*), prostrate knotweed (*Polygonum aviculare*), Spanish lotus (*Acmispon americanus*), and western witchgrass (*Panicum capillare*).

Black Willow Woodland

The northern region of Drainage A is dominated by black willow woodland. Common species documented within this vegetation community include Gooding’s willow (*Salix gooddingii*), velvet ash (*Fraxinus velutina*), and an understory of non-native grasses and ruderal species as described above.

Developed

Developed regions of the Project Site include a culvert structure located at the southern terminus of Drainage A and existing paved roads located within the offsite impact areas.

Disturbed Wetland – Cattail

Two small patches of disturbed wetland-cattail habitat are located in the northern region of both Drainage A and B, immediately adjacent to Alessandro Boulevard. Dominant plant species observed within this vegetation community include curly dock (*Rumex crispus*), common cattail (*Typha latifolia*), tall nutsedge (*Cyperus eragrostis*), annual beard grass (*Polypogon monspeliensis*), Mexican fan palm (*Washingtonia robusta*), dallis grass (*Paspalum dilatatum*), barnyard grass (*Echinochloa crus-galli*), and tarragon (*Artemisia dracuncululus*).

Ornamental

A single ornamental tree, Mexican palo verde (*Parkinsonia aculeata*) is located adjacent to the black willow woodland.

Mule Fat

A single mule fat (*Baccharis salicifolia*) shrub is located near the northeast corner of the Project Site.

Results from the Step I - Habitat Assessment indicate that the disturbed/non-native grassland (described above) represent low potential habitat for the burrowing owl. Accordingly, due to the presence of potential habitat onsite, Step II – Locating Burrows and Burrowing Owls is required. In addition, due to the presence of potential habitat onsite, a pre-construction survey within 30 days of any project-related or construction-related activities is therefore required.

2.2 Step II – Locating Burrows and Burrowing Owls

Part A – Focused Burrow Survey

Due to the presence of low potential burrowing owl habitat, focused burrow surveys, including documentation of appropriately sized natural burrows or suitable man-made structures that may be utilized by burrowing owl, were conducted as part of the protocol on May 21st, 2020 (Table 1. Summary of Focused Survey Weather Conditions during the Nesting Season).

The systematic surveys for burrows, including burrowing owl signs, were conducted by walking across all potential habitat mapped at the Project Site. Pedestrian survey transects were spaced to allow 100% visual coverage of the ground surface. The distances between transect centerlines were no more than 30 meters (approximately 100 feet) apart. The burrow survey began within two hours prior to sunset. Accordingly, due to the presence of suitable burrowing owl burrows onsite, Step II, Part B – Focused Burrowing Owl Surveys are required.

General wildlife species documented onsite or within the vicinity of the Project Site include but are not limited to red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaidura macroura*), Anna's hummingbird (*Calypte anna*), song sparrow (*Melospiza melodia*), house sparrow (*Passer domesticus*), Nuttall's woodpecker (*Picoides nuttallii*), Cassin's kingbird (*Tyrannus vociferans*), western kingbird (*Tyrannus verticalis*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), cliff swallow (*Petrochelidon pyrrhonota*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*),

American crow (*Corvus brachyrhynchos*), western meadowlark (*Sturnella neglecta*) common raven (*Corvus corax*), house sparrow (*Passer domesticus*), American goldfinch (*Spinus tristis*), house finch (*Haemorhous mexicanus*), western tanager (*Piranga ludoviciana*), and desert cottontail (*Sylvilagus audubonii*).

Part B – Focused Burrowing Owl Surveys

If any burrows are found during the Part A – Focused Burrow Survey, Part B – Focused Burrowing Owl Surveys are required to determine presence or absence of the species. The Part B effort consists of at least four focused surveys to search for signs of occupation at the burrows, or observations of burrowing owls. Focused surveys are to be conducted within the breeding season between March 1st and August 31st. A review of local documentation (CNDDDB 2020) suggests that no burrowing owls have been historically identified within the extent of the Project Site boundary. In addition to the breeding season survey conducted on May 21st, 2020, three additional breeding season surveys were conducted throughout the Project Site on June 20th, July 10th, and 30th, 2020 (Figure 5, Burrowing Owl Survey Area Map). All surveys were conducted during times and conditions conducive to observing burrowing owl (Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season). A thorough investigation of the potentially suitable burrows concluded that no evidence of burrowing owl activity was present in any of the onsite burrow complexes.

Table 1. Summary of Focused Survey Weather Conditions during the Breeding Season

Date	Time Start/End	Temperature (°F)	Wind Speed (mph)	Conditions
5/21/2020	6:30AM – 7:30AM	72	2-5	Clear
6/20/2020	6:00AM – 9:00AM	68	0-4	Clear
7/10/2020	6:00AM – 9:00AM	66	4-8	Clear
7/30/2020	6:00AM – 9:00AM	66	2-8	Clear

2.3 Step III – Reporting Requirements

This report represents the third step of the burrowing owl focused survey, the preparation of a report that provides the results of each step of the survey protocol. After completion of appropriate surveys, a final report shall be submitted to the City of Moreno Valley, which discusses the survey methodology, transect width, duration, conditions, and results of the survey.

2.4 Preconstruction Surveys

All project sites containing burrows or suitable habitat (based on Step I/Habitat Assessment), whether owls were found or not, require pre-construction surveys that shall be conducted within 30 days prior to ground disturbance to avoid direct take of burrowing owls (MSHCP Species-Specific Objective 6).

3.0 CONCLUSIONS AND RECOMMENDATIONS

Both low potential burrowing owl habitat and burrowing owl burrows were identified within the Project Site during the Step I – Habitat Assessment performed on May 21st, 2020 and the Step II, Part A – Focused Burrow Survey performed on May 21st, 2020. Three additional Step II, Part B – Focused Burrowing Owl Surveys were therefore performed during the breeding season on June 20th, July 10th, and 30th, 2020 throughout the Project Site. No evidence of burrowing owl activity was observed during any of the surveys.

A pre-construction burrowing owl survey will need to be completed within 30 days prior to any project-related or construction-related disturbances to onsite areas.

4.0 REFERENCES

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- CDFW. 2010. The Vegetation Classification and Mapping Program – List of California Terrestrial Natural Communities Recognized by The California Natural Diversity Database. September 2010.
- CNDDDB. 2020. Sensitive Element Record Search for the Riverside East and Surrounding USGS Quadrangles. California Department of Fish and Wildlife. Sacramento, California. Accessed [July 2020].
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- Riverside County Transportation and Land Management Agency. 2003. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Final MSHCP—Volumes 1 and 2. Approved June 17, 2003.
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FIGURES



Figure 1 Regional Location Map

Alessandro Project Site, City of Moreno Valley, CA



Project Site Boundary (17.66 acres)

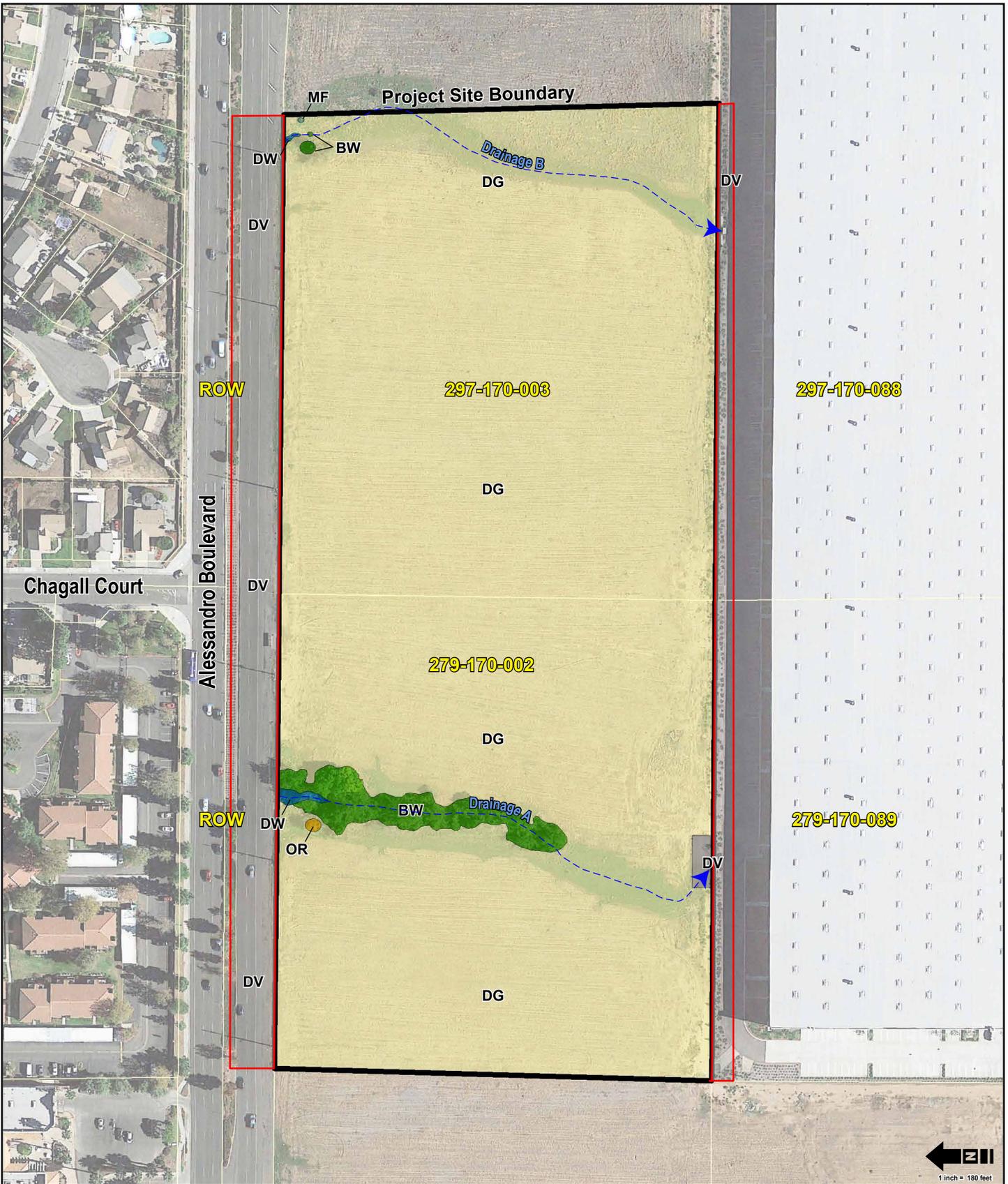
Offsite Assessment Area (2.65 acres)

→ Photo Point & Direction



Figure 2 Project Site Map

Alessandro Project Site, City of Moreno Valley, CA



- | | | |
|--|---|--------------------------------------|
| BW Black Willow Woodland | OR Ornamental (Mexican palo verde) | Project Site Boundary (17.66 acres) |
| DG Disturbed (Non-native Grassland) | DW Disturbed Wetland - Cattail | Offsite Assessment Area (2.65 acres) |
| DV Developed | MF Mule Fat (individual shrub) | |

Figure 3 Vegetation Communities Map
Alessandro Project Site, City of Moreno Valley, CA



Photograph 1 - Southeast view of Project Site from northwest corner adjacent to Alessandro Boulevard.



Photograph 2 - Southward view of down drain located at end of the end of Drainage A

Figure 4a Current Project Site Photographs
Alessandro Project Site, City of Moreno Valley, CA



Photograph 3 - Northwest view of Project Site from southeast corner. The Project Site is dominated by annually disked disturbed non-native grassland.



Photograph 4 - Westward view of Drainage B from northeast corner of Project Site near Alessandro Boulevard.



--- Survey Transects

- Project Site Boundary (17.66 acres)
- Offsite Assessment Area (2.65 acres)

Figure 5 Burrowing Survey Area Map
Alessandro Project Site, City of Moreno Valley, CA