

FOREMOST PACIFIC GROUP

Attn: Mr. Bryan Bergeron 27271 Las Ramblas Mission Viejo, CA 92691

RE: Results of Focused Burrowing Owl (*Athene cunicularia*) Surveys, 139-Unit Residential Project, Tentative Tract Map 38955 (PEN-0058), Plot Plan (PEN-0059), City of Moreno Valley, Riverside County, CA.

Dear Mr. Bergeron:

This report contains the findings of MNS Engineers, Inc. (MNS) focused burrowing owl (*Athene cunicularia*; [BUOW]) surveys conducted during the 2025 breeding season for the Moreno Valley Farm Bureau Project (project) located in the City of Moreno Valley, Riverside County, California. The project site is located within a survey area for BUOW as identified in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Interactive RCA/MSHCP Map (Western Riverside County Regional Conservation Authority [RCA] 2025) and provides suitable foraging habitat and nesting opportunities for BUOW. In accordance with the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (BUOW Survey Instructions; RCA 2006), if BUOW habitat occurs on-site, both focused surveys and preconstruction clearance surveys are required prior to project implementation. As such, a focused burrow survey and focused BUOW surveys were conducted on four separate days during the 2025 breeding season to confirm the presence of BUOW. The focused survey effort encompassed the project development footprint plus a 500-foot buffer (biological survey area; BSA). This report includes the methods, results, and conclusion/recommendations for future actions based on the survey results.

1 Project Location

The project site is located at 21160 Box Springs Road in the northwestern portion of the City of Moreno Valley, north of Box Springs Road, east of Morton Road, and west of Lewisia Avenue, with existing residential uses bordering the site to the north (Figure 1, *Project Vicinity*, in Attachment A). The project site consists of three parcels, identified as Assessor Parcel Numbers (APNs) 236-200-002, 236-200-003, and 236-200-004. Regional access to the project site is provided by Interstate 215 (I-215) and State Route 60 (SR-60); the I-215/SR-60 freeway interchange is located approximately 550 feet south of the project site. Local access to the project site is provided by Box Springs Road, which borders the site to the south.

2 Project Description

The City of Moreno Valley is processing an application for a Tentative Tract Map (TTM 38955), for the development of a 139-unit multi-family residential project within three parcels totaling approximately 9.32 gross acres, including all associated access, circulation, infrastructure, utility hardscape/landscape improvements. Proposed open space and recreational amenities within the site would include a clubhouse, pool, and gym, 1.04-acre common open space area, and 21,165 square feet of private outdoor space consisting of decks or patios attached to each unit. The proposed project also includes demolition of the existing structures on-site.

The project site has a General Plan land use designation of Residential/Office (R/O) Use and is zoned Multi-Family, Medium Density Residential (R-15), which is intended as an area for development of attached residential dwelling units with a maximum allowable density of 15 dwelling units per net acre (du/ac). The density of the proposed development is 15 du/ac.





3 Existing Conditions

The project site is generally flat with some gently rolling topography. The site is dominated by ruderal/weedy, low-growing plant species such as Russian thistle (Salsola tragus), jimson weed (Datura wrightii), shortpod mustard (Hirschfeldia incana), and pigsweed (Amaranthus sp.). Natural habitats within nearly the entire project site have been almost eliminated due to routine weed abatement activities (e.g. disking, tilling), resulting in routinely heavily disturbed surface soil. The frontage of the property along Box Springs Road is developed with a parking lot and retail/office buildings. A knoll in the northwestern corner of the project area supports a small patch of buckwheat and scrub. Representative site photographs of the biological survey area taken during the field survey are included in Attachment B.

4 Background

The BUOW is a grassland specialist distributed throughout western North America, where it is known to occupy a wide variety of arid and semi-arid open areas within shrub, desert, and grassland environments. The California Department of Fish and Wildlife (CDFW) currently lists the BUOW as a California Species of Special Concern. BUOWs require large open, sparsely vegetated areas, on rolling or level terrain with an abundance of fossorial mammal burrows (> 4 inches in diameter). In addition, BUOWs require low growing vegetation allowing line-of-sight of the surrounding habitat to forage as well as watch for predators. BUOWs are dependent upon the presence of burrowing mammals (e.g., California ground squirrel [Otospermophilus beecheyi], coyote [Canis latrans], American badger [Taxidea taxus]) whose burrows are used for roosting and nesting (Haug et al. 1993). The presence or absence of fossorial mammal burrows is often a major factor that limits the presence or absence of BUOW. Where mammal burrows are scarce, BUOWs have been observed digging their own burrows in soft, friable soil and have been observed utilizing man-made cavities such as buried and non-functioning drain pipes, stand-pipes, and dry culverts. Additionally, BUOWs may burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. Large, hard objects at burrow entrances stabilize the entrance from collapse and may inhibit excavation by predators.

Adult BUOWs are small owls (approximately 7.5 to 9.8 inches) with long legs and short tails that are speckled brown and white, with yellow eyes and a yellow bill. A bold white throat and eyebrows are also typical distinguishing features for BUOWs. Juvenile BUOWs are usually less mottled than adults, with buffy-yellow underparts. BUOWs have crepuscular (dawn and dusk) hunting habits but are often observed perched in or near the burrow entrance during the day. One burrow is typically selected for use as the main nest burrow, however, BUOWs also utilize satellite burrows that are often located within the immediate vicinity of the main nest burrow. BUOWs prey upon invertebrates and small vertebrates through the low growing vegetation which allows for foraging visibility (Thomsen 1971). They typically forage in shortgrass, mowed, or overgrazed pasture, golf courses and airports (Thomsen 1971). Based on the Staff Report on Burrowing Owl Mitigation (CDFG 2012), the BUOW breeding season in California extends from February 1 through August 31. BUOWs in California may migrate southerly, but often remain in their breeding area during the non-breeding months. The BUOW was once abundant and widely distributed within southern California, but it has declined precipitously in counties such as Los Angeles, Orange, San Diego, Riverside, and San Bernardino.

Based on a review of the California Natural Diversity Database RareFind 5 (CDFW 2025), there are 2,133 occurrence records for BUOW in the USGS Riverside East, California 7.5-minute quadrangle. The most recent extant occurrence (Occurrence Number 1283) was recorded in 2009, approximately 3.31 miles southwest of the project area—two adults and one owlet in intermixed riversidian sage scrub (CDFW 2025).



5 Methodology

The biologist survey area (BSA) included the project site and a 500-foot buffer, as required by the BUOW Survey Instructions (RCA 2006) (Figure 2, *Survey Area*, in Attachment A). As such, a focused burrow survey and focused BUOW surveys were conducted by MNS biologist Brant Primrose on four separate days during the 2025 breeding season (March 1 through August 31). The surveys were conducted in accordance with the guidelines and protocols provided in the BUOW Survey Instructions (RCA 2006). Table 1 summarizes the survey dates, surveyors, times, and weather conditions for each of the surveys.

Date	Time (start/finish)	Surveyors	Temperature (°F)	Average Wind Speed (mph)
May 16, 2025	7:30am/1:30pm	Brant Primrose	60°F, partly cloudy	0-2mph
May 30, 2025	7:00am/1:00pm	Brant Primrose	66°F, sunny	0-2mph
June 23, 2025	7:30am/1:30pm	Brant Primrose	65°F, sunny	0-1mph
July 1, 2025	7:30am/1:30pm	Brant Primrose	66°F, sunny	0-2mph

Table 1: Survey Dates, Timing, Surveyors, and Weather Conditions

The focused burrow survey consisted of a systematic search for suitable burrows (less than 4 inches in diameter) throughout the BSA that were determined to provide suitable habitat for BUOW. Suitable burrows/cavities encountered, including rock outcrops, concrete/debris piles, buried and nonfunctioning storm drainpipes, standpipes, and dry culverts, were recorded using a hand-held Global Positioning System (GPS) unit and thoroughly examined for signs of presence (i.e., pellets, whitewash, feathers, tracks, and prey remains, particularly around burrows) that would indicate the presence of BUOW. Survey transects were conducted at approximately 15- to 30-foot intervals to ensure 100 percent visual coverage of areas in suitable habitat, as applicable based on topography and site access.

Binoculars were used to scan areas that were inaccessible due to lack of right-of-entry to observe and identify distant birds; identify any suitable, occupied, and remnant burrows consisting of natural and nonnatural substrates; and identify any activity around potential suitable habitat for BUOW.

Methods to detect the presence of BUOWs included direct observation, aural detection, and signs of presence. The location of suitable habitat, potential burrows, sign, and BUOWs in the BSA were recorded and mapped, if present. Surveys were not conducted during rain, high winds (more than 20 miles per hour), dense fog, or temperatures over 90 degrees Fahrenheit. In addition, the focused surveys were conducted during the recognized time frame listed in BUOW Survey Instructions (RCA 2006): in the morning one hour before sunrise to two hours after sunrise and two hours before sunset to one hour after sunset.

6 Results

A total of 13 bird species were observed and/or detected in the BSA during the focused surveys. Common bird species included yellow-breasted warbler (*Setophaga coronata*), Cassin's kingbird (*Tyrannus vociferans*), and house finch (*Haemorhous mexicanus*). Large mammals detected in the BSA included domestic dog (*Canis familiaris*) and coyote





(*Canis latrans*). No BUOW or other special-status species were detected during the focused survey. Attachment C provides a complete list of the wildlife species that were detected during the surveys.

The project area provides approximately 9.32 gross acres of suitable foraging habitat. However, no suitable burrows were detected during the focused surveys.

7 Conclusions and Recommendations

No BUOWs, BUOW sign, occupied BUOW burrows, or remnant BUOW burrows were observed on or within the vicinity of the survey area. Therefore, project-related activities are not expected to result in any direct or indirect impacts to BUOWs or occupied BUOW burrows on or within the vicinity of the survey area.

Although BUOWs were not observed during the focused surveys, the survey area does contain suitable foraging and nesting habitat for BUOW. Due to the presence of suitable foraging habitat for BUOW and the proximity of the survey area to existing occurrence records for BUOW, in accordance with the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (RCA 2006), one (1) pre-construction clearance survey should be conducted no more than thirty (30) days prior to any ground disturbing activities to avoid direct take of BUOWs. The clearance survey shall be conducted by a qualified biologist and cover all suitable habitat within the project impact area, including adjacent suitable habitat within a 500-foot buffer (as accessible). Following completion of the clearance survey, the qualified biologist shall prepare and submit a final report documenting the methods and results of the survey. If no BUOWs or occupied burrows are detected, project activities may begin, and no additional avoidance and minimization measures would be required. If an occupied burrow is found within the project impact area during pre-construction clearance surveys, a BUOW exclusion plan shall be prepared and submitted to the RCA and Wildlife Agencies (USFWS and CDFW) for approval prior to initiating project activities that includes proposed mitigation for direct and permanent impacts to nesting, occupied, and satellite burrows and/or BUOW habitat.

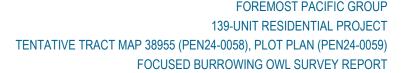
Please do not hesitate to contact me at (909) 419-4268 or sriggs@mnsengineers.com should you have any questions or require further information.

Sincerely,

MNS Engineers, Inc.

Shelah Riggs

Principal Regulatory Specialist





8 References

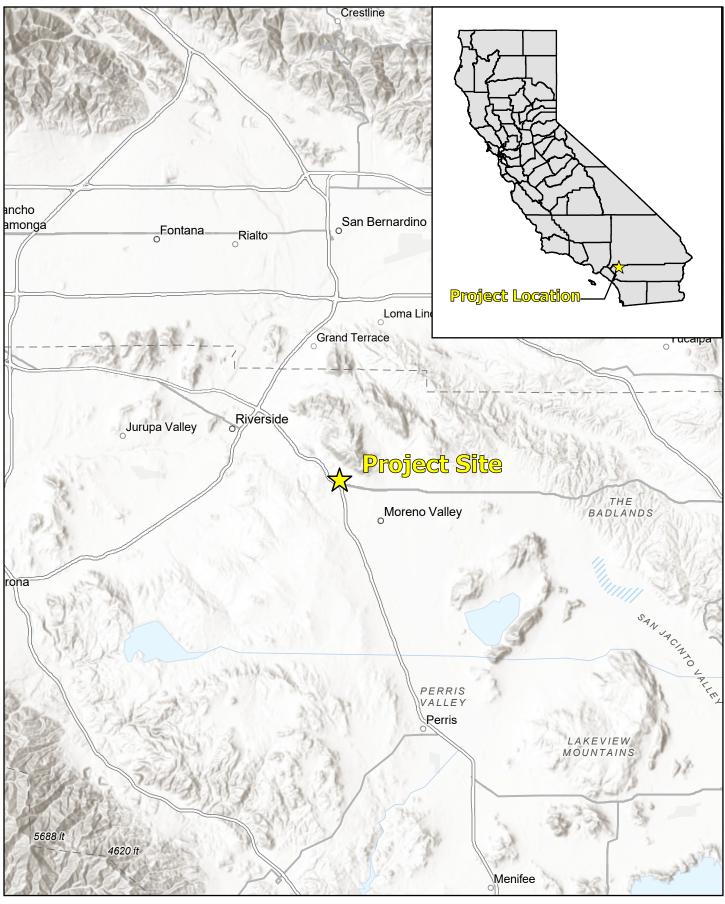
- California Department of Fish and Game (CDFG). 2012. *Staff Report on Burrowing Owl Mitigation*. State of California Natural Resources Agency, Department of Fish and Game.
- California Department of Fish and Wildlife (CDFW). 2025. RareFind 5, California Natural Diversity Data Base, California. Data base report on threatened, endangered, rare or otherwise sensitive species and communities for the USGS *El Casco, Perris, Riverside East, Steele Peak, and Sunnymead, California* 7.5-minute quadrangles. eBird. 2022. eBird: An online database of bird distribution and abundance [web application].
- Haug, E.A., B.A. Millsap, and M.S. Martell. 1993. Burrowing Owl (*Speotyto cunicularia*). In: A. Poole and F. Gill, editors, Birds of North America, No. 61. Philadelphia: The Academy of Natural Science; Washington DC: The American Ornithologists' Union.
- Thomsen, L. 1971. Behavior and ecology of Burrowing Owls in the Oakland Municipal Airport. Condor 73: 177-192.
- Western Riverside County Regional Conservation Authority (RCA). 2006. Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area.





Attachment A

Figures









MORENO VALLEY FARM BUREAU PROJECT Focused Burrowing Owl Survey Report

REGIONAL VICINITY







0 200 400 Feet MORENO VALLEY FARM BUREAU PROJECT Focused Burrowing Owl Survey Report

SURVEY AREA





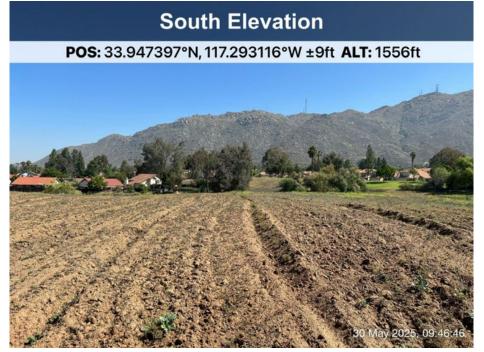
Attachment B

Photo Log





Photograph 1: Overview of the southern low-lying fields that were tilled at the project site.



Photograph 2: Overview of the northern low-lying fields that were tilled at the project site.





Photograph 3: Overview of the knoll (hill) located on the northern portion of the project site.





Attachment C

Species List

Appendix B: Plant and Wildlife Species Observed List

Scientific Name*	Common Name	Cal-IPC Rating**	Special-Status Rank***
Plants			•
Schinus terebinthifolia	Brazilian pepper	Moderate	
Hedera helix	Common Ivy	High	
Washingtonia filifera	California fan palm		
Sonchus asper	Prickly sow thistle		
Melilotus indicus	Small melilot		
Nerium oleander	Oleander		
Eucalyptus camaldulensis	River redgum	Limited	
Tamarix ramosissima	Salt cedar	High	
Croton setiger	Turkish mullein		
Hirschfeldia incana	Short-pod mustard	Moderate	
Encelia farinose	Brittlebush		
Schinus molle	Peruvian pepper tree	Limited	
Populus fremontii	Fremont cottonwood		
Salix gooddingii	Goodding's willow		
Datura wrightii	Sacred datura		
Heterotheca grandiflora	Telegraphweed		
Pennisetum alopecuroides	Fountain grass		
Parkinsonia aculeata	Palo verde sp.		
Eriogonum fasciculatum	California buckwheat		
Birds			
Tyrannus vociferans	Cassin's kingbird		
Calypte anna	Anna's hummingbird		
Zonotrichia leucophrys	White-crowned sparrow		
Corvus brachyrhynchos	American crow		
Setophaga coronata	Yellow-rumped warbler		
Haemorhous mexicanus	House finch		
Passer domesticus	House sparrow		
Psaltriparus minimus	Bushtit		
Sayornis nigricans	Black phoebe		
Corthylio calendula	Ruby-crowned kinglet		
Chamaea fasciata	Wrentit		
Polioptila caerulea	Blue-gray gnatcatcher		
Passerculus sandwichensis	Savannah sparrow		
Mammals			
Sylvilagus audubonii	Desert cottontail		
Canis familiaris	Domestic dog		
Canis latrans	Coyote		
* Non-native species			

^{*} Non-native species

High

These species have severe ecological impacts on physical process, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

^{**} California Invasive Plant Council (Cal-IPC) Ratings

Moderate

These species have substantial and apparent-but generally not severe-ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

Limited

These species are invasive by their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distributions are generally limited, but these species may be locally persistent and problematic.

*** Special-Status Rank

California Department of Fish and Wildlife (CDFW)

WL Watch List - taxa that were previously designated as "Species of Special Concern" but no longer merit that status, or which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.