



## ***Focused Burrowing Owl Surveys***

### ***±86-acre Ontario Ranch Business Park Site***

***Site Location:***

City of Ontario  
San Bernardino County, California  
Prado Dam 7.5-minute Quadrangle Map  
Township 2 South, Range 7 West

***Prepared for:***

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October 17, 2019



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**SUBJECT: Results of a Focused Burrowing Owl Surveys, ±86-acre Ontario Ranch Business Park Site, City of Ontario, San Bernardino County, California**

Dear Jeff:

This letter report presents results of focused surveys conducted to evaluate the presence/absence of the special-status burrowing owl (*Athene cunicularia*-BUOW) on an ±86-acre site.

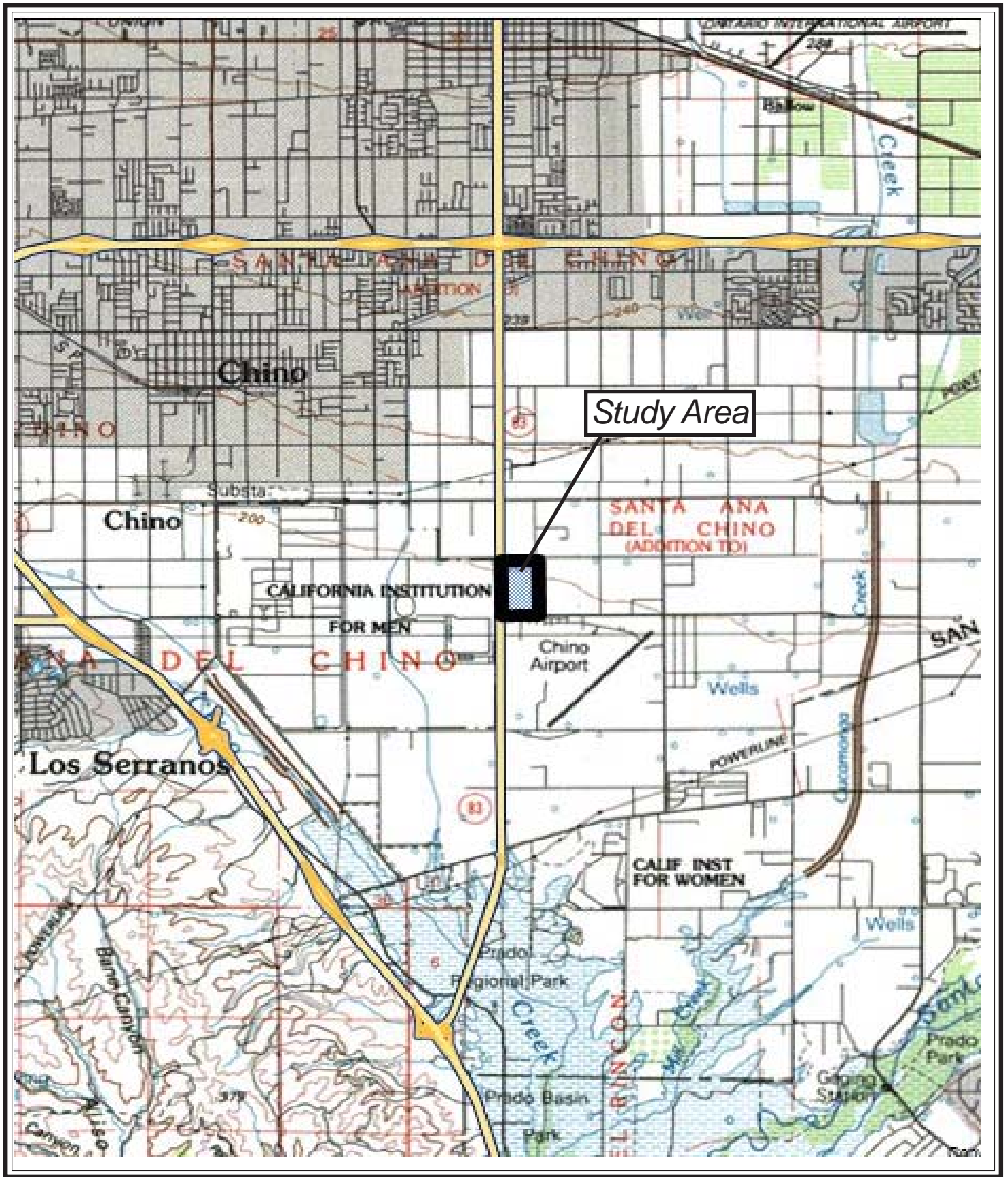
### **Introduction**

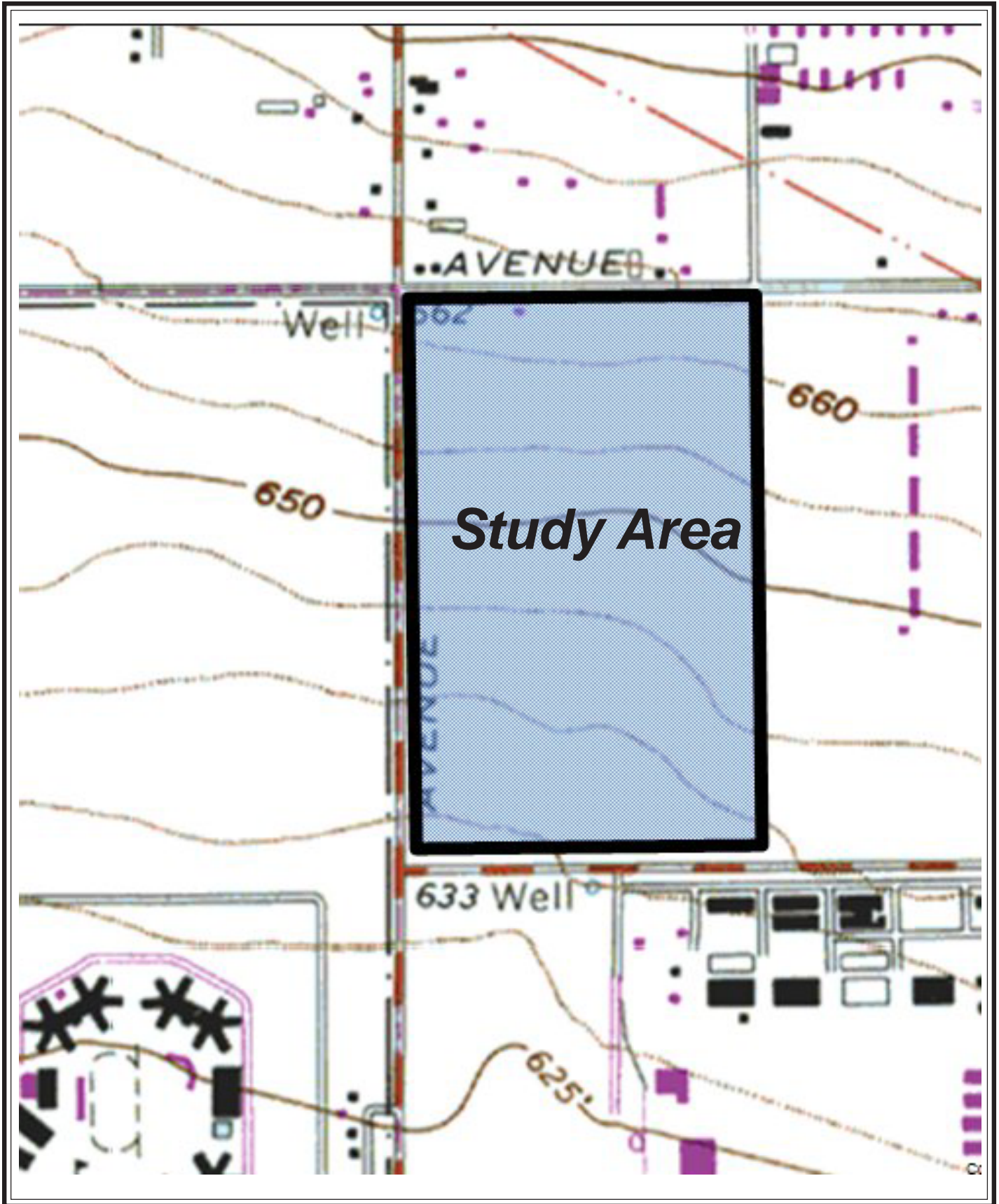
The project site is located in San Bernardino County, California (**Plate 1**). Specifically, the site is located in the City of Ontario north of Merrill Avenue, south of Eucalyptus Avenue, and east of Euclid Avenue. The site occurs on the "Prado Dam" California USGS 7.5-minute quadrangle map, Township 2 South, Range 7 West (**Plate 2**).

Projects proposed in the area that contain potentially suitable habitat to support sensitive biological resources must demonstrate to reviewing agencies [e.g., U.S. Fish and Wildlife Service (FWS), California Department of Fish and Wildlife/Game (CDFW/CDFG), County of San Bernardino (County), City of Ontario (City)] that potential project-related impacts to sensitive biological resources are adequately addressed and mitigated pursuant to the California Environmental Quality Act (CEQA) and other environmental regulations as part of project approval. For the purposes of this report, both the 1995 CDFG Staff Report on Burrowing Owl Mitigation and the 2012 CDFG Staff Report on Burrowing Owl Mitigation are referenced to provide background information.

### **Selected Species Overview / Regulatory Background**

The **western burrowing owl** is considered a California Species of Special Concern, Federal Species of Concern, Partners in Flight Priority Bird Species, and Fish and Wildlife Service Species of Management Concern because of declines of suitable habitat, as well as localized and statewide population declines (CDFG 1995, 2012). Burrowing owls range across most of western North America. In coastal southern California, they occur in annual and perennial grasslands, agricultural areas, and coastal dunes. Habitat characteristics also include deserts and arid scrublands that contain low-growing vegetation (Zarn 1974). It is believed that burrowing owls may potentially occur wherever there are ground squirrel (e.g., *Spermophilus beecheyi*) colonies as this owl uses ground squirrel burrows throughout the year. Burrows are the essential component of burrowing owl habitat (CDFG 1995), however, burrowing owls are also known to use artificial burrows under certain circumstances such as abandoned concrete structures and debris piles. The BUOW generally prefers moderately to heavily grazed grasslands for nesting and roosting and avoids recently cultivated/disc'd fields. BUOW may utilize multiple burrows/sites throughout the year (e.g., small seasonal migrations), although in central and southern California, owls are predominantly non-migratory (CBOC 2000).





**Site Vicinity**

Ontario Ranch Business Park Site



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October 2019

While this special-status species is not protected by state or federal endangered species acts, take, possession or destruction of individual burrowing owls, their nests and eggs is prohibited under CDFG code sections 3503, 3503.5 and 3513, as well as the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711). Under CEQA, goals would consist of measures that would avoid, minimize and mitigate impacts to a less than significant level. For individual projects, mitigation must be roughly proportional to the level of impacts, including cumulative impacts, in accordance with the provisions of CEQA (CEQA Guidelines, §§ 15126.4(a)(4)(B), 15064, 15065, and 16355). If it were later determined that active nests would be lost as a result of site-preparation, it would be in conflict with these regulations, and could also be considered a significant impact under CEQA without mitigation. In order to avoid violation of the MBTA and CDFG Code requirements, CDFG guidelines (1995, 2012) suggest that project-related disturbances at active nesting territories be reduced or eliminated during the BUOW nesting/breeding cycle (typically February 1 to August 31). Accordingly, construction should take place, as much as possible, outside of the breeding season for BUOW (i.e., construction between September 1 to January 31) to avoid or reduce potential impacts to this species. However, BUOW nesting activity is variable, and as such the time frame should be adjusted accordingly based on specific site information.

Owl survival can be adversely affected by disturbance (e.g., foraging habitat loss) even when impacts to individual birds and nest/burrows are avoided (CDFG 1995). Recommended restricted activity dates and setback distances by level of disturbance for burrowing owls (Scobie and Faminow 2000 in 03/7/12 CDFG BUOW Staff Report) are provided below in Table 1.

**Table 1- CDFG Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for BUOW**

<b>Location</b>	<b>Time of Year</b>	<b>Level of Disturbance</b>		
		<b>Low</b>	<b>Medium</b>	<b>High</b>
Nesting sites	April 1-Aug 15	200 m*	500 m	500 m
Nesting sites	Aug 16-Oct 15	200 m	200 m	500 m
Nesting sites	Oct 16-Mar 31	50 m	100 m	500 m

\*meters (m). Table and text excerpted directly from 2012 CDFG BUOW Staff Report

Note: Based on existing vegetation, human development, and land uses in an area, resource managers may decide to allow human development or resource extraction closer to these area/sites than recommended above. However, if it is decided to allow activities closer than the setback distances recommended, a broad-scale, long-term, scientifically-rigorous monitoring program ensures that burrowing owls are not detrimentally affected by alternative approaches.

Mitigation measures detailed in the CDFG 1995 staff report include: (1) preservation of habitat, (2) artificial burrow construction, and (3) provide funding for long-term management and monitoring of protected mitigation lands. Mitigation measures successfully implemented for this species also include giving the Service/CDFW right of first refusal for actively relocating any BUOW present. Currently occupied receiving sites may be available where this species has a greater chance of successful long-term relocation. Other minimization measures include eliminating actions that reduce burrowing owl forage and burrowing surrogates (e.g. ground squirrel), or introduce/facilitate burrowing owl predators. Actions that could influence these factors include reducing livestock grazing rates and/or changing the timing or duration of grazing or vegetation management that could result in less suitable habitat (CDFG 2012).

Implementation of avoidance and minimization measures would be triggered by positive owl presence on the site where project activities would occur. The development of avoidance and minimization approaches would be developed by monitoring. BUOW may re-colonize a site after only a few days. Time lapses (i.e. construction delays) between project activities would trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance (CDFG 2012). Should eggs or fledglings be discovered in any owl burrow or native nest, these resources

cannot be disturbed (pursuant to CDFW guidelines) until the young have hatched and fledged (matured to a stage that they can leave the nest on their own). Take of active nests should always be avoided. If owls must be moved away from the disturbance area, passive relocation techniques (where applicable outside of the breeding season before breeding behavior is exhibited and after the burrow is confirmed empty by site surveillance) should be used rather than trapping (CDFG 2012). If burrow exclusion and/or burrow closure is implemented, BUOWs should not be excluded from burrows unless or until: (1) a Burrowing Owl Exclusion Plan is developed and approved by the applicable local CDFW office; and (2) permanent loss of occupied burrow(s) and habitat is mitigated in accordance with the Mitigating Impacts (CDFG 2012).

## ***Methodology***

### ***Review of Existing Information***

Existing documentation pertinent to the distribution and habitat requirements of the burrowing owl was reviewed and analyzed. This included a review of: (1) the California Natural Diversity Data Base (CNDDDB 2019), (2) both the 1995 CDFG Staff Report on Burrowing Owl Mitigation and the 2012 CDFG Staff Report on Burrowing Owl Mitigation, and (3) other literature pertaining to habitat requirements of the BUOW as referenced herein.

### ***2019 Focused BUOW Survey***

The BUOW surveys were conducted in accordance with the March 7, 2012 CDFG Staff Report on Burrowing Owl Mitigation. These guidelines include searches for BUOW, burrows (natural and artificial), and BUOW sign by walking parallel transects (where feasible) through suitable habitat over the entire survey area [i.e., the project site and within a 150 meter (500 feet) buffer area where feasible or at least by visual means]. Upon arrival at the survey area and prior to initiating the walking surveys, the biologist used binoculars and/or spotting scope to scan suitable habitat. Ecological Sciences' Principal Biologist, Scott Cameron, initiated the first of four total focused breeding season BUOW surveys on April 14, 2019. Subsequent surveys were conducted on May 12, June 17, and July 7. Mr. Cameron has extensive experience conducting habitat assessments and focused burrowing owl surveys over the past 25 years, and has recorded numerous BUOW over the course of 100+ surveys throughout southern California. Mr. Cameron has also conducted passive relocation activities, used burrow probes, and conducted burrow closing procedures for multiple projects.

Per the Staff Report, the breeding season BUOW surveys included a review of pertinent information of the project site and vicinity and a series of four focused burrowing owl surveys conducted according to the 2012 California Department of Fish and Game (CDFG April 7, 2012) Staff Report on Burrowing Owl Mitigation. The Staff reports requires at least one site visit between 15 February and 15 April, and a minimum of three survey visits, at least three weeks apart, between 15 April and 15 July, with at least one visit after 15 June. Surveys would be conducted by walking straight-line transects spaced 7 meters (23 feet) to 20 meters (65 feet) apart, adjusting for vegetation height and density using standard auditory and visual means. At the start of each transect and, at least, every 100 m (328 feet), the entire visible project area would be scanned for BUOW using binoculars. During walking surveys, a record of all potential burrows used by burrowing owls as determined by the presence of one or more burrowing owls, pellets, prey remains, whitewash, or decoration would be recorded. Surveys should not be conducted when wind speed is >20 kilometers/hour (>12.5 miles/hour), and/or if there is precipitation or dense fog. Surveys have greater detection probability if conducted when ambient temperatures are >20° Celsius (>68° Fahrenheit), <12 km/hr winds (<7.5 miles/hr), and cloud cover is <75%. Surveys would be conducted between morning civil twilight and 10:00 a.m. and two hours before sunset until evening civil twilight (highest detection probabilities); It is assumed that a copy of this report would be forwarded to the lead agency at the discretion of the project applicant in order to comply with conditions of approval (where applicable).

Focused BUOW surveys were conducted to determine if the BUOW was foraging on or adjacent to the site. Transects were spaced to allow 100 percent visual coverage of the ground surface. The distance between transect center lines was no more than 20 meters ( $\pm 65$  feet) and were reduced (as necessary) to account for differences in terrain, vegetation density, and ground surface visibility. Periodic stops along each transect (generally at 100 meter intervals) and at the end of each transect were implemented to scan the site for BUOW with binoculars. Suitable burrows were examined for sign of BUOW use such as the presence of owl pellets, prey remains, or feathers at burrow entrances. Suitable burrows (burrows that are open and wide enough for owl use), regardless if owl sign was recorded, were noted. Burrows (where present) were inspected with the aid of a mirror to better view burrow interiors. Per protocol, surveys were conducted during weather that was conducive to observing owls outside their burrows and detecting BUOW sign. Focused surveys were conducted two hours before sunset until evening civil twilight (highest detection probabilities). Weather conditions through the survey period included clear skies, scattered clouds, and partly cloudy (<50% cover), 1-9 mph variable breezes, and air temperatures ranging between 67-89 °F. Accordingly, weather conditions were conducive for above-ground BUOW activity.

### **Existing Biological Environment**

The subject site is characterized primarily as an active dairy operation. The site contains a couple single-family residences, multiple dairy-related structures (sheds, corrals, etc.), feeding preparation areas, waste ponds/basins, cultivated/disc'd areas, manure spreading areas, and debris dumping areas. The ruderal/disturbed areas support mostly invasive, non-native annual species. Manure, associated with the ongoing dairy operation, is present throughout most of the site. Cattle feeding areas were barren ground covered in manure and mud. Surrounding land uses include agricultural areas similar to the subject site. **Plate 3** schematically illustrates site features.

#### **Vegetation**

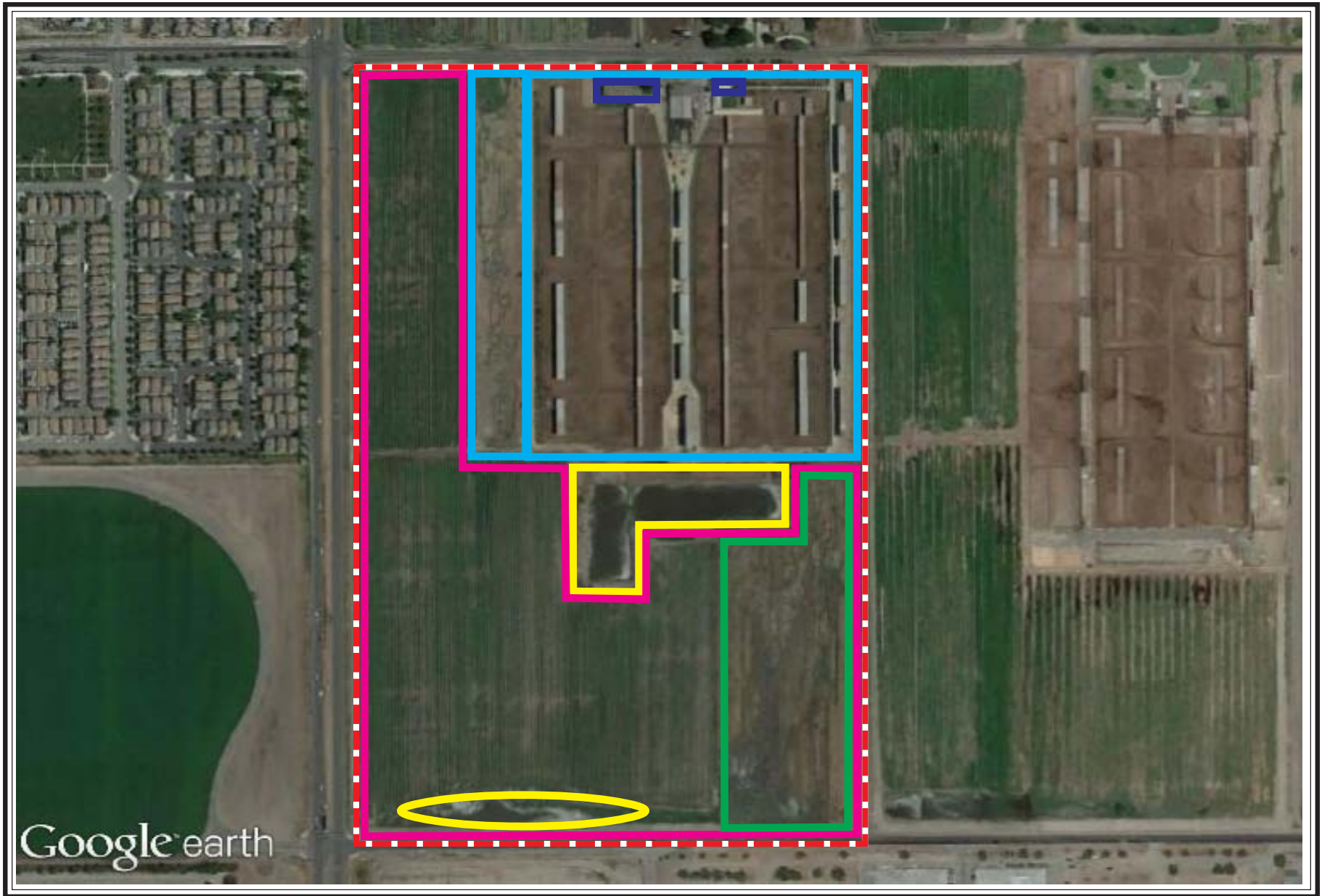
Ruderal plants recorded on site included ubiquitous non-native grasses and weedy species associated with historic agriculture operations such as foxtail chess (*Bromus madritensis* spp. *rubens*), riggut grass (*Bromus diandrus*), Bermuda grass (*Cynodon dactylon*), Mediterranean grass (*Schismus barbatus*), filaree (*Erodium* sp.), Lamb's quarter's (*Chenopodium album*), milk thistle (*Silybum marianum*), Russian thistle (*Salsola tragus*), black mustard (*Brassica nigra*), cheeseweed (*Malva parviflora*), nettle (*Urtica* sp.), and tobacco (*Nicotiana glauca*), and non-native cultivars such as fan palm (

### **Survey Results**

No direct BUOW observations were recorded during the April-July 2019 focused BUOW breeding season surveys. None of the potential burrows inspected during the survey were determined to be currently occupied by BUOW based on absence of BUOW observations and sign (feathers, pellets, fecal material, prey remains, etc.) at or near burrow entrances/aprons. BUOW were also not observed utilizing the site for foraging purposes on or adjacent to the site (adjacent areas viewed by binocular only).

Avian species observed on site included turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), common raven (*Corvus corax*), American crow (*Corvus brachyrhynchos*), killdeer (*Charadrius vociferus*), European starling (*Sturnus vulgaris*), rock pigeon (*Columba livia*), mourning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), Brewer's blackbird (*Euphagus cyanocephalus*), western meadowlark (*Sturnella neglecta*), house finch (*Carpodacus mexicanus*), and house sparrow (*Passer domesticus*). Mammal species directly observed, or of which sign was detected, included California ground squirrel (*Spermophilus beecheyi*).

Despite that fact that the site has been exposed to long-standing disturbances, BUOW often occur in less than optimal and/or disturbed conditions. If it were later determined that active nests of BUOW would be lost as a result of site-preparation, it could result in CEQA significant adverse impacts and



- - - = Study Area
- = Rural Residential
- = Disced Rudereral Field/Cultivation
- = Detention/Retention Basins
- = Corrals/Feed Areas
- = Pasture



would be in conflict with CDFW code sections. Although no BUOW were recorded on site, it is recommended by CDFW to complete an initial take avoidance survey no less than 14 days prior to initiating ground disturbance activities. Implementation of avoidance and minimization measures would be triggered by positive owl presence on the site where project activities would occur. The development of avoidance and minimization approaches would be evaluated by monitoring burrowing owls (if present on site). BUOW may re-colonize a site after only a few days. Time lapses between project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance (CDFW 2012).

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

Sincerely,

Ecological Sciences, Inc.



Scott D. Cameron  
Principal Biologist

## References

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