



January 7, 2015

Daxa Patel
21 Prestwick Lane
Amarillo, Texas 79124
ramhotel1@aol.com

Re: Follow-up/winter burrowing owl survey for 2350 Harbor Bay Parkway, Alameda, California

Dear Ms. Patel:

This letter provides the results of a follow-up habitat assessment and survey for burrowing owls (*Athene cunicularia*) at the 2350 Harbor Bay Parkway property (Study Area) in Alameda, Alameda County, California. As requested by the City of Alameda (due to planned development of the site), WRA conducted an assessment and survey of the Study Area on August 8, 2014. The results of this investigation were presented in a letter report (addressed to Emma Becton) dated August 2014; no burrowing owls or indication of this species' presence were observed during the survey. WRA concluded that 1) no burrowing owls were present within or adjacent to the Study Area, 2) the site provides only poor-quality burrowing owl habitat, and 3) year-round occupation (including breeding) was unlikely. However, WRA did state that there was limited potential for wintering by burrowing owls within or adjacent to the site, and that an additional pre-construction survey effort should be conducted prior to initial ground disturbance to document any changes in existing conditions and avoid potential impacts to this species.

Study Area description

The Study Area is a piece of undeveloped land approximately 1.6 acres in size along Harbor Bay Parkway, in the Bay Farm Island portion of the City of Alameda (Figure 1, attached). The Study Area is bounded by Harbor Bay Parkway and adjacent urban development to the north, east and southeast, urban parkland to the south, the San Francisco Bay shoreline and associated landscaping to the west, and a very small, linear section of urban parkland to the northwest. The vast majority of the Study Area contains open, disturbed ground grown to grasses and weedy vegetation, with an isolated patch of willows (*Salix* sp.) present roughly in the center of the site. Urban landscaping in the form of shrubs and trees is present along much of the Study Area's periphery. The general vicinity of the Study Area is characterized by urban development and includes commercial buildings and transportation corridors, including a paved pedestrian shoreline path. Human activity in the immediate area appears to occur habitually, including jogging, bicycling and dog-walking (all observed during the survey). Additionally, the Study Area is located below a primary flight course for aircraft taking off from nearby Oakland International Airport (also observed during the survey).

Burrowing owl background

The burrowing owl is a California Department of Fish and Wildlife (CDFW, formerly Department of Fish and Game) Species of Special Concern, as well as a U.S. Fish and Wildlife Service Bird of Conservation Concern. This species inhabits open areas with sparse or non-existent tree or shrub canopies; typical habitat is annual or perennial grassland, although human-modified areas such as agricultural land and airports are also used. Burrowing owls are dependent on burrowing mammals to provide the burrows that are characteristically used for shelter and nesting. In northern California, owls are typically found in close association with California ground squirrels (*Spermophilus beecheyi*). Manmade substrates such as pipes or debris piles may also be occupied in place of burrows. In the San Francisco Bay area, the species is both a winter visitor and a year-round resident; individuals of the latter group generally show strong site fidelity. The greater statewide nesting period is from February through August, although nesting in the San Francisco Bay area typically occurs from late March through July.

Prior to conducting the current survey, CDFW's Natural Diversity Database¹ and eBird.com² were re-examined to determine the nearest documented burrowing owl occurrence(s) to the Study Area. The results of this research were unchanged from August 2014. According to the Natural Diversity Database, the nearest documented occurrence is approximately 0.8 mile to the southeast of the Study Area, and dates from 1983 (apparently before much of the current development on Bay Farm Island). The nearest eBird observation is approximately 1.2 miles to the north along the Bay Farm Island Shoreline; this observation occurred in 2012, and was apparently of a wintering individual.

Methods

Survey methodology was informed by guidelines developed by the Burrowing Owl Consortium and adopted by CDFW, corresponding both to both a habitat assessment and a burrow/burrowing owl survey as described in the updated 2012 protocol³. The survey was conducted by WRA wildlife biologist Jason Yakich (me) on January 6, 2014, from 8:30 AM to 10:10 AM. Sky conditions were sunny, with a very light wind and air temperatures ranging from 50° F (start of survey) to 59° F (end). The Study Area and surrounding, accessible areas within 500 feet were traversed on foot to determine the general suitability for burrowing owl, to locate burrows (or other suitable substrates), and to search for owls or signs of their presence. Burrowing owl sign consists of feathers, regurgitated pellets and/or whitewash (feces stains), and is typically found near the entrances to occupied burrows; foraging perches often show these characteristics as well. The survey area included urban parklands and landscaped areas adjacent to the Study Area, and the portion of the bay shoreline rip-rap above the high-tide line. All burrows (and any comparable, potential refugia) found were carefully examined for signs of burrowing owl occupation.

¹ California Natural Diversity Database ("CNDDB"), Wildlife and Habitat Data Analysis Branch. Sacramento, CA. Accessed: January 2014.

² eBird: An online database of bird distribution and abundance (web application). eBird, Ithaca, New York. Available online: <http://www.ebird.org>. Accessed: January 2014.

³ "Staff Report on Burrowing Owl Mitigation." California Department of Fish and Game. March 7, 2012.

Results

As was the case in August 2014, no burrowing owls or indication of this species' presence was observed during the site visit.

Within the Study Area itself, conditions were slightly altered from those observed during the initial survey in August 2014. At that time, the Study Area had been disked fairly recently, resulting in loose soil that rendered burrow construction by ground squirrels and other mammals difficult to infeasible. Despite the disking, several ground squirrel burrows were observed in lightly or un-disked (mostly peripheral) portions of the Study Area in August 2014. During the present survey, however, all of the burrows formerly present within the Study Area were collapsed (likely due at least in part to relatively heavy rainfall in December) and provided no refuge for squirrels or owls. At the same time, the soil had become more compacted (suitable for burrow excavation), and more densely grown to grasses and weeds that were generally very low in stature throughout (i.e., less than four inches in height for the grasses). No burrowing owl sign was observed in association with the collapsed burrows, or in any other portion of the Study Area. What appeared to be recent digging by animals (likely skunks and/or domestic dogs) was present in several areas, but these excavations consisted of shallow depressions (not burrows) and provided no potential refuge for burrowing owls.

Burrows appearing to be those of ground squirrels did remain present in areas adjacent to the Study Area, specifically the strip of urban parkland to the southeast (approximately three burrows) and along the upper, vegetated/landscaped portion of the San Francisco Bay shoreline (approximately 21 burrows). Two of the burrows within the urban parkland area had entrances blocked by rocks and leaves; the third burrow was unblocked. Approximately half of the burrows along the upper portion of the shoreline were dilapidated and/or featured entrances covered by cobwebs, indicating no recent use by squirrels or owls. The remaining burrows in this area appeared intact, though all of these burrows were located at the bases of or otherwise directly adjacent to shrubs and pampas grass clumps that were several feet in height, indicating that burrowing owls would be unlikely to use them due to visual obstructions surrounding the burrow entrances. All of the burrows observed in areas peripheral to the Study Area were carefully examined for any indication of burrowing owl presence, and none was observed. Additionally, no ground squirrels were observed.

Conclusions

As was the case in August 2014, WRA concludes that no burrowing owls are currently present within or adjacent to the Study Area. Additionally, the site provides only poor-quality habitat, and is unlikely to be occupied unless conditions improve, for the following reasons:

- Ground squirrel burrows that were formerly present within the Study Area itself are now collapsed and provide no potential burrowing owl refuge.
- The Study Area is relatively small in area and surrounded by urban development (to the east), or landscaping (shrubs, trees and pampas grass) that limit visibility at ground-level and thus discourage use by burrowing owls.
- The intact burrows present along the upper portion of the bay shoreline adjacent to the Study Area are located amid dense vegetation (landscaping), rendering them of poor-quality to burrowing owls due to obstructed visibility as described above.
- Ambient conditions within the Study Area and its immediate vicinity are characterized by urban development and associated proximate disturbances (especially

pedestrians/joggers and dog-walkers), further discouraging occupation of the site by owls.

While the Study Area and directly adjacent lands are unlikely to support year-round burrowing owl occupation (including breeding), a limited potential for burrowing owl wintering at the site remains. Burrowing owls have been documented to winter (roughly from September through April) in marginal, urban habitat areas in the vicinity of San Francisco Bay. WRA therefore recommends the following:

- To preclude ground squirrels from re-colonizing the Study Area (and creating burrows that may host owls in the future), the property should be regularly disked. Initial disking should occur within 30 days of the January 6, 2014 site visit (i.e., by February 5, 2014). Prior to disking, the City of Alameda should be consulted to confirm that disking of the site is acceptable.
- An additional follow-up pre-construction survey/assessment should be conducted within 15 days of initial ground disturbance within the Study Area. If burrowing owls or any indication of this species' presence is observed within or adjacent to the Study Area, both consultation with CDFW and additional follow-up surveys are strongly recommended prior to the initiation of any project activities.

Please do not hesitate to contact me if you would like additional information, or have questions about any of these survey efforts and recommendations.

Sincerely,

A handwritten signature in black ink, appearing to read "Jason Yakich". The signature is fluid and cursive, with the first name "Jason" and last name "Yakich" clearly distinguishable.

Jason Yakich
Wildlife Biologist

Attachment: 1. Figure 1



Figure 1. Study Area Location Map

2350 Harbor Bay Parkway
Alameda, Alameda County, California



0 100 200 400
Feet



Map Date: August 2014
Map By: Derek Chan
Base Source: ESRI/National Geographic