



Environmental
Intelligence, LLC

March 18, 2014

Mr. Hugh Hewitt
Hewitt Wolensky LLP
4041 MacArthur Boulevard – Suite 300
Newport Beach, CA 92660

Subject: 2014 Burrowing Owl Passive Relocation Report for the Christensen Site Located near the City of Lake Elsinore, Riverside County, California.

Summary: Environmental Intelligence, LLC (EI) was retained by Pardee Homes to provide a burrowing owl habitat assessment and survey, passive relocation, and monitoring within the Christensen Site located near the City of Lake Elsinore, Riverside County, California. This report covers all survey and monitoring activities conducted by EI on the site between November 2013 and February 2014. Two active burrowing owl burrows and one burrowing owl were observed on the Site. The only burrowing owl observed during this period was passively relocated off-site to an area with suitable habitat. As of EI's last survey visit on February 5, 2014, no burrowing owls or burrowing owl sign were observed on-site.

Dear Mr. Hewitt:

Environmental Intelligence, LLC (EI) was retained by Pardee Homes to provide a burrowing owl (*Athene cunicularia*) habitat assessment and survey, passive relocation, and monitoring on the Christensen Site (Site) located near the City of Lake Elsinore, Riverside County, California. Surveys and passive relocation followed methods recommended by the California Department of Fish and Wildlife (CDFW, 2012) and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP, 2006). Two active burrowing owl burrows and one burrowing owl were observed on the Site during EI's surveys and relocation efforts. The burrowing owl was passively relocated successfully to suitable off-site habitat prior to the start of the burrowing owl breeding season. The following report describes all biological surveys, passive relocation, and monitoring conducted between November 26, 2013 and February 5, 2014.

Site Location and Description

The approximately 21-acre Christensen Site is located on the eastern border of the city of Lake Elsinore, Riverside County, California. The Site is located in the 7.5' U. S. Geological Survey (USGS) 'Romoland' Quadrangle. The Site abuts current land development to the west, Holland Road to the north, Corson Avenue to the south and rural single family homes to the east. Land use to the east and south of the site is rural ranch and equestrian properties. To the north and southeast of the site, undeveloped areas remain with native scrub and riparian communities present.

Methods and Results of Burrowing Owl Surveys, Passive Relocation, and Monitoring

Burrowing Owl Habitat Assessment and Survey

On November 26, 2013, an EI biologist conducted a burrowing owl habitat assessment to determine if the site contained suitable habitat. The site consisted of a gently sloping fallow agricultural field that showed signs of previous discing. The majority of the site contained bare ground and non-native annual grass and herb species. No shrubs or trees and very few native plant species were observed on the site. Numerous California ground squirrel (*Spermophilus beecheyi*) burrows were observed across the site providing suitable habitat for burrowing owl.

The site was surveyed with 100-foot (30-meter) linear transects providing 100 percent coverage of the site. Two burrows showing burrowing owl sign (white wash, pellets, feathers, or bone fragments) were recorded on-site. These burrows are considered active due to the presence of recent owl sign per the CDFW and MSHCP guidelines and passive relocation was determined to be necessary to remove any potential burrowing owl nesting sites. No burrowing owls were observed on the site during the November 26 visit. The two active burrows and approximately 240 potential refuge sites (i.e. California ground squirrels burrows) were marked with GPS units and all visible sign (scat, feathers, and bones) were removed after each site visit to facilitate monitoring of burrowing owl activity. Table I summarizes the survey, passive relocation efforts, and monitoring conducted between November 2013 and February 2014.

Passive Relocation

Passive relocation began on the Site on January 7, 2014. A 160-foot (50-meter) buffer was implemented around the two active burrowing owl burrows. Inactive burrows, containing no owl sign, of appropriate size within the buffer were manually closed by EI biologists. Any potential burrowing owl refuge sites outside the burrowing owl buffer were collapsed with the assistance of a skip loader equipped with ripping teeth. A biological monitor was present during all ripping activities on-site. Once all suitable refuge sites were removed one-way doors were placed over the two active burrowing owl burrow entrances and two adjacent burrows. These two adjacent burrows lacked burrowing owl sign, but were not collapsed due to the possibility of them being contiguous with the adjacent active burrows. The one-way doors were inspected daily to ensure they had not been tampered with and successfully prevented wildlife from re-entering the burrow. After at least two days, the one-way doors were removed and these burrows were visually inspected with a borescope (flexible fiber optic video camera) for signs of owls and other wildlife. When the burrows were confirmed to be unoccupied they were carefully collapsed and filled by hand.

A single burrowing owl was first observed on-site on January 7, 2014. Over the next two day period this owl was monitored and observed to be utilizing the two active burrows on-site, located within approximately 120 feet of one another. Surveys and monitoring conducted by EI biologists between January 7 and 10, confirmed the presence of a single burrowing owl. This owl was observed to be unpaired and was not nesting or feeding young.

Once passive relocation was completed on January 13, 2014 the Site was monitored weekly until the end of January for any new sign of burrowing owl occupation. No other burrowing owls or new burrowing owl sign were observed on the Site. On February 5, 2014, EI conducted a clearance survey to confirm burrowing owls were absent from the site.

Table 1. Christensen Site Visit Summary

| Date | Biologist(s)* | Purpose |
|-------------|----------------------|---------------------------------|
| 11/26/2013 | SD | Habitat Assessment and Survey |
| 1/7/2014 | SD | Passive Relocation Preparation |
| 1/8/2014 | SD, | Passive Relocation |
| 1/9/2014 | SD, JG | Passive Relocation |
| 1/10/2014 | SD, JG | Passive Relocation |
| 1/11/2014 | JG | Passive Relocation |
| 1/13/2014 | JG | Passive Relocation |
| 1/17/2014 | SD, CD | Monitoring |
| 1/23/2014 | JG | Monitoring |
| 1/30/2014 | JG | Monitoring |
| 2/5/2014 | JG | Monitoring and Clearance Survey |

*Biologists: SD = Scott Duff, JG = Jeremiah George, CD = Cherie Dugal

Conclusions

One burrowing owl was passively relocated off-site to suitable habitat during EI's passive relocation efforts. Passive relocation was completed prior to February 1, the start of the burrowing owl breeding season. As of the last site visit (February 5), no owls were present on the Christensen Site and the one passively relocated owl was observed residing 600-650 feet to the south of the Site.

If you have any questions or comments regarding this report please contact Eric Kline directly at 949-497-0931.

Sincerely,

ENVIRONMENTAL INTELLIGENCE, LLC



Eric Kline

Literature Cited

CDFG 2012. Staff Report on Burrowing Owl Mitigation. Dated March 7, 2012.

MSHCP 2006 (as amended). *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area*. Riverside, CA: the County.
<http://www.tlma.co.riverside.ca.us/epd/docu>