Brian Thorne, LMC Philip Henderson, Tetra Tech Thomas Villeneuve, Tetra Tech 6/8/2012 Burrowing Owl at LMC Beaumont Site 1

## Introduction

The burrowing owl (*Athene cunicularia*) is a small (9 to11 inches) owl that inhabits relatively open environments such as grassland areas, prairies, desert, farmland, and airfields that contain bare ground or low growing vegetation. Burrowing owls typically inhabit burrows made by other animals such as ground squirrels (*Spermaphilus beecheyi*) and badgers (*Taxidea taxus*). They are also found in structures such as woodpiles, cement, earthen berms, and culverts that give them cover from predators. Burrowing owls eat a variety of invertebrates, including adult beetles, larval and adult moths, crickets, flies, and ants, but will occasionally take small mammals, birds, amphibians, and reptiles.

Breeding takes place any time from late February to August, while courtship occurs as early as December in California. Burrowing owls lay their eggs underground inside an occupied burrow and the female owl incubates the eggs for up to 30 days at which point the eggs will hatch and the young will emerge from the burrow several weeks later.



The burrowing owl has lost an extensive amount of habitat due to urban development and the elimination of burrowing mammals through control programs. Habitat loss has been identified as the primary factor in the species decline. Additional threats to the species include habitat fragmentation, predation, pesticides and contamination. This is just a general statement regarding the species. However, there are shallow perchlorate impacts in the burn pit area but the Environmental Risk Assessment did not show any impacts in the BPA to ecological receptors from perchlorate.

Photo 1 The burrowing owl seen in the burn pit area near monitoring well MW-26.

no disturbance to the owl was recorded. On both occasions the lone owl left after approximately one month on the site.

On February 28, 2012, another lone burrowing owl (possibly the same individual) was spotted in the burn pit area near monitoring well MW-26 in the mouth of a burrow (Figure 1). Four surveys were conducted California Department of Fish and Game (CDFG) protocols (CDFG, 1993 & 2012) over several weeks following the initial sighting of the burrowing owl. During the first official survey, the burrowing owl was present in the burrow mouth. However, during subsequent surveys the owl was not seen and it appeared that the burrow was only occupied by California ground squirrels. The burrow was also monitored during routine site maintenance and groundwater sampling activities in nearby areas. Based upon the surveys and monitoring of the burrow it was determined that the lone burrowing owl was not a part of a breeding pair and may have been passing through the site similar to the occurrences in 2009 and 2010. Since the last recorded sighting at the burrow (February 29th), no other burrowing owl sign has been seen in the area of the burrow or in nearby areas of the site. The survey dates for the burrowing owl observed at the Potrero Canyon Unit were February 29, 2012, March 6, 2012, March 14<sup>-</sup> 2012, and April 18, 2012.

## Management Implications for LMC Beaumont

Burrowing owl is listed as a California Species of Concern (SSC) by CDFG. This designation is essentially administrative and carries no formal legal status. The intent of designating SSCs is to focus attention on animals at conservation risk by the Department, other State, local and Federal governmental entities, regulators, land managers, planners, consulting biologists, and others; and to achieve conservation and recovery of these animals before they meet California Endangered Species Act criteria for listing as threatened or endangered.

Occupied nest sites are protected under the federal Migratory Bird Treaty Act (MBTA) and cannot be disturbed. According to the MBTA, active nest sites must not be disturbed until the breeding pair and their fledglings have left the nest and the nest becomes inactive. Inactive nests are not protected by the MBTA and can be removed without being in violation of the MBTA.

Site 1 is mostly owned and managed by the CDFG and is a "core area" for species' protection under the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP). LMC retained 565 acres of the site, referred to as the Conservation Easement. The burrowing owl was observed within the former Burn Pit Area, which is located within this Conservation Easement owned by LMC. Site 2 has recently been placed in the MSHCP planning area due to its purchase by Riverside County. Monitoring these areas within the MSHCP area is the joint responsibility of U.S. Fish and Wildlife Service (USFWS), CDFG, and the Riverside County. Because CDFG is the agency with the responsibility to manage this species as described above, they will have