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**Biological Resource Assessment of  
APN 3150-008-069  
Lancaster, California**

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## Biological Resource Assessment of APN 3150-008-069, Lancaster, California

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### **Abstract**

Residential development has been proposed for APN 3150-008-069. The approximately 10 acre (4 ha) study area was located east of 20th Street East and north of Nugent Street, T7N, R11W, N1/2 of the N1/2 of the SW1/4 of the SW1/4 of Section 18, S.B.B.M. A line transect survey was conducted on 24 September 2005 to inventory biological resources. The proposed project area was characteristic of a highly disturbed field. A total of eight plant species and ten wildlife species or their sign were observed during the line transect survey. No desert tortoises (*Gopherus agassizii*) or their sign were observed during the field survey. No burrowing owls (*Athene cunicularia*) or their sign were observed during the line transect survey, however, within 30 days prior to further ground disturbing activity, a survey for burrowing owls should be conducted due to potential burrowing owl cover sites. If burrowing owls are discovered during the survey, consultation should be conducted with the California Department of Fish and Game to determine if mitigation for this species is required. The proposed project site was located within the geographic range of the Mohave ground squirrel (*Spermophilus mohavensis*). However, the study area did not contain suitable habitat to support the Mojave ground squirrel. No other state or federally listed species are expected to occur within the proposed project area. This project is not expected to result in a significant adverse impact to biological resources.

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Residential development has been proposed for APN 3150-008-069 (Figure 1). Development would include installation of paved access roads and utilities (natural gas, water, sewer, electric, telephone). The entire project area would be graded prior to construction activities.

An environmental analysis should be conducted prior to any development project. An assessment of biological resources is an integral part of environmental analyses (Gilbert and Dodds 1987). The purpose of this study was to provide an assessment of biological resources potentially occurring within, or utilizing the proposed project area. Specific focus was on the presence/absence of rare, threatened and endangered species of plants and wildlife.

### **Study Area**

The approximately 10 acre (4 ha) study area was located east of 20th Street East and north of Nugent Street, T7N, R11W, N1/2 of the N1/2 of the SW1/4 of the SW1/4 of Section 18, S.B.B.M. (Figure 2). The southern boundary of the study area was formed by Nugent Street. Single family homes were present immediately south of Nugent Street.



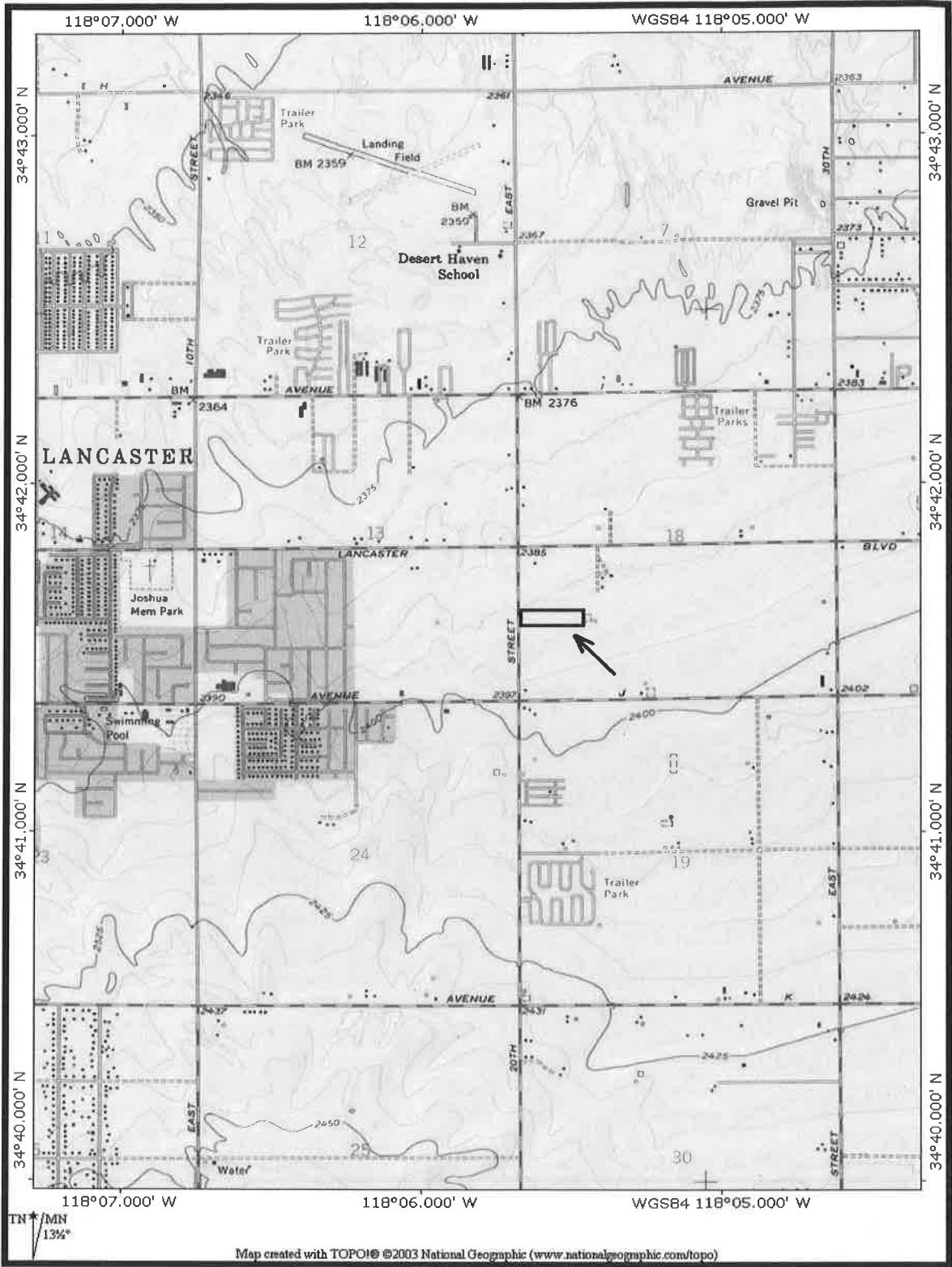


Figure 2. Approximate location of study area as depicted on excerpt from USGS Quadrangle, Lancaster East, California, 7.5' 1974.

The eastern boundary was formed by a chicken wire fence and one single family home. The northern boundary was formed by a graded field and construction activities. The western boundary of the study area was formed by 20th Street East.

## Methods

A line transect survey was conducted to inventory plant and wildlife species occurring within the proposed project area (Cooperrider et al. 1986, Davis 1990). Line transects were walked in an east-west orientation. Line transects were approximately 1,320 feet (426 m) long and spaced about 55 feet (18 m) apart (U.S. Fish & Wildlife Service 1990).

All observations of plant and animal species were recorded in field notes. Field guides were used to aid in the identification of plant and animal species (Arnett and Jacques 1981, Borror and White 1970, Burt and Grossenheider 1976, Gould 1981, Jaeger 1969, Knobel 1980, Robbins et al. 1983, Stark 2000). Observations were aided with the use of 10x50 binoculars. Observations of animal tracks, scat, and burrows were also utilized to determine the presence of wildlife species inhabiting the proposed project area (Cooperrider et al. 1986, Halfpenny 1986, Murie 1974).

## Results

A total of four line transects were walked on 24 September 2005. Weather conditions consisted of warm temperatures (estimated 80 degrees F), 20% cloud cover and a light breeze. A sandy clay loam surface soil texture was characteristic throughout the study area.

The proposed project area was characteristic of a highly disturbed field. A total of eight plant species were observed during the line transect survey (Table 1). The only shrub species throughout the entire study area was rabbit brush (*Chrysothamnus nauseosus*) and only a few individuals of this species were found within the study area.

A total of ten wildlife species, or their sign were observed during the line transect survey (Table 2). No desert tortoises (*Gopherus agassizii*) or sign were observed during the field survey. No burrowing owls (*Athene cunicularia*) or their sign were observed during the line transect survey. No bird nests were observed within the study area. California ground squirrel (*Citellus beecheyi*) burrows were observed within the study area. A potential kit fox (*Vulpes macrotis*) den was observed in the southern central portion of the study site.

Table 1. List of plant species that were observed during the line transect survey of APN 3150-008-069, Lancaster, California.

<u>Common Name</u>	<u>Scientific Name</u>
Rabbit brush	<i>Chrysothamnus nauseosis</i>
Russian thistle	<i>Salsola iberica</i>
Red stemmed filaree	<i>Erodium cicutarium</i>
Cheatgrass	<i>Bromus tectorum</i>
Tumble mustard	<i>Sisymbrium altisissimum</i>
Prickley lettuce	<i>Lactuca seriola</i>
Schismus	<i>Schismus sp.</i>
Five-hook bassia	<i>Bassia hyssopifolia</i>

Table 2. List of wildlife species, or their sign, that were observed during the line transect survey of APN 3150-008-069, Lancaster, California.

<u>Common Name</u>	<u>Scientific Name</u>
Kit fox	<i>Vulpes macrotis</i>
California ground squirrel	<i>Citellus beecheyi</i>
Domestic dog	<i>Canis familiaris</i>
Killdeer	<i>Charadrius vociferus</i>
Rock dove	<i>Columba livia</i>
Barn owl	<i>Tyto alba</i>
Ants (small)	Order: Hymenoptera
Harvester ants	Order: Hymenoptera
Butterfly	Order: Lepidoptera
Grasshopper	Order: Orthoptera

The study site had been recently plowed and grubbed. The site was nearly devoid of vegetation. Asphalt and dirt piles were observed along the southern portion of the site. A small amount of scattered trash was observed throughout the proposed project area. Off road vehicle trails and roads were being established going towards the construction site north of the study area. A road drainage was present along the western edge of the study area.

## **Discussion**

Due to the study site being recently plowed and grubbed many annual species that may have been present were no longer present. Some vegetation had begun to re-establish on the study site. Although not observed, several wildlife species would be expected to occur within the proposed project area (Table 3).

The study area was probably once characteristic of a saltbush (*Atriplex* sp.) scrub plant community (Barbour and Major 1988). However, the study area was highly disturbed, due to previous grubbing activities. Human impacts are expected to increase as urban development continues to occur near and adjacent to the study area. Habitat in the general area will continue to become degraded and fragmented. Burrowing animals within the proposed project area are not expected to survive construction activities. More mobile species, such as lagomorphs (rabbits and hares), coyotes (*Canis latrans*), and birds are expected to survive, but they will have less cover and foraging habitat available.

Although no burrowing owls were observed during the field survey, the California ground squirrel burrows and potential kit fox den provide potential cover sites. Within 30 days prior to further ground disturbing activity, a survey for burrowing owls should be conducted. If burrowing owls are discovered during the survey, consultation should be conducted with the California Department of Fish and Game to determine if mitigation for this species is required. The proposed project area was located within the geographic range of the Mohave ground squirrel (*Spermophilus mohavensis*). The western limit of the geographic range of the Mohave ground squirrel is currently thought to be Highway 14. However, the study area appeared to lack suitable habitat to support Mohave ground squirrels. No other state or federally listed threatened or endangered species are expected to occur within the proposed project area (California Department of Fish and Game 2002, Smith and Berg 1988, U.S. Fish & Wildlife Service 1990).

Landscape design should incorporate the use of native plants to the maximum extent feasible. Native plants that have food and cover value to wildlife should be used in landscape design (Adams and Dove 1989). Diversity of native plants should be maximized in landscape design (Adams and Dove 1989). This project is not expected to result in a significant adverse impact to biological resources.

Table 3. List of wildlife species that may occur within the study area, APN 3150-008-069, Lancaster, California.

<u>Common Name</u>	<u>Scientific Name</u>
Deer mouse	<i>Peromyscus maniculatus</i>
Coyote	<i>Canis latrans</i>
Domestic cat	<i>Felis sp.</i>
Mourning dove	<i>Zenaida macroura</i>
Common raven	<i>Corvus corax</i>
European starling	<i>Sturnus vulgaris</i>
House sparrow	<i>Passer domesticus</i>
Side blotched lizard	<i>Uta stansburiana</i>
Fly	Order: Diptera



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