

Biological Resource Assessment of  
APN 3109-024-043  
Lancaster, California

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## **Abstract**

Development has been proposed for APN 3109-024-043, Lancaster, California. The approximately 2 acre (0.8 ha) study area was located north of Avenue L-12 and east of 12th Street West, T7N, R12W, a portion of the SW1/4 of the NE1/4 of the SE1/4 of Section 33, S.B.B.M. A line transect survey was conducted on 25 November 2021 to inventory biological resources. The proposed project area was characteristic of a developed lot. One American elm (*Ulmus americana*) and desert cottontail (*Sylvilagus auduboni*) scat were observed during the line transect survey. The study site did not support desert tortoise (*Gopherus agassizii*) habitat. The study site did not support desert kit fox (*Vulpes macrotis*) habitat. The study site did not support Mohave ground squirrel (*Xerospermophilus mohavensis*) habitat. The study site did not support burrowing owl (*Athene cunicularia*) habitat. The American elm provides potential nesting sites for small migratory birds. The study area does not provide forage for Swainson's hawks or other raptors due to parcel size and current condition of the habitat. The study site did not support sensitive plant habitat. No other state or federal listed species are expected to occur within the study area. No ephemeral streams or washes occur within the study area.

## **Recommended Protection Measures:**

The American elm within the study area offers potential nesting habitat for small migratory birds. If possible, removal of this tree will occur outside the breeding season for migratory birds. Nesting generally lasts from February to July but may extend beyond this time frame. If tree removal will occur during or close to the nesting season, a qualified biologist will survey the tree to be disturbed as close as possible but no more than one week prior to removal. If active bird nests are found impacts to nests will be avoided by either delaying work or establishing initial buffer areas of a minimum of 50 feet (16 m) around active migratory bird species nests. The project biologist will determine if the buffer areas should be increased or decreased based on the nesting bird response to disturbances.

**Significance:** Given the adjacent land uses, and highly impacted condition of the study area this project would not result in adverse impacts to biological resources.

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Development has been proposed for APN 3109-024-043 (Figure 1). Development may include installation of access roads, parking, and utilities (water, sewer, electric, etc.). The entire project area has been graded, compacted, and overlaid with crushed asphalt but regrading may take place.

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 protected, rare, threatened and endangered species of plants and wildlife that would be expected to use the existing habitat. Species of concern included the desert tortoise (*Gopherus agassizii*), Mohave ground squirrel (*Xerospermophilus mohavensis*), desert kit fox



(*Vulpes macrotis*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), Joshua tree (*Yucca brevifolia*), alkali mariposa lily (*Calochortus striatus*), desert cymopterus (*Cymopterus deserticola*), and Barstow woolly sunflower (*Eriophyllum mohanense*).

## **Study Area**

The approximately 2 acre (0.8 ha) study area was located north of Avenue L-12 and east of 12th Street West, T7N, R12W, a portion of the SW1/4 of the NE1/4 of the SE1/4 of Section 33, S.B.B.M. (Figures 2 and 3). The study site had a chain link privacy fence, oriented east-west, within the northern third of the study site. Chain fence with barbwire on top enclosed all sides of the study site. A highly disturbed field with Joshua trees was present along the western side of the study site. Storage facilities were present to the north of the study site. A highly disturbed field was present along the northeast side of the study site. A commercial facility was present along the southeast of the study site. Avenue L-12 formed the southern boundary. Commercial facilities were present south of Avenue L-12 and all around the general area.

## **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). Random transects were walked through and around the outside of the study site. Vehicular transects were accomplished along portions of the east, west, and south outside of the chain link boundary fencing.

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 10x42 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, Lowrey 2006, Murie 1974). Historical aerial photographs and the USGS topographic map of the study area and surrounding vicinity were reviewed. Photographs of the study site were taken (Figures 4 and 5).

## **Results**

Random transects were accomplished on 25 November and 13 December 2021. Weather conditions on 25 November 2021 consisted of warm temperatures (estimated 60 degrees F), 0% cloud cover, and moderate wind. Weather conditions on 13 December 2021 consisted of warm temperatures (estimated 50 degrees F), 100% cloud cover, and no wind. Gravel covered the northern third of the study site. Crushed asphalt was observed throughout the rest of the study area. Topography of the study area was approximately 2,495 feet (760 m) above sea level. There were no blue line streams delineated on the U.S.G.S. topographic map within the study area. There were no washes or streams observed within the project site.





Figure 4. Representative photographs of the northern third of the study area.



View is from eastern boundary of site looking north towards the internal privacy fence.



View from east boundary of site looking south.

Figure 5. Representative photographs of the study area.

The proposed project area was characteristic of a developed lot. One American elm (*Ulmus americana*), rattlesnake weed (*Euphorbia albomarginata*), and a mustard species (Brassicaceae) were observed during the line transect survey within the study site. The study area was devoid of perennial shrubs. No Joshua trees, alkali mariposa lilies, Barstow woolly sunflowers, desert cymopterus, or suitable habitat were observed within the study site.

Desert cottontail (*Sylvilagus auduboni*) scat was observed during the line transect survey within the study site. No suitable desert tortoise habitat was present within the study site. No suitable desert kit fox habitat was present within the study site. No suitable Mohave ground squirrel habitat was present within the study site. No suitable habitat for burrowing owl was present within the study site.

The project site was being used as a parking and storage lot. The entire study site had been graded and used as a parking and storage lot by 2009 based on Google Earth historical aerial photography.

## **Discussion**

It is likely that most annual species were visible during the time the field survey was performed. The study area was highly disturbed from previous and ongoing impacts. No sensitive plant species are expected to exist within the study site. Although not observed, several wildlife species would be expected to occur within the proposed project area (Table 1).

Human impacts within the study area are expected to continue. Habitat in the general area was degraded and fragmented. Burrowing animals within the proposed project area are not expected to survive construction activities. More mobile species, such as birds, are expected to survive construction activities. Development of this site will result in a minimal loss of cover and foraging opportunities for the common wildlife species occurring within and adjacent to the study area.

The desert tortoise is a state endangered and federally threatened listed species. The proposed project area was located within the geographic range of the desert tortoise. The proposed project site was not located in critical habitat designated for the Mojave population of the desert tortoise. Suitable habitat for desert tortoise was not present within or adjacent to the study area. Desert tortoises are not within the study area. No protection measures are recommended for desert tortoises.

The Mohave ground squirrel (MGS) is a state listed threatened species. The proposed project site was located within the geographic range of the MGS. The western limit of the geographic range of the Mohave ground squirrel is currently thought to be Highway 14. Suitable habitat was not present within or adjacent to the study site. MGS are not present within the study area. No protection measures are recommended for MGS.

Table 1. List of wildlife species that may occur within the proposed study area, APN 3109-024-043, Lancaster, California.

<u>Common Name</u>	<u>Scientific Name</u>
Deer mouse	<i>Peromyscus maniculatus</i>
House finch	<i>Carpodacus mexicanus</i>
House sparrow	<i>Passer domesticus</i>
Mourning dove	<i>Zenaida macroura</i>
Fly	Order: Diptera

Burrowing owls are considered a species of special concern by the CDFW. No burrowing owls or their sign were observed within the study area. No potential cover sites for burrowing owls were present within the study area. There is no habitat that could support burrowing owls within the study site. No protection measures are recommended for burrowing owls.

Many species of birds and their active nests are protected under the Migratory Bird Treaty Act. The one American elm provides potential nesting sites for small migratory birds within the study site. No Swainson’s hawk nesting is noted in eBird or in the CNDDDB in the urban areas of Lancaster. There is no forage opportunity within the study area for Swainson’s hawks and other raptors. No protection measures are recommended for Swainson’s hawks or other large migratory birds.

No suitable habitat for sensitive plant species was observed within the study site. Based on the results of the field survey sensitive plant species are not expected to occur within the study area and no protection measures are recommended. No other state or federal listed species are expected to occur within the proposed project area (California Department of Fish and Wildlife 2020, 2021, Smith and Berg 1988, U.S. Fish & Wildlife Service 2016).

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).

**Recommended Protection Measures:**

The American elm within the study area offers potential nesting habitat for small migratory birds. If possible, removal of this tree will occur outside the breeding season for migratory birds. Nesting generally lasts from February to July but may extend beyond this time frame. If tree removal will occur during or close to the nesting season, a qualified biologist will

survey the tree to be disturbed as close as possible but no more than one week prior to removal. If active bird nests are found impacts to nests will be avoided by either delaying work or establishing initial buffer areas of a minimum of 50 feet (16 m) around active migratory bird species nests. The project biologist will determine if the buffer areas should be increased or decreased based on the nesting bird response to disturbances.

**Significance:** Given the adjacent land uses, and highly impacted condition of the study area this project would not result in an adverse impact to biological resources.

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