

Biological Resource Assessment of
APN 3148-041-001
Lancaster, California

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Abstract

Development has been proposed for APN 3148-041-001, Lancaster, California. The approximately 15 acre (6 ha) study area was located south of Avenue J-2 and east of 17th Street East, T7N, R12W, a portion of the N1/2 of the NE1/4 of Section 24, S.B.B.M. A line transect survey was conducted on 22 October 2019 to inventory biological resources. The proposed project area was characteristic of a previously developed and abandoned lot. A total of twenty plant species and nineteen 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. The study site did not contain suitable habitat to support desert tortoises. No mitigation for this species is recommended. The proposed project site was located within the geographic range of the Mohave ground squirrel (*Xerospermophilus mohavensis*). The study site did not contain suitable habitat to support Mohave ground squirrels. No mitigation for this species is recommended. No burrowing owls (*Athene cunicularia*) or their sign were observed during the field survey. The study site did not contain suitable habitat to support burrowing owls. The few trees present provide potential nesting sites for migratory birds. No desert kit fox (*Vulpes macrotis*) or their sign were observed within the study area. No sensitive plants, specifically, alkali mariposa lily (*Calochortus striatus*), desert cymopterus (*Cymopterus deserticola*), and Barstow woolly sunflower (*Eriophyllum mohanense*) are expected to occur within the study area due to lack of suitable habitat. No other state or federally listed species are expected to occur within the proposed project area. No wetlands or ephemeral washes were observed within the study site.

Recommended Protection Measures:

If possible, removal of trees will occur outside the nesting 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 all areas 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.

Based on the condition of the habitat, surrounding land use, and lack of wildlife sign, no other protection measures are recommended.

Significance: This project is not expected to result in a significant adverse impact to biological resources.

Development has been proposed for APN 3148-041-001 (Figure 1). Development would include installation of access roads, parking, and utilities (water, sewer, electric, etc.). The entire project area would be graded prior to construction activities.

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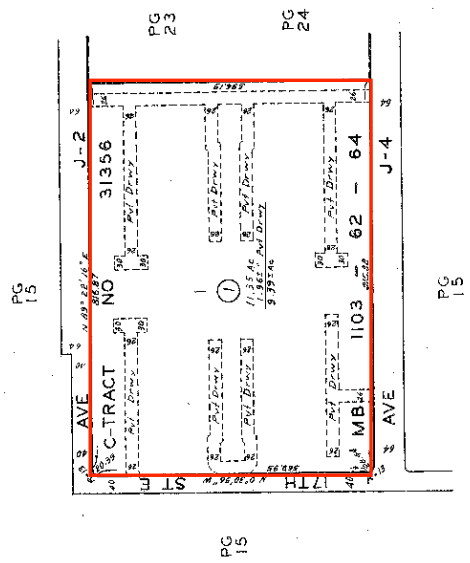
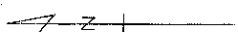


Figure 1. Location of proposed project site as depicted on APN map.

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. Species of concern included the desert tortoise (*Gopherus agassizii*), Mohave ground squirrel (*Xerospermophilus mohavensis*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), desert kit fox (*Vulpes macrotis*), desert cymopterus (*Cymopterus deserticola*), Barstow woolly sunflower (*Eriophyllum mohanense*), and alkali mariposa lily (*Calochortus striatus*).

Study Area

The approximately 15 acre (6 ha) study area was located south of Avenue J-2 and east of 17th Street East, T7N, R12W, a portion of the N1/2 of the NE1/4 of Section 24, S.B.B.M (Figures 2 and 3). The northern boundary of the project site was formed by Avenue J-2. The southern boundary of the project site was formed by Avenue J-4, and the western boundary was formed by 17th Street East. Single-family homes were present west of 17th Street East. The eastern boundary was formed by a block wall. Residential apartments were located to the east and south of the study site. A commercial shopping center was present to the north of Avenue J-2. Topography of the site was approximately 2,400 feet (774 m) above sea level.

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 812 feet (262 m) long and were spaced 50 to 75 feet (16 to 24 m) apart (U.S. Fish & Wildlife Service 2010). Transect spacing was altered due to the presence of homeless encampments.

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). The USGS topographic maps and aerial photographs were reviewed. Representative photographs were taken of the study site (Figure 4).

Results

A total of 10 line transects were walked on 22 October 2019. Weather conditions consisted of warm temperatures (estimated 75 degrees F), 0% cloud cover and light winds. A sandy loam surface soil texture was characteristic throughout the study area. There were no blue line streams delineated on the USGS topographic maps within the study area. There were no washes or streams observed on the aerial photography. No washes or streams were observed during the field survey.

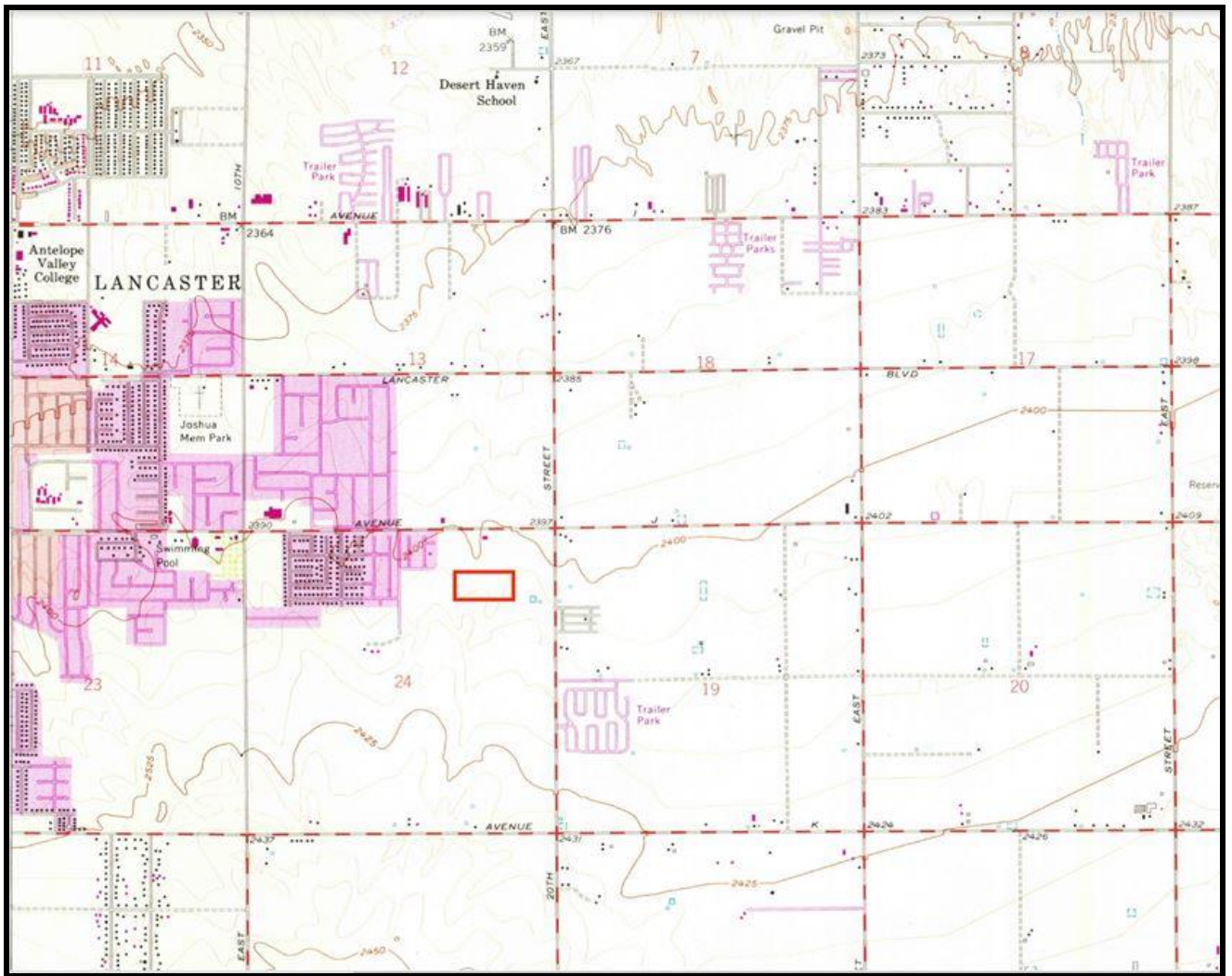


Figure 2. Approximate location of study area as depicted on excerpt from Lancaster East USGS, 1974, Quadrangle Maps.



Figure 3. Approximate location of study area showing surrounding land use as depicted on excerpt from Google Earth Aerial Photography, October 2019.



Figure 4. Representative photographs depicting general site characteristics.

The proposed project area was characteristic of a previously developed and abandoned lot. A total of twenty plant species were observed during the line transect survey (Table 1). Rabbit brush was the dominant perennial shrub species throughout the study area. Schismus (*Schismus* sp.) was the dominant annual species throughout the study area. Annuals within the study site were predominately invasive and weedy species (Table 1). No alkali mariposa lilies, Barstow woolly sunflowers, desert cymopterus, or suitable habitat were observed within the study site.

A total of nineteen wildlife species, or their sign were observed during the line transect survey (Table 2). No desert tortoises or their sign were observed during the field survey. No burrowing owls or their sign were observed during the field survey. No bird nests were observed within the study site. No desert kit foxes or their sign were observed during the field survey. No Mojave ground squirrels were detected visually or audibly during the field survey.

Heavy trash dumping was present along the eastern portion of the study site consisting of household items and furniture. Old concrete building foundations were observed within the study area. Two homeless shelters with occupants and evidence of fire were located in the northeastern portion of the study site. A walking and biking path was observed oriented from the southwest corner to the northeast corner with other smaller paths noted throughout the study area. Elevated dirt pads, utility vaults and broken concrete pads were noted within the study site. Human traffic crossing the study site was observed during the field survey.

Discussion

It is likely that some annual species were not visible during the time the field survey was performed. Based on the habitat and level of disturbance, no sensitive plants species are expected to exist on the study site. Although not observed, several wildlife species would be expected to occur within the proposed project area (Table 3).

Human impacts are expected to increase as urban development continues to occur in the area. No other open habitat is present within the general area. Burrowing animals within the proposed project area are not expected to survive construction activities. More mobile species, such as birds are expected to survive, but they may have less cover and foraging habitat available.

The desert tortoise is a state and federally listed threatened 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. Based on field observations, desert tortoises are not present within the area. No protection measures are recommended for desert tortoises.

The Mohave ground squirrel is a state listed threatened species. The proposed project site was located within the geographic range of the Mohave ground squirrel. Habitat within the study site was not suitable for Mohave ground squirrels due to the lack of forage and cover. Based on this, Mohave ground squirrels are not expected to be present within the area. No protection measures are recommended for Mohave ground squirrels.

Table 1. List of plant species that were observed during the line transect survey of APN 3148-041-001, Lancaster, California.

<u>Common Name</u>	<u>Scientific Name</u>
American elm	<i>Ulmus americana</i>
Four-wing saltbush	<i>Atriplex canescens</i>
Rabbit brush	<i>Chrysothamnus nauseosus</i>
Black-eyed susan	<i>Rudbeckia hirta</i>
Fiddleneck	<i>Amsinckia tessellata</i>
Herb willow	<i>Epilobium</i> sp.
Russian thistle	<i>Salsola iberica</i>
Bunch grass	Family: Poaceae
Schismus	<i>Schismus</i> sp.
Red brome	<i>Bromus rubens</i>
Foxtail barley	<i>Hordeum leporinum</i>
Cheatgrass	<i>Bromus tectorum</i>
Bermuda grass	<i>Cynodon dactylon</i>
Red stemmed filaree	<i>Erodium cicutarium</i>
Russian knapweed	<i>Rhaponticum repens</i>
Annual burweed	<i>Franseria acanthicarpa</i>
Tumble mustard	<i>Sisymbrium altissimum</i>
Rattlesnake weed	<i>Euphorbia albomarginata</i>
Prickly lettuce	<i>Lactuca seriola</i>
Horseweed	<i>Canyza honariensis</i>

Table 2. List of wildlife species, or their sign, that were observed during the line transect survey of APN 3148-041-001, Lancaster, California.

<u>Common Name</u>	<u>Scientific Name</u>
California ground squirrel	<i>Citellus beecheyi</i>
Black-tailed jackrabbit	<i>Lepus californicus</i>
Desert cottontail	<i>Sylvilagus auduboni</i>
Domestic dog	<i>Canis familiaris</i>
Domestic cat	<i>Felis catus</i>
Gull sp.	Family: Laridae
Rock dove	<i>Columba livia</i>
Hummingbird sp.	Family: Trochilidae
Common raven	<i>Corvus corax</i>
Say's phoebe	<i>Sayornis saya</i>
Northern mockingbird	<i>Mimus polyglottos</i>
Horned lark	<i>Eremophila alpestris</i>
Western meadowlark	<i>Sturnella neglecta</i>
Harvester ants	Order: Hymenoptera
Grasshopper spp. (2)	Order: Orthoptera
Dragonfly	Order: Odonata
European honey bees	Order: Hymenoptera
Butterfly (white)	Order: Lepidoptera

Table 3. List of wildlife species that may occur within the study area, APN 3148-041-001 Lancaster, California.

<u>Common Name</u>	<u>Scientific Name</u>
Deer mouse	<i>Peromyscus maniculatus</i>
Side blotched lizard	<i>Uta stansburiana</i>
Mourning dove	<i>Zenaida macroura</i>
European starling	<i>Sturnus vulgaris</i>
House finch	<i>Carpodacus mexicanus</i>
House sparrow	<i>Passer domesticus</i>
Spider	Order: Araneida
Fly	Order: Diptera
Wasp	Order: Hymenoptera

Desert kit foxes are a fully protected species by California Department of Fish and Wildlife (CDFW). No sign of desert kit fox activity was observed within the study site. The study site is surrounded by development and little cover is present. No protection measures are recommended for desert kit foxes.

Burrowing owls are considered a species of special concern by the CDFW. The California ground squirrel (*Citellus beecheyi*) burrows within the project site could provide potential cover sites for burrowing owls. However, this site is within a fully developed urban area. The project site has occupied encampments within it, and human traffic crossing the area between the retail shops and the homes/apartments was commonly observed during the field survey. It is highly unlikely a burrowing owl would move into this site with this level of human presence. No protection measures are recommended for burrowing owls.

Many species of birds and their active nests are protected under the Migratory Bird Treaty Act. Swainson's hawk would not be expected to nest within the study area given the lack of foraging habitat, tree type/size, and level of activity. Smaller migratory birds may potentially nest in the trees within the study site.

No suitable habitat for alkali mariposa lily, Barstow woolly sunflower or desert cymopterus was observed within the study site. Based on the results of the field survey these species are not expected to occur within the study area and no protection measures are recommended. No other state or federally listed threatened or endangered species are expected to occur within the proposed project area (California Department of Fish and Wildlife 2015, 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:

If possible, removal of trees will occur outside the nesting 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 all areas 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.

Based on the condition of the habitat, level of human presence, surrounding land use, and lack of wildlife sign, no other protection measures are recommended.

Significance: This project is not expected to result in a significant adverse impact to biological resources.

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