Biological Resource Assessment of
APN 3090-431-07
Victorville, California

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Abstract

Development has been proposed for APN 3090-431-07, Victorville, California. The approximately 7 acres (2.8 ha) study area was located south of Ottawa Street, and east of Enterprise Way, T5N, R4W, a portion of the NE1/4 of the SW1/4 of the of Section 27, S.B.B.M. A line transect survey was conducted on 24 November 2021 to inventory biological resources. The proposed project area was characteristic of a heavily disturbed lot. A total of 11 plant species and 6 wildlife species or their sign were observed during the line transect survey. The study site did not support desert tortoise (*Gopherus agassizii*) habitat. The study site did not support Mohave ground squirrel (*Xerospermophilus mohavensis*) habitat. No burrowing owls (*Athene cunicularia*) or their sign were observed within the study site. California ground squirrel (*Citellus beecheyi*) burrows were observed within the study site. California ground squirrel burrows can provide future potential cover sites for burrowing owls. No desert kit foxes (*Vulpes macrotis*) or their sign were observed within the study site. Desert kit foxes would not be expected to use this study site due to its fenced location. The study area does not provide forage for Swainson's hawks (*Buteo swainsoni*) or other raptors due to the low wildlife presence. The study site did not provide potential nesting sites for migratory birds. No sensitive plants, specifically Joshua tree (*Yucca brevifolia*), 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 the lack of suitable 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. A channelized wash/storm drain was present outside of the fenced boundary of the study site. A pipe from a dirt parking area along the eastern boundary was observed within the study site. This pipe appeared to have been used to dump water into the study site.

Recommended Protection Measures:

A burrowing owl survey should be accomplished within 30 days prior to construction activities to ensure burrowing owls have not moved into the study area. If burrowing owls are discovered the guidance outlined in the California Department of Fish and Wildlife titled "Staff Report on Burrowing Owl Mitigation" will be used for addressing burrowing owl issues on the study site (California Department of Fish and Game 2012).

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

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.

Development has been proposed for APN 3090-431-07 (Figure 1). Development may include installation of access roads, parking, and utilities (water, sewer, electric, etc.). The entire project area would be graded prior to construction activities.

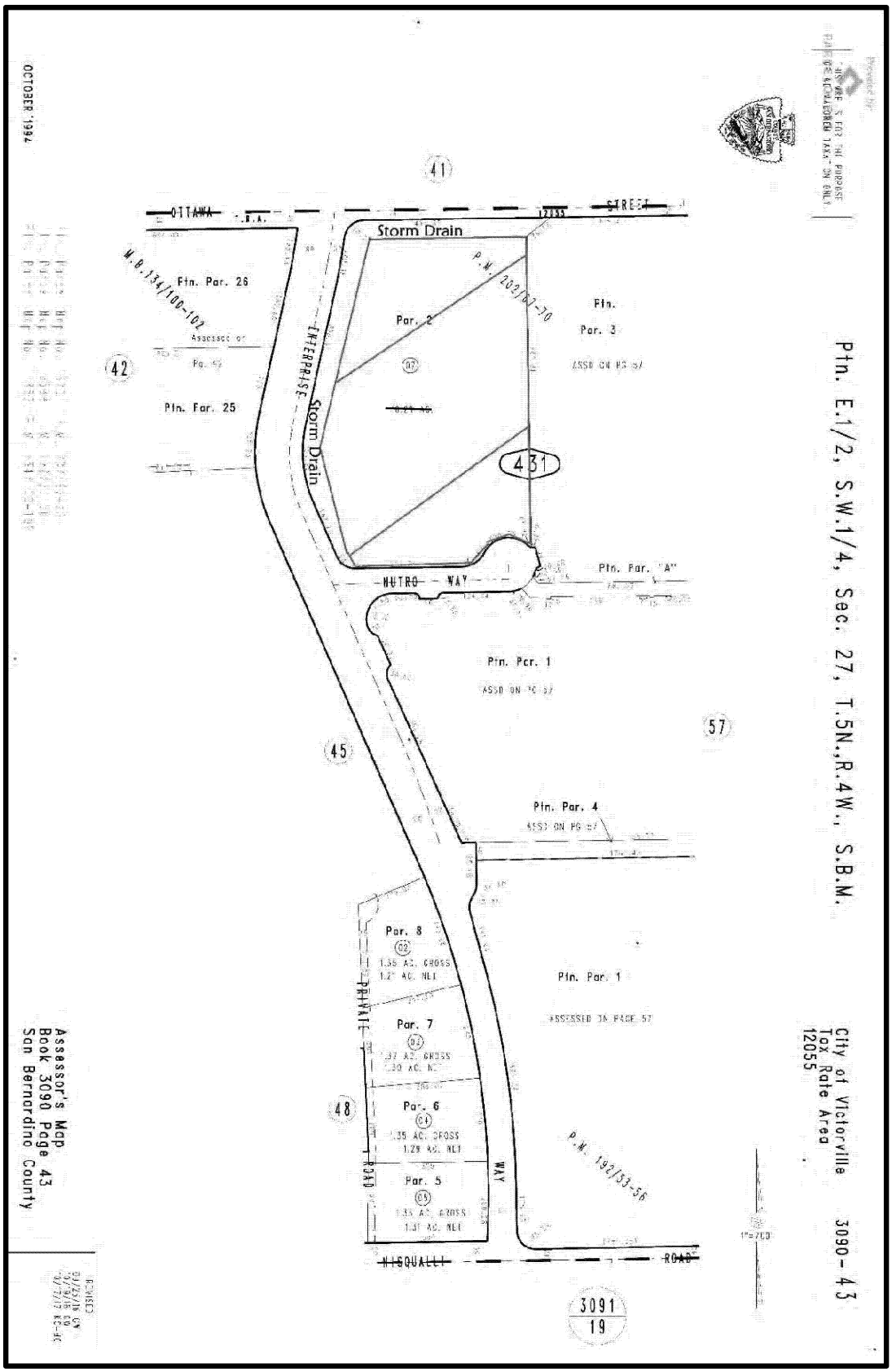

Figure 1. Location of proposed project site as depicted on APN map.

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 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 7 acres (2.8 ha) study area was located south of Ottawa Street, and east of Enterprise Way, T5N, R4W, a portion of the NE1/4 of the SW1/4 of the of Section 27, S.B.B.M. (Figures 2 and 3). The study site had a chain link fence along the west and north boundaries. A wrought iron fence existed along the eastern boundary. A paved road existed along the southern boundary. A sidewalk existed west and north of the chain link fence. A channelized wash/storm drain existed west and north of the sidewalk. Enterprise Way was west of the study site. Ottawa Street was north of the study site. A wrought iron fence and commercial storage buildings existed adjacent to the eastern boundary. Industrial buildings were present to the east and south of the study site.

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 a north-south orientation. Line transects were approximately 660 feet (201 m) long and spaced about 100 feet (30 m) apart (U.S. Fish & Wildlife Service 2010).

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 map of the study area and surrounding vicinity was reviewed. Photographs of the study site were taken (Figures 4 and 5).

Results

A total of 4 line transects were walked on 24 November 2021. Weather conditions consisted of warm temperature (estimated 60 degrees F), 0% cloud cover, and moderate wind. Sandy clay loam surface soil texture was present in the north half of the study site. Most of the south half of the study site was covered with gravel. Topography of the study area was

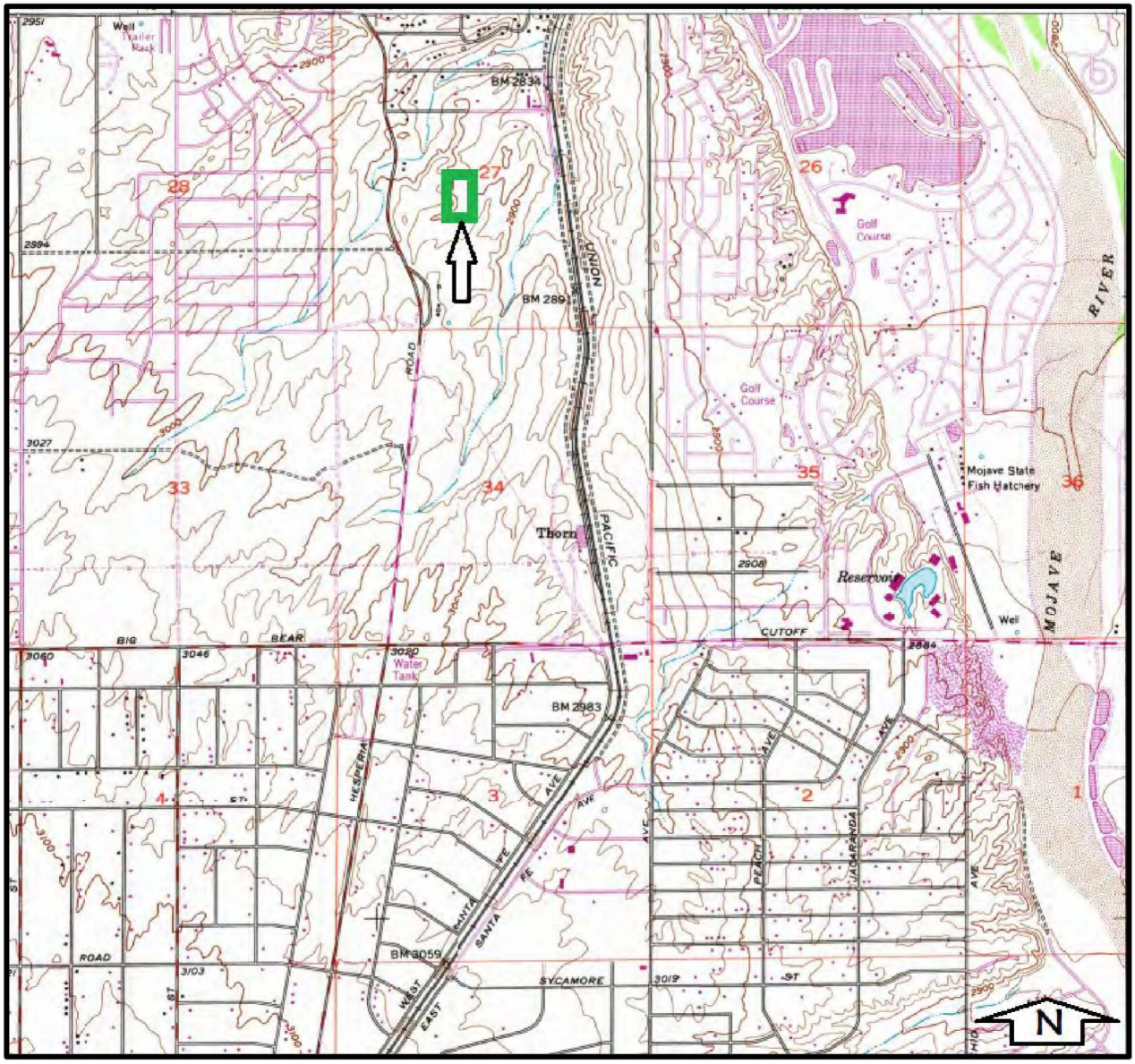

Figure 2. Approximate location of study area as depicted on excerpt from USGS Quadrangle, Hesperia, California, 7.5' 1980.

Figure 3. Approximate location of study area, Google Earth, April 2018, showing surrounding land use.

Figure 4. Representative photographs of the study area. Top photograph of site is from the southern boundary. Bottom photograph is within the northern portion of the site.

Figure 5. Representative photographs of the study area. Top photograph of site shows pipe used to drain water from adjacent property onto the study site. Bottom photograph shows the channelized wash/storm drainage present along the western and northern boundary of the site.

approximately 2,894 to 2,912 feet (882 to 888 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. A channelized wash/storm drain was present outside of the fenced boundary of the study site. A pipe from a dirt parking area along the eastern boundary was observed within the study site. This pipe appeared to have been used to drain water into the study site.

The proposed project area was characteristic of a highly disturbed lot. A total of 11 plant species were observed during the line transect survey (Table 1). The dominant perennial shrub species throughout the study area was rabbit brush (*Chrysothamnus nauseosis*). Annual species were sparse within the study area consisting of primarily weedy and invasive species. No Johsua trees, alkali mariposa lilies, Barstow woolly sunflowers, desert cymopterus, or suitable habitat were observed within the study site.

Six 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 suitable desert tortoise habitat was observed within the study site. No burrowing owls or their sign were observed within the study site during the field survey. California ground squirrels (*Citellus beecheyi*) and their burrows were observed within the study site. No bird nests were observed within the study area. Vegetation within the study site does not provide suitable nesting habitat. No Swainson's hawk nesting sites were documented within 5 miles (8 km) of the study site (eBird 2022). No desert kit foxes, dens, or tracks were observed within the study site. No suitable Mohave ground squirrel habitat was present within the study site (CDFW 2019).

The project site had been previously graded and the southern half built up in the past. Remnants of a gravel covered area was observed within the northern half of the study site. The study site boundaries consisted of constructed banks. Several dump sites were present within the study site, primarily in the southern and northern boundaries. Scattered litter was observed within the study site.

Discussion

It is likely that some annual species were not visible during the time the field survey was performed. Nearly all the remnant annuals on the study site were invasive or weedy species (Table 1). The study area was highly disturbed from previous 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 3).

Human impacts within the study area are expected to continue. Habitat in the general area consisted of an urban environment. 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.

Table 1. List of plant species that were observed during the line transect survey of APN 3090-431-07, Victorville, California.

Common Name	Scientific Name
Creosote bush	*Larrea tridentata*
Rabbit brush	*Chrysothamnus nauseosis*
Annual burweed	*Franseria acanthicarpa*
Red-stem filaree	*Erodium cicutarium*
Vinegar weed	*Trichostema lanceolatum*
Rattlesnake weed	*Euphorbia albomarginata*
Annual burweed	*Franseria acanthicarpa*
Mustard sp.	Brassicaceae
Sahara mustard	*Brassica tournefortii*
Russian thistle	*Salsola iberica*
Cheat grass	*Bromus tectorum*

Table 2. List of wildlife species, or their sign, that were observed during the line transect survey of APN 3090-431-07, Victorville, California.

Common Name	Scientific Name
California ground squirrel	*Citellus beecheyi*
Desert cottontail	*Sylvilagus auduboni*
Black-tailed jackrabbit	*Lepus californicus*
Common raven	*Corvus corax*
Harvester ants	Order: Hymenoptera
Ants	Order: Hymenoptera

Table 3. List of wildlife species that may occur within the proposed study area, APN 3090-431-07, Victorville, California.

Common Name	Scientific Name
Rodents	Order: Rodentia
Deer mouse	*Peromyscus maniculatus*
Rock dove	*Columba livia*
Horned lark	*Eremophila alpestris*
Fly	Order: Diptera
Spider	Order: Araneida

The desert tortoise is a state endangered and federal 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. Suitable habitat for desert tortoise was not present within or adjacent to the study area. Desert tortoises are not present within the study area. No protection measures are recommended for desert tortoises.

The Mohave ground squirrel (MGS) is a state listed threatened species. The study area was located within the geographic range of MGS. MGS habitat consists of a variety of desert scrub habitats, to include a specific assemblage of required shrub and annual species within those habitats, none of which occur any longer within the project site (Figures 4 and 5, Table 1). MGS foraging behavior changes depending on season and whether it has been a dry or wet season. Stems and leaves from shrubs are necessary to provide forage during times annuals are unavailable. The lack of shrubs within and around the study site preclude MGS presence. A table listing MGS habitats and a discussion of required shrubs and annuals can be found in the 2019 CDFW publication titled "A Conservation Strategy for the Mohave Ground Squirrel." California ground squirrels (CGS) are present within the study site. Since MGS prefer natural habitats, interactions with CGS would not occur often (CDFW 2019). CGS are larger and more aggressive than MGS which would seem to indicate they would be unlikely to coexist (CDFW 2019). No MGS are expected to be present within the study area. Given the lack of suitable habitat, presence of CGS, lack of adjacent habitat, no protection measures are recommended for MGS.

Burrowing owls are considered a species of special concern by the California Department of Fish and Wildlife (CDFW). No burrowing owls or their sign were observed during the field survey. CGS burrows provide future potential suitable cover sites for burrowing owls.

The study site was graded, and developed prior to 2005. The study site was constructed banks approximately 8 feet (2.4 m) high along the east and south boundaries. Aerial photographs show vehicles parked in the study area. The study site no longer appears to be used as a parking area and showed signs it was revegetating, primarily with rabbit brush and invasive weeds. No suitable habitat for sensitive plant species was present 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:

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

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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