General Biological Resources Assessment
Kuri Storage Project
Phelan, California

Prepared for:

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November 7, 2019

Project Number: LIL19-114
CERTIFICATION

I hereby certify that the statements furnished below and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Karen Kirtland

NATURAL RESOURCES ASSESSMENT, INC.

November 7, 2019
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1.0 Introduction

Natural Resources Assessment, Inc. (NRAI) was contacted by Lilburn Corporation to prepare a general biological assessment for a proposed Self-Storage Facility in Phelan, San Bernardino County, California (Figure 1). The general biological assessment was required as part of environmental approvals for the project.

2.0 Location and Description of the Property

The property is located north of Highway 138 in the unincorporated community of Phelan/ Pinon Hills (Figure 1). Phelan Road is south of the property. The eastern border is along Baldy Mesa Road. An existing residence is along part of the northern border. Open space borders the remaining section of the northern border, as well as the western, eastern and southern borders (Figure 2).

The property lies in Section 13, Township 4 north and Range 6 west of the Baldy Mesa U.S. Geological Survey (USGS) 7.5’ topographic map, San Bernardino baseline and meridian (Figure 1).

The proposed project is a Recreational Vehicle (RV) storage and personal mini-storage facility. The Project site includes a total of four parcels including APNs: 3065-481-08, 3065-481-09, 3065-481-10 and 3065-481-11; the first two parcels will remain vacant and the latter two will be developed with the proposed Self-Storage Facility.

3.0 Methods

3.1 Data Review

A data search was conducted to provide information on the known occurrence of plant and wildlife species within the vicinity of the property. This review included biological texts on general and specific biological resources, and those resources considered to be sensitive by various wildlife agencies, local governmental agencies and interest groups. The documents reviewed include:

- General texts and other documents identifying potential resources that were found within or near the property.
- A review of collection records from participating herbaria in California available through the Consortium of California Herbaria, 2019;
- Documented rare plant occurrences compiled in the California Natural Diversity Data Base (CNDDB) by the California Department of Fish and Wildlife, 2019;
- A review of documented occurrences of common and rare plants from Calflora, 2019;
- Species descriptions from the Jepson Online Interchange, 2019;
- A review of (IPaC) results, 2019
- Geological maps available from the US Geological Survey (Morton and Miller 2003);
- Soils data from the Natural Resources Conservation Service and available from the Web Soil Survey, 2019; and,
Figure 1. State and Regional Location of the Property
Figure 2. Aerial Showing Property Site and Condition (Date Unknown).
The results of the data search and assessment are provided in Appendix A. NRAI also reviewed other available technical information on the biological resources in the region occupied by the property. We used the information to focus our survey efforts in the field.

3.2 Field Surveys

Ms. Karen Kirtland of NRAI and Mr. Ricardo Montijo (subconsultant to NRAI) conducted the survey on October 3, 2019. Because of the potential presence of the desert tortoise (Gopherus agassizii), the field team conducted the survey according to the 2018 standard protocols set forth by the U. S. Fish and Wildlife Service (USFWS)\(^1\) and the California Department of Fish and Wildlife (CDFW)\(^2\) as the basis for the survey. Representative photographs were taken of the property and are included in Section 4.0.

The field survey included searches for sensitive biological resources and observations of potential habitat for sensitive species. Sign surveyed for included nests, tracks, scat, burrows, skeletal remains, and live animals.

3.3 Jurisdictional Waters and Wetland Evaluation

The field team evaluated the property for drainages subject to jurisdiction by the U. S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act, CDFW under Sections 1600 et seq. of the California Fish and Game Code, and the water act regulations of the State Water Resources Control Board.

4.0 Results

4.1 Weather Conditions, Topography and Soils

At the beginning of the survey the sky was clear and the temperature was 64 degrees Fahrenheit. Winds were averaging three to five miles per hour (mph). At the end of the survey the sky was clear and the temperature was 73 degrees Fahrenheit. Winds were averaging six mph, gusting to ten mph.

The site topography is flat. Elevations range from approximately 3680 feet in the northeast corner to approximately 3700 feet in the southwest corner.

The soil on site is Cajon sand (Figure 3). This soil is sandy, occurring on zero two percent slopes. It is formed from alluvium derived from granite sources and is found on alluvial fans. Cajon sand is a non-hydric soil and never floods or ponds.

4.2 Site Condition

The property has been somewhat disturbed. There is a dirt road that runs through the southern part of the property (Figure 2, Photos 1 and 2). The dirt road was in active use at the time of the survey, with several cars using this road to access Baldy Mesa Road from the west.

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\(^2\) https://nrm.dfg.ca.gov/Handler.ashx?DocumentID=174633&inline
Figure 3. Property Soil Distribution
Photo 1. The existing dirt road is on the left of the photograph, and the gas station and empty lot on the right. Looking east.

Photo 2. Existing dirt road (right) and additional tire tracks across the property. Looking east at sparse shrub cover.
The remainder of the site shows evidence of some kind of disking or weed control. There are also several vehicle tracks crossing the property and trash dumping (Photos 1 - 4).

**4.3 Vegetation**

The plant community on site is Mojave creosote bush scrub (*Ephedra nevadensis* and *Ericameria nauseosa* alliances) and has been impacted by past and current uses (Figure 4). Scrub cover is sparse (Photos 1 - 4). Scrub species observed include burrobush (*Ambrosia dumosa*), Mormon tea (*Ephedra nevadensis*), rabbit bush (*Ericameria nauseosa*), Anderson’s boxthorn (*Lycium andersonii*) and Emory’s indigo bush (*Psorothamnus emoryi*). Only a few creosote bushes (*Larrea tridentata*) and Joshua trees (*Yucca brevifolia*) are present. There were no cactus species seen.

The undergrowth was dominated by native and non-native weedy species such as desert fiddleneck (*Amsinckia tessellata*), Mediterranean grass (*Schismus barbatus*), ragweed (*Ambrosia psilostachya*), common barley (*Hordeum vulgare*), and Lemmon’s lessingia (*Lessingia lemmontii*).

A complete list of plant species observed is provided in Appendix B.

**4.3.1 Wildlife**

No amphibians were observed, probably because no suitable habitat for desert amphibians exists on the property. Marginal habitat for a number of reptile species is present, but only side-blotched lizard (*Uta stansburiana*) was observed. Bird species observed included common raven (*Corvus corax*), mourning dove (*Zenaida macroura*), black-throated sparrow (*Amphispiza bilineata*) and lesser goldfinch (*Spinus psaltria*).

Sign of mammal species include Merriam’s kangaroo rat (*Dipodomys merriami merriami*), Beechey ground squirrel (*Otospermophilus beecheyi*), Audubon’s cottontail (*Sylvilagus audubonii*) and black-tailed jackrabbit (*Lepus californicus*).

A complete list of wildlife observed is provided in Appendix B.

**4.4 Sensitive Resources**

Appendix A contains a table of those sensitive species and others identified as part of the literature review. The table summarizes their habitat requirements, seasonal distribution, legal standing and the potential for their presence or absence on site.

All sensitive species were considered as potentially present on the property if its known geographical distribution encompassed all or part of the project site or if its distribution was near the site and its general habitat requirements were present.

**4.4.1 Desert Tortoise**

The desert tortoise (*Gopherus agassizii*) occurs from California east to Utah. It ranges from below sea level (Death Valley and Sonora, California) to over 7,000 feet in a few areas. In the Mojave Desert, desert tortoises are typically between 1,000 and 4,000 ft elevation and normally occur in creosote scrub, although other native desert scrub communities can also host this species. Tortoise habitats are often-associated with well-drained sandy loam soils in plains, alluvial fans, and bajadas, but also sometimes dunes, edges of basaltic flow and other rock outcrops, and, rarely, in well drained and vegetated alkali flats.
Photo 3. Tire tracks crossing through mostly weedy ground cover. Looking northeast.

Photo 4. Trash dumping on the northern boundary of the property.
Figure 4. Vegetation Communities
The desert tortoise ranges from 8 to 15 inches in length (Stebbins 1985). The high-domed upper shell (carapace) and flattened lower shell (plastron), and since they are often subterranean when inactive (Nagy and Medica 1986), their burrows take on a distinctive half-moon shape appearance. Tortoises excavate in part by using their stocky limbs to push dirt behind them, so, burrows often feature a fan-shaped dirt apron outside of the burrow.

Tortoises forage primarily on native winter and summer annuals (dicots and grasses), perennial grasses, cacti, and other vegetation, including a few perennial shrubs in descending order of preference. Individuals may emerge from burrows when temperatures and precipitation are favorable. Rainfall often precedes emergence and individuals have been observed emerging following summer thunderstorms.

The desert tortoise hibernates or estivates underground for much of the year as an adaptation to the extreme temperature changes characteristic of desert winters and summers. As a result, determining whether desert tortoise is present in a particular area is generally restricted to locating sign, or evidence, of recent activity.

Population declines in desert tortoises are due to a number of factors. These include loss or destruction of habitat, killing or harming of animals in the wild, collection of individual animals, raven predation and disease.

The California Department of Fish and Wildlife listed the tortoise as threatened under California Endangered Species Act on June 22, 1989. The tortoise was emergency listed as endangered under the Federal Endangered Species Act by the U. S. Fish and Wildlife Service on August 4, 1989. The Service listing was later changed to threatened. Both listings were made on the basis of declining populations due to the factors listed above. The discovery that the tortoise was rapidly disappearing throughout its range as a result of a disease known as Upper Respiratory Disease Syndrome (URDS) was a critical part of the listing decisions.

**Findings**

The field team found marginally suitable habitat for desert tortoise, but did not identify burrows, scat or other sign indicating tortoise are resident on site. Because the property is connected to suitable habitat on the east and west there is a potential for tortoise to move onto or wander across the site.

Construction of the project will have indirect impacts to potential desert tortoise habitat. There are potential indirect impacts to tortoises wandering on during construction.

A pre-construction survey and biological monitoring during the construction is required to determine if desert tortoises are in or adjacent to the property.

Regardless of the survey results, tortoises cannot be subject to take per the requirements of state and federal law. This report does not constitute authorization for incidental take of desert tortoise. Handling or other inappropriate treatment of tortoises must be avoided until authorization is obtained from the USFWS and CDFW.

**4.4.2 Mohave Ground Squirrel**

Mohave ground squirrel (*Spermophilus mohavensis*) is a ground-dwelling mammal that occupies creosote bush scrub, saltbush scrub and Joshua tree woodland. This species is found in all major desert scrub habitats in the western Mojave Desert, and has been found at oases, along riverbanks, and washes, in dunes and on rocky slopes. The Mohave ground squirrel prefers flat to moderate terrain, and has only rarely been
found on steep hillsides. Preferred soil types are sandy, alluvial soils, but this species also occupies gravelly and even rocky soils.

The documented habitat range for the Mohave ground squirrel includes suitable habitat within Inyo, Kern, Los Angeles and San Bernardino counties in the western Mojave Desert.

The diet of the Mohave ground squirrel is varied, but is focused primarily on the leaves and seeds of forbs and shrubs. Green annual plants are foraged on early in spring, but as summer progresses, the leaves of perennial shrubs make up a larger part of their diet. They will also forage on invertebrates, but this food source is a relatively small part of their diet.

This species is active in spring from February to early July, and estivates throughout most of the remaining months. Juveniles will remain above ground well into July and August to build up fat reserves.

The Mohave ground squirrel is not listed by the USFWS. It is listed as threatened by the CDFW. The species was listed because of the decline and loss of habitat in the Kern County portion of its range, as well as the loss of habitat due to development in the Victor Valley and Barstow areas.

Findings

Mohave ground squirrel and white-tailed antelope squirrel (*Ammospermophilus leucurus*) occupy similar habitats and their burrows cannot be told apart. While Mohave ground squirrels would not be active aboveground at the time of the survey, white-tailed antelope squirrels would be.

The field team did not identify any burrows belonging to ground squirrels, nor were any ground squirrels observed. In addition, the property habitat is somewhat degraded and subject to occasional human use. Mohave ground squirrels are not expected to be present on site.

4.4.3 Burrowing Owl

The burrowing owl (*Athene cunicularia*) is a resident species in lowland areas of southern California (Garrett & Dunn 1981). It prefers open areas for foraging and burrowing, and is found widely scattered in open desert scrub. This species is scarce in coastal areas, being found mainly in agricultural and grassland habitats. The largest remaining numbers are in the Imperial Valley, where it is common in suitable habitat adjacent to the agricultural fields.

The burrowing owl prefers large flat open areas for nesting and hunting (Garrett & Dunn 1981). This species lives in burrows constructed by other ground-dwelling species in grassy or sparse shrubby habitat. Burrowing owls also take over other types of burrows, including manmade objects such as pipes. This species forages low over the ground surface for insect prey, and seldom flies very high in the air.

As a result of coastal development, the burrowing owl is declining in coastal habitats. The CDFW has designated the burrowing owl as a California SSC. These species are so designated because “declining population levels, limited ranges and/or continuing threats have made them vulnerable to extinction.” (California Department of Fish and Wildlife 2012).

Findings

No suitable burrowing owl burrows were observed, and no animals were observed. There was one potential burrow site. There is an active Beechey ground squirrel burrow complex in the western section of the property (Figure 5, Photo 5). Abandoned Beechey ground squirrel burrows are sometimes used by burrowing owls.
Figure 5. Joshua Trees and Potential Burrowing Owl Burrow Site
No suitable pipes, concrete structures or similar man-made features that could provide suitable burrow sites were found. Burrowing owls are not expected to nest on the property at this time, but could move onsite if suitable burrow sites (like the Beechey ground squirrel burrow mound) become available over time. Therefore, the following measures are recommended.

- A pre-construction burrowing owl breeding bird survey following the recommended guidelines of the MSHCP will be required to determine if nesting is occurring.

- Occupied nests will not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist verifies through non-invasive methods that either (a) the adult birds have not begun egg-laying and incubation; or (b) the juveniles from the occupied nests are foraging independently and are capable of independent survival.

- If the biologist is not able to verify one of the above conditions, then no disturbance shall occur during the breeding season within a distance determined by the qualified biologist for each nest or nesting site. For the burrowing owl, the recommended distance is a minimum of 160 feet.

### 4.4.4 Desert Kit Fox

The kit fox (*Vulpes macrotis*) is the smallest member of the dog family in North America. Body color ranges from yellowish to gray. They have a dark-colored back, light colored lower and undersides and light, almost white inner ears. Like the gray fox, they have a dark-tipped tail, but unlike the gray fox, there is no dark stripe running up to the base of the tail. They also have distinct dark patches on each side of the muzzle, between the eyes and the mouth.
The historical range of this species extended from the southeastern Oregon down the desert side of the Sierra Nevada, into the Inyo region and through the Mojave and Colorado deserts. Kit fox populations also extended into the southern half of the San Joaquin Valley.

The kit fox constructs dens in arid habitats such as desert scrub, chaparral and arid grasslands. They occupy suitable habitat at elevation ranging from 400 to 1900 meters (1300 to 6000 feet). In the desert, they generally prefer to avoid human dwellings, although they can be found in urban and agricultural areas if there is sufficient food. They prey primarily on small rodents and insects, and can function as pest control of rodents in agricultural areas. They are active mostly at dawn and dusk, although they have been observed both during the day and late at night (personal observation, Karen Kirtland).

The kit fox species has been split into two subspecies. The first one, the San Joaquin kit fox (*Vulpes macrotis mutica*), is found only in the San Joaquin Valley. The San Joaquin subspecies has been formally recognized as threatened by the CDFW and endangered by the USFWS due to the loss of habitat.

The desert kit fox (*Vulpes macrotis arsipus*) subspecies occupies the remainder of the historical range. It is recognized as a fully protected species by the CDFG because of general population declines due to habitat loss.

**Findings**

There were no active kit fox dens located on the property. No impacts to kit fox are expected.

4.4.5 **Other Sensitive Resources**

Species not discussed in the text but that were reviewed to determine their potential presence on the property are discussed in Appendix A. None of these resources were found during the surveys. Some of these resources are potentially present, but impacts to them would not be considered significant because of their low sensitive status. The loss of habitat as a result of project construction would not constitute a substantial loss of the total habitat for that species.

4.5 **Protected Native Plant Species**

The California Desert Native Plants Act\(^3\) regulates the taking of plant species for commercial purposes. It also regulates the permitting process for the taking of desert plant species, making it unlawful for “any person to destroy, dig up, mutilate or harvest any living native plant, or the living or dead parts of any native plant, except its fruit, without obtaining written permission from the landowner and a permit . . .” (State of California 1982, Division 23, Chapter 5, Section 80111).

The Act allows exceptions for “a public agency or to a publicly or privately-owned public utility when acting in the performance of its obligation to provide service to the public. This section does not prevent the landowner or his or her agent from complying with any other federal, state, or local laws or regulations.” (State of California 1982, Division 23, Chapter 5, Section 80117).

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\(^3\) [http://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=FAC&division=23.&title=&part=&chapter=3.&article=](http://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=FAC&division=23.&title=&part=&chapter=3.&article=)
Photo 6. Two of the Joshua trees found on site.
In addition to the State Act, Division 8, Chapter 88.01: Plant Protection and Management, of the County Development Code (Code) requires the protection of California native plants within County boundaries. Excepted entities under the Code include “(b) Government Owned Lands. Removal from lands owned by the United States, State of California, or local governmental entity . . .” (Section 88.01.030).

Findings

Joshua tree was the only protected species found on the property (Figure 5, Photo 6). No protected cactus or other yucca species are present. There are no creosote bush rings on site.

Any construction that removes any protected Joshua trees would have to conduct the removal according to the requirements of the County ordinance. In addition, the removal may require a permit from the agricultural commissioner or local sheriff in the county where trees will be removed.

All protected trees to be removed should be flagged and transplanted to an undisturbed area prior to construction per the requirements of State regulation and County ordinance.

4.6 Raven Predation

Ravens follow human activity, in that they are drawn to occupied areas for food and nesting sources. Ravens have always been present in the desert, but the extension of various types of development into previous open space areas has resulted in a rapid increase in raven populations. When ravens forage for food, they prey on whatever is available, including desert tortoise.

The property is somewhat disturbed and has existing adjacent human uses that already attract ravens. The additional increase in foraging habitat for ravens created by the project is not expected to add significantly to the problem of raven predation in this area of Phelan.

However, we recommend the following measures be implemented as part of the Best Management Practices to further reduce the use of the site by ravens and a potential increase in foraging by ravens on adjacent properties:

- Control of trash during construction by placing all trash, garbage and other debris into closed waste containers.
- Regular emptying of waste containers to avoid over-spilling of trash.
- Construction of anti-roosting devices on tall poles and other potential roost sites before and after construction.

4.7 Streambeds and Wetlands

4.7.1 Army Corps of Engineers

The Corps regulates discharges of dredged or fill material into waters of the United States. These watersheds include wetlands and non-wetland bodies of water that meet specific criteria. The lateral limit of Corps jurisdiction extends to the Ordinary High-Water Mark (OHWM) and to any wetland areas extending beyond the OHWM; thus, the maximum jurisdictional area is represented by the OHWM or wetland limit, whichever is greater.

Corps regulatory jurisdiction pursuant to Section 404 of the Clean Water Act is founded on a connection or nexus between the water body in question and interstate (waterway) commerce. This connection may be
direct, through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the Corps regulations.

4.7.2 Regional Water Quality Control Board

The Corps has delegated the authority for use of 404 permits to each individual state. The use of a 404 permit in California is regulated by the State Water Resources Control Board (SWRCB) under Section 401 of the Clean Water Act regulations. The Board has authority to issue a 401 permit that allows the use of a 404 permit in the state, with the authority in the state being vested in regional offices known as Regional Water Quality Control Boards (RWQCB).

Under the Porter-Cologne Act of 2003, the SWRCB has extended its responsibilities to include impacts to water quality from non-point source pollution.

In addition, the SWRCB has the responsibility to require that projects address ground water and water quality issues, which would be evaluated as part of the geotechnical and hydrology studies. Their authority extends to all waters of the State (of California).

4.7.3 California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW), through provisions of State of California Administrative Code, is empowered to issue agreements for any alteration of a river, stream or lake where fish or wildlife resources may adversely be affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. Lateral limits of the jurisdiction are not clearly defined, but generally include any riparian resources associated with a stream or lake, CDFW regulates wetland areas only if those wetlands are part of a river, stream or lake as defined by CDFW.

Findings

The property has no wetlands, washes or other evidence of water flow that would come under the jurisdiction of the Corps.

There are no drainages or other areas of watered habitat that would come under the jurisdiction of the RWQCB or provide any Beneficial Uses (BUs) that might come under the RWQCB protection.

There are no washes or riparian habitats that may come under the jurisdiction of the CDFW.

No impacts to federal or jurisdictional waters, wetlands or riparian habitat are expected, and no mitigation is required.

4.8 Raptors and Migratory Birds Nesting Habitat

Most of the raptor species (eagles, hawks, falcons and owls) are experiencing population declines because of habitat loss. Some, such as the peregrine falcon, have also experienced population losses because of environmental toxins affecting reproductive success, animals destroyed as pests or collected for falconry, and other direct impacts to individuals. Only a few species, such as the red-tailed hawk and barn owl, have expanded their range despite or a result of human modifications to the environment. As a group, raptors are of concern to state and federal agencies.
Raptors and all migratory bird species, whether listed or not, receive protection under the Migratory Bird Treaty Act (MBTA) of 1918\(^4\). The MBTA prohibits individuals to kill, take, possess or sell any migratory bird, or bird parts (including nests and eggs) except in accordance with regulations prescribed by the Secretary of the Interior Department (16 U. S. Code 703)\(^5\).

Additional protection is provided to all bald and golden eagles under the Bald and Golden Eagle Protection Act of 1940, as amended\(^6\). State protection is extended to all birds of prey by the California Fish and Game Code, Section 2503.5\(^7\). No take is allowed under these provisions except through the approval of the agencies or their designated representatives.

**Findings**

At the time of the survey, there was suitable nesting habitat throughout the property for nesting birds, including the Joshua trees. The following measures shall be implemented to address potential impacts.

- If start of construction occurs between February 1 and August 31, then a qualified biologist shall conduct a breeding bird survey no more than three days prior to the start of construction to determine if nesting is occurring. This survey can be conducted as part of the burrowing owl surveys.

- If occupied nests are found, they shall not be disturbed unless the qualified biologist verifies through non-invasive methods that either (a) the adult birds have not begun egg-laying and incubation; or (b) the juveniles from the occupied nests are capable of independent survival.

- If the biologist is not able to verify one of the above conditions, then no disturbance shall occur within a distance specified by the qualified biologist for each nest or nesting site. The qualified biologist will determine the appropriate distance in consultation with the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service.

“Construction” includes selection of staging areas, demolition, tree, trash and debris removal, placement of equipment and machinery on to the site preparatory to grading, and any other project-related activity that increases noise and human activity on the project site beyond existing levels. Emergency measures are exempt from this definition.

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\(^5\) [https://www.fws.gov/le/USStatutes/MBTA.pdf](https://www.fws.gov/le/USStatutes/MBTA.pdf)

\(^6\) [https://www.fws.gov/le/USStatutes/BEPA.pdf](https://www.fws.gov/le/USStatutes/BEPA.pdf)

\(^7\) [https://leginfo.legislature.ca.gov/face.../FGC&tocTitle=Fish+and+Game+Code+-+FGC](https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=FGC&tocTitle=Fish+and+Game+Code+-+FGC)
4.9 Bats

Most bat species prefer rock crevice, cliff openings and similar narrow, dark places. This includes human habitations that mimic these conditions, such as barns, attics, warehouses, under bridges, and other dark spaces. They forage for insects, fruits or pollen at night.

Findings

There are no suitable rock crevices, buildings or comparable sites that would provide roosting sites for bats on the property. Bats may fly over the property from adjacent buildings or rocky hibernacula in the mountains to the south. No significant impacts to bats are expected.

4.10 Habitat Fragmentation and Wildlife Movement

Wildlife movement and the fragmentation of wildlife habitat are recognized as critical issues that must be considered in assessing impacts to wildlife. In summary, habitat fragmentation is the division or breaking up of larger habitat areas into smaller areas that may or may not be capable of independently sustaining wildlife and plant populations. Wildlife movement (more properly recognized as species movement) is the temporal movement of individuals (plants and animals) along diverse types of corridors. Wildlife corridors are especially important for connecting fragmented habitat areas.

Findings

The property is bordered in an area where wildlife movement is restricted by roads and houses. Impacts to regional wildlife movement are not expected. The site is in a partially developed area where habitat fragmentation has already occurred.
5.0 References


California Desert Native Plants Act, Division 23, 1992 Food and Agricultural Code.


## Appendix A - Sensitive Biological Resources

### Table 1. Sensitive Biological Resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>Habitat and Distribution</th>
<th>Activity Period</th>
<th>Status Designation</th>
<th>Occurrence Probability</th>
</tr>
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<tbody>
<tr>
<td><strong>Plants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Bernardino milkvetch</td>
<td>Perennial herb that flowers from April through June. It usually found on carbonate soils, occasionally granitic soils in pinyon juniper and creosote bush scrub habitats. The historical distribution of this species extends from the northern (desert) slopes of the San Bernardino and Little San Bernardino Mountains through to the New York and Ivanpah ranges. Most modern occurrences are along the base of the San Bernardino and Little San Bernardino mountains. It is found on suitable soils from 3000 to 7000 feet in elevation.</td>
<td>April - June flowering period</td>
<td>FED: ND STATE: ND CNPS: 1B.2</td>
<td>None. Site lacks carbonate or granitic soils.</td>
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<tr>
<td><em>Astragalus bernardinus</em></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Coulter’s saltbush</td>
<td>Perennial. Somewhat alkaline low places, open sites, Los Angeles County to western San Bernardino County and Baja California.</td>
<td>March – October</td>
<td>FED: ND STATE: ND CNPS: 1B.2</td>
<td>None. Suitable alkaline habitat does not exist on site. Not observed during the survey.</td>
</tr>
<tr>
<td><em>Atriplex coulteri</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parish’s brittlescale</td>
<td>Annual. Alkali flats largely in valley or annual grassland. From cismontane California to the edge of the desert, extending into the Central Valley.</td>
<td>June - Oct</td>
<td>FED: C2* STATE: ND CNPS: 1B.1</td>
<td>None. Site lacks suitable alkali flat habitats.</td>
</tr>
<tr>
<td><em>Atriplex parishii</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ayenia</td>
<td>Perennial. Mojave Desert scrub, Sonoran Desert scrub. Sandy and gravelly washes in the desert. Dry desert canyons. 150 to 1095 meters elevation</td>
<td>March – April flowering period</td>
<td>FED: ND STATE: ND CNPS: 2B.3</td>
<td>None. Suitable wash habitat not present. Perennial species not observed during the survey.</td>
</tr>
<tr>
<td><em>Ayenia compacta</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pinyon rock cress</td>
<td>Perennial from a cespitose base. Gravelly slopes from 4000 to 8000 feet. Creosote bush scrub, Joshua tree woodland, pinyon juniper woodland. Distributed from the Panamint and Argus Mtns. and further north. Also in the San</td>
<td>April - May flowering period</td>
<td>FED: ND STATE: ND CNPS: 2B.3</td>
<td>None. Site is below the known range for this species. Site lacks gravelly slopes.</td>
</tr>
<tr>
<td><em>Boechera dispar</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species</td>
<td>Distribution</td>
<td>Flowering Period</td>
<td>FED</td>
<td>STATE</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>------------------------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Lincoln rockcress</td>
<td>Perennial that grows on carbonate soils in chenopod (saltbush) and Mojave desert scrub plant communities. The historical distribution was limited to Inyo County and extending to Utah. It has since been found in the San Bernardino and Kingston mountain ranges, elevations from 3600 feet to 8800 feet.</td>
<td>March through May</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Shockley's rock cress</td>
<td>Perennial from a thick simple caudex. Dry rocky places in pinyon juniper woodland. Northern slopes of the San Bernardino Mountains and western Nevada.</td>
<td>May - June flowering period</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Alkali mariposa lily</td>
<td>Alkaline meadows and in moist areas in creosote bush scrub. Historically distributed from Mojave Desert at the northern base of the San Bernardino and San Gabriel Mountains east to Las Vegas.</td>
<td>April - June</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Pygmy poppy</td>
<td>Grows in sand flats in creosote bush scrub, Joshua tree woodland. Western Mojave from Walker Pass to Victorville. 2000 to 4000 feet elevation.</td>
<td>April - May</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Purple-nerved cymopterus</td>
<td>Perennial herb the grows from an underground taproot. It is found on sandy or gravelly soils in Mojave desert scrub and pinyon and juniper woodland habitats. The historical distribution of this species is the northern base of the San Bernardino Mountains, the New York Mountains, and the eastern Mojave to Utah. The current distribution includes the mountain ranges, as well as isolated localities on smaller mountain ranges in the wider Mojave Desert, 2500 to 6000 feet.</td>
<td>March - April</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Mojave tarplant</td>
<td>Annual herb. Low sand bars in river bed. Ephemeral grassy areas,</td>
<td>July – Sep</td>
<td>ND</td>
<td>END</td>
</tr>
</tbody>
</table>
**Deinandra mohavensis**
Riparian scrub and chaparral. Joshua tree woodland. 3000 to 4000 feet.
Mojave River at Deep Creek and Mt. San Jacinto. CNPS: 1B.3 species. Site is west of known localities.

**Parish’s club-cholla**
Cactus on sandy and rocky soils in Joshua tree woodland, creosote bush scrub and Sonoran desert scrub. Historical range was from the Little San Bernardino Mountains east to the Clark Mountains, and outside California. Current distribution San Bernardino Mountains and mountain ranges of the eastern Mojave. Elevations 900 to 5000 feet.

**Grusonia parishii**
Joshua tree woodland, creosote bush scrub and Sonoran desert scrub. May - June flowering period. FED: ND STATE: ND CNPS: 2B.2 None. Species not observed during the survey.

**Little San Bernardino Mountains linanthus**
Minute annual. Found in desert dunes in the Sonoran desert, Mojave desert scrub, Joshua tree woodland. April - May flowering period. FED: C2* STATE: ND CNPS: 1B.2 Unknown. Site lacks desert dunes, but there are sandy soils on site.

**Linanthus maculatus**
Only known from sandy places in Riverside and San Bernardino Counties. 500 to 4000-foot elevation. Microhabitat difficult to pin down. April - September flowering period. FED: ND STATE: ND CNPS: 1B.3 Unknown. Site lacks desert dunes, but there are sandy soils on site.

**Creamy blazing star**
Annual. Creosote bush scrub. On talus slopes of mesas and canyons. March – May flowering period. FED: ND STATE: ND CNPS: 1B.3 Unknown. Site lacks desert dunes, but there are sandy soils on site.

**Monardella robisonii**
Endemic to California. Recorded only from sky island habitats in the Mojave Desert, primarily within areas of Joshua Tree National Park and lower elevations in Sand to Snow National Monument. It occurs among granite boulders in the desert chaparral and pinyon-juniper woodland plant communities. April – September flowering period. FED: C2* STATE: ND CNPS: 1B.3 None. The property is outside the known distribution area and lacks suitable granite boulder habitat, pinyon juniper woodland and desert chaparral habitats.

**Crowned muilla**
Perennial herb from corm. Open desert scrub. 1000 to 1600 meters (3000 to 5000 feet). Southern High Sierra to Eastern Sierra, Mojave Desert, possibly in Tehachapi Mountains. Western Nevada. March - April flowering period. FED: ND STATE: ND CNPS: 4.2 Unknown. The property is east of the known distribution range.

**Parish’s alkali grass**
Historically recorded from Rabbit Springs in the Mojave Desert east to New Mexico. Occurs in alkali seeps and mineral springs in meadows. FED: C2* STATE: ND CNPS: 1B.1 None. No suitable alkali mesic habitats present.
**Salt spring checkerbloom**  
*Saltalcea neomexicana*

Alkaline, usually wet places. Coastal sage scrub, chaparral, creosote bush scrub. Los Angeles, Orange, San Bernardino, Riverside Counties.

April to June  
FED: ND  
STATE: ND  
CNPS: 2.2

None. No suitable alkaline, wet habitat present.

**Latimer's woodland gilia**  
*Saltugilia latimeri*

Annual that is found on rocky or sandy, often granitic soils, along washes in chaparral, Mojave desert scrub and pinyon and juniper woodland. The historical range (first described in 2001) is various locations in the Mojave Desert and further north. Elevations ranging from 1300 to 6300 feet.

March - June  
FED: ND  
STATE: ND  
CNPS: 1B.2

None. Species not observed during the survey.

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**Reptiles**

**Desert tortoise**  
*Gopherus agassizii*

Historically found throughout the Mojave and Sonoran Deserts into Arizona, Nevada, and Utah. Occurs throughout the Mojave Desert in scattered populations. Found in creosote bush scrub, saltbush scrub, thornscrub (in Mexico), and Joshua tree woodland. Found in the open desert as well as in oases, riverbanks, washes, dunes, and occasionally rocky slopes.

February – June  
FED: THR  
STATE: THR

Unknown. Suitable habitat exists on the property, but no sign was observed.

**San Diego horned lizard**  
*Phrynosoma coronatum blainevillei*

Wide variety of habitats including coastal sage scrub, grassland, riparian woodland. Pinyon-juniper woodland. On or near loose sandy soils; coastal and inland areas from Ventura Co. to Baja Calif.

April – July (with reduced activity Aug. - Oct.)  
FED: ND  
STATE: SSC

Unknown. Suitable habitat exists, the site not near known populations.

**Silvery legless lizard**  
*Anniella pulchra pulchra*

Found predominantly in the Coast Ranges, Transverse Mountains, and Peninsular Ranges and in northwest Baja California. Also found in scattered occurrences on the floor of the San Joaquin Valley, in the southern Sierra, Walker Basin and in the Piute, Scodie and Tehachapi Mountains. Desert-edge localities are recorded at the eastern end of Walker Pass in Kern County, Morongo Pass, in San Bernardino County, in the Little San Bernardino

Active year round with some winter activity under the surface.  
FED: ND  
STATE: SSC

None. Although sandy soils occur on both sections, abundant leaf litter (providing a humid microclimate) does not exist.
Mountains at Whitewater, Riverside County, and on the eastern slopes of the Peninsular Ranges. Prefers areas with sandy or loose organic soils or with abundant leaf litter.

### Birds

<table>
<thead>
<tr>
<th>Bird</th>
<th>Habitat</th>
<th>Seasonal Activity</th>
<th>Endangered Status</th>
</tr>
</thead>
</table>
| **Northern harrier** <br> *Circus cyaneus* | Grassland and marshy habitats in Southern California. Uncommonly in open desert and brushlands. | Year round | FED: ND  <br> STATE: SSC  
Low | Forages over a wide range of open habitat and can be expected to occur during migration. |
| **Cooper’s hawk** <br> *Accipiter cooperi* | Woodland and semi-open habitats, riparian groves and mountain canyons. Uncommon permanent resident in coastal, mountainous regions. Transients fairly common on coast. | Year round; predominant in summer | FED: ND  
STATE: SSC  
Low | Low. May forage infrequently over the property during migration and in winter. |
| **Golden eagle** <br> *Aquila chrysaetos* | Grasslands, brushlands, deserts, oak savannas, open coniferous forests and mountain valleys. Nesting primarily in rugged mountainous country. Uncommon resident in Southern California. | Year round diurnal | FED: ND  
STATE: SSC  
(nesting and wintering).  
CFP | High. Foraging habitat for this species exists in the vicinity of the property. No suitable nesting habitat occurs on site. |
| **Ferruginous hawk** <br> *Buteo regalis* | Fairly common in winter in open grassland and agricultural regions in the interior, as well as some valleys along the coast. Rare and uncommon along the coast and in the desert. | Winter | FED: C2*  
STATE: SSC | Low. May forage infrequently over the property during migration and in winter. |
| **Merlin** <br> *Falco columbarius* | Frequent several habitats including coastal sage scrub and annual grassland. Forages along the coast, and in montane valleys and open deserts with scattered clumps of trees. Rare fall migrant and winter visitor to Southern California. | Fall & Winter | FED: ND  
STATE: SSC | Low. May forage infrequently over the property during migration and in winter. |
| **American peregrine falcon** <br> *Falco peregrinus anatum* | Wetlands near high cliffs; few known to nest in urban settings on tall buildings. Scattered locations in North America; in California coastal areas and inland mountains. | Fall & Winter  
(in migration and as winter visitor) | FED: ND  
STATE: END.  
CFP | Low. May forage infrequently over the property during migration and in winter. |
<table>
<thead>
<tr>
<th>Species</th>
<th>Description</th>
<th>Status</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prairie falcon <em>Falco mexicanus</em></td>
<td>Nest in cliffs or rocky outcrops; forage in open arid valleys, agricultural fields. Throughout the desert and arid interior portions of coastal counties. Uncommon resident in Southern California.</td>
<td>Year round diurnal</td>
<td>FED: ND STATE: SSC Present. Species was observed during the field surveys.</td>
</tr>
<tr>
<td>Burrowing owl <em>Athene cunicularia hypugea</em></td>
<td>Grasslands and rangelands, usually occupying ground squirrel burrows. Resident over most of Southern California. Found in agricultural and desert areas.</td>
<td>Year round</td>
<td>FED: ND STATE: SSC Low. No burrows were observed on site, but this species may forage in the vicinity, and nest in the future.</td>
</tr>
<tr>
<td>Long-eared owl <em>Asio otus</em></td>
<td>Rare resident in coastal Southern California and uncommon resident in desert areas. Dense willow-riparian woodland and oak woodland. Breeds from valley foothill hardwood up to ponderosa pine habitat.</td>
<td>Year round nocturnal</td>
<td>FED: ND STATE: SSC Low. Foraging habitat exists, but no nesting habitat.</td>
</tr>
<tr>
<td>Le Conte’s thrasher <em>Toxostoma lecontei</em></td>
<td>Uncommon and local resident in low desert scrub throughout most of the Mojave Desert, extending up into the southwestern corner of the San Joaquin Valley. Breeding range extends from these areas into eastern Mojave, north into the Owens Valley and south into the lower Colorado Desert, and eastern Mojave. Also recorded from southern Nevada and Utah, as well as western Arizona and New Mexico.</td>
<td>Year round</td>
<td>FED: ND STATE: SSC None. Suitable dense scrub habitat not present on site.</td>
</tr>
<tr>
<td>Loggerhead shrike <em>Lanius ludovicianus</em></td>
<td>Open fields with scattered trees, open woodland, scrub. Fairly common resident throughout southern California.</td>
<td>Year round</td>
<td>FED: ND STATE: SSC Moderate. Shrub habitat may be too dense for this species.</td>
</tr>
</tbody>
</table>

**Mammals**

<table>
<thead>
<tr>
<th>Species</th>
<th>Description</th>
<th>Status</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>California leaf-nosed bat <em>Macrotus californicus</em></td>
<td>In California, these bats primarily occupy low-lying desert areas, where they roost in caves, mines, and old buildings. Historic records extend west to near Chatsworth, Los Angeles County, but most populations from the California coastal basins are believed to have disappeared. Occurs from northern Nevada, Southern California, and western</td>
<td>Year round nocturnal</td>
<td>FED: ND STATE: SSC None. No suitable roosting habitat available. Any foraging activity would occur in the air.</td>
</tr>
</tbody>
</table>
## Arizona south to southern Baja California and Sonora.

### Townsend's western big-eared bat

*Plecotus townsendii*, two spp.

Requires caves, mines, tunnels, buildings or other similar structures for roosting. May use separate sites for night, day, hibernation or maternity roosts. Found in all but subalpine and alpine habitats throughout California.

- **Habitat:** Year round
- **Activity:** Nocturnal
- **Fed:** ND
- **State:** SSC
- **Notes:** None. No suitable roosting habitat available. Any foraging activity would occur in the air.

### Pallid bat

*Antrozous pallidus*

Day roost in caves, crevices, mines and occasionally hollow trees and buildings. Night roosts may be more open sites, such as porches and open buildings. Hibernation sites are probably rock crevices. Grasslands, shrublands, woodlands and forest from sea level through to mixed conifer. Throughout Southern California.

- **Activity:** Spring, Summer, Fall
- **Habitat:** Nocturnal
- **Fed:** ND
- **State:** SSC
- **Notes:** None. No suitable roosting habitat available. Any foraging activity would occur in the air.

### Spotted bat

*Euderma maculatum*

Found in the western North America from southern British Columbia to the Mexican border, at a small number of widely scattered localities. Habitats range from arid deserts and grasslands through mixed conifer forest up to 10,600-foot elevation. Prefers rock crevices in cliffs, also uses caves and buildings.

- **Activity:** Spring, Summer, Fall
- **Habitat:** Nocturnal
- **Fed:** ND
- **State:** SSC
- **Notes:** None. No suitable roosting habitat available. Any foraging activity would occur in the air.

### Western yellow bat

*Lasiurus xanthinus*

Found in valley foothill riparian, desert riparian, desert palm oasis and desert wash. Roosts in trees, particularly palms. This species forages over water and among trees.

- **Activity:** Spring, Summer, Fall
- **Habitat:** Nocturnal
- **Fed:** ND
- **State:** ND
- **Notes:** None. No suitable roosting habitat available. Any foraging activity would occur in the air.

### California mastiff bat

*Eumops perotis californicus*

Historically from north-central California south to northern Baja California, eastward across the southwestern United States, and northwestern Mexico to west Texas and Coahuila (Hall, 1981; Williams, 1986). In California, most records are from rocky areas at low elevations where roosting occurs primarily in crevices.

- **Fed:** ND
- **State:** SSC
- **Notes:** None. No suitable roosting habitat available. Any foraging activity would occur in the air.
### Pocketed free-tailed bat  
*Nyctinomops femorasa*  
Spotty distribution in California, ranging from Southern California south to the Baja Peninsula, and through south western Arizona to at least central Mexico (Williams, 1986). In California, pocketed free-tailed bats are typically found in rocky, desert areas with relatively high cliffs.  
- **Warmer months.**  
- **FED: ND**  
- **STATE: SSC**  
- **Nocturnal**  
- **None. No suitable roosting habitat available. Any foraging activity would occur in the air.**

### Big free-tailed bat  
*Nyctinomops macrotis*  
Found from northern South America and the Caribbean Islands northward to the western United States (Williams, 1986). In the southwestern U.S., populations appear to be scattered. Known breeding localities are in parts of Arizona, New Mexico, and Texas. Prefers rocky, rugged terrain. Roosts in crevices in high cliffs or rocky outcrops. Ranges up to 8000-foot elevation.  
- **Nocturnal**  
- **FED: ND**  
- **STATE: SSC**  
- **None. No suitable roosting habitat available. Any foraging activity would occur in the air.**

### San Diego black-tailed jackrabbit  
*Lepus californicus bennettii*  
Variety of habitats including herbaceous and desert scrub areas, early stages of open forest and chaparral. Most common in relatively open habitats. Restricted to the cismontane areas of Southern California, extending from the coast to the Santa Monica, San Gabriel, San Bernardino and Santa Rosa mountain ranges.  
- **Year round, diurnal and crepuscular activity**  
- **FED: ND**  
- **STATE: SSC**  
- **None. Jackrabbits were observed during the field surveys, but the geographic location of the property indicates that the individuals observed belonged to the desert race, and not the coastal race.**

### Grasshopper mouse  
*Onychomys torridus ramona*  
In the more arid regions of southern California. Especially prefers sandy areas of the Mojave and Sonoran deserts, especially friable soils for digging. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropods, especially scorpions and orthopteran insects.  
- **Year round**  
- **FED: ND**  
- **STATE: SSC**  
- **Moderate. Suitable sandy habitat exists on site.**

### Nelson’s bighorn sheep  
*Ovis canadensis nelsoni*  
Prefers rugged terrain, and can be found from near the valley floor to the tops of desert mountain ranges. This particular race is found in desert ranges from the White Mountains south to Mexico. They are also in the San Bernardino Mtns., and there is  
- **Year round, seasonal elevation movement.**  
- **FED: END, DPS***  
- **STATE: THR, CFP**  
- **None. Bighorn sheep are not expected to move through the site on a regular basis.**

*A Distinct Population*
an isolated population in the San Gabriel Mountains.

Segment in the Santa Rosa Mtns.

<table>
<thead>
<tr>
<th>Sensitive Habitats</th>
<th>Found where springs occur or water table is very shallow.</th>
<th>Year round</th>
<th>FED: ND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desert fan palm oasis woodland</td>
<td>Year round</td>
<td>STATE: ND</td>
<td>None. Not present on the site.</td>
</tr>
<tr>
<td>Joshua tree woodland</td>
<td>Most of the Mojave Desert and parts of the Colorado Desert.</td>
<td>Year round</td>
<td>Protected by local ordinance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Present. Found throughout the site.</td>
</tr>
</tbody>
</table>
Legend

**FED: Federal Classifications**

END  Taxa listed as endangered
THR  Taxa listed as threatened
PE   Taxa proposed to be listed as endangered
PT   Taxa proposed to be listed as threatened
C2*  The U.S. Fish and Wildlife Service (USFWS) revised its classifications of candidate taxa (species, subspecies, and other taxonomic designations). Species formerly designated as “Category 1 Candidate for listing” are now known simply as “Candidate”. The former designation of “Category 2 Candidate for listing” has been discontinued. The USFWS will continue to assess the need for protection of these taxa and may, in the future, designate such taxa as Candidates. NRI has noted the change in species status by marking with an asterisk (*) those C2 candidates that were removed from the list.
C    Candidate for listing. Refers to taxa for which the USFWS has sufficient information to support a proposal to list as Endangered or Threatened and issuance of the proposal is anticipated but precluded at this time.
ND   Not designated as a sensitive species

**STATE: State Classifications**

END  Taxa listed as endangered
THR  Taxa listed as threatened
CE   Candidate for endangered listing
CT   Candidate for threatened listing
CFP  California Fully Protected. Species legally protected under special legislation enacted prior to the California Endangered Species Act.
SSC  California Species of Special Concern. Taxa with populations declining seriously or that are otherwise highly vulnerable to human development.
SA   Special Animal. Taxa of concern to the California Natural Diversity Data Base regardless of their current legal or protected status.
ND   Not designated as a sensitive species

**CNPS: California Native Plant Society Classifications**

1A   Plants presumed by CNPS to be extinct in California
1B   Plants considered by CNPS to be rare or endangered in California and elsewhere
2P   Plants considered by CNPS to be rare, threatened or endangered in California, but which are more common elsewhere.
3    Review list of plants suggested by CNPS for consideration as endangered but about which more information is needed.
4    Watch list of plants of limited distribution whose status should be monitored

**Occurrence Probabilities**

Occurs  Observed on the site during this study or recorded on site by other qualified biologists.
Expected Not observed or recorded on site, but likely to be present at least during a portion of the year.
High    Known to occur in the vicinity of the project site. Suitable habitat exists on site.
Moderate Known to occur in the vicinity of the project site. Small areas or marginally suitable habitat exist on site.
Low     No reported sightings within the vicinity of the project. Available habitat limited and rarely used.
None    Focused surveys did not locate the species, or suitable habitat does not exist on site.
Unknown No data is available on whether species is on or in the vicinity of the site, and information about the species is insufficient to make an accurate assessment of probability occurrence to make an accurate assessment of probability occurrence.
Appendix B – Species Observed

*non-native species

### Plants

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GYMNOSPERMAE</strong></td>
<td></td>
</tr>
<tr>
<td>CUPRESACEAE</td>
<td>CYPRUS FAMILY</td>
</tr>
<tr>
<td>Juniperus californicus</td>
<td>California Juniper</td>
</tr>
<tr>
<td>EPHEDRAEE</td>
<td>JOINT FIR FAMILY</td>
</tr>
<tr>
<td>Ephedra Californica</td>
<td>Nevada Joint-fir</td>
</tr>
<tr>
<td><strong>DICOTYLEDONS</strong></td>
<td></td>
</tr>
<tr>
<td>AMARANTHACEAE</td>
<td>AMARANTH FAMILY</td>
</tr>
<tr>
<td>Amaranthus albus</td>
<td>Tumbleweed*</td>
</tr>
<tr>
<td>ASTERACEAE</td>
<td>SUNFLOWER FAMILY</td>
</tr>
<tr>
<td>Ambrosia psilostachya</td>
<td>Ragweed</td>
</tr>
<tr>
<td>Artemisia tridentata</td>
<td>Common Sagebrush</td>
</tr>
<tr>
<td>Ericameria linearifolia</td>
<td>Narrowleaf Goldenbush</td>
</tr>
<tr>
<td>Ericameria nauseosa</td>
<td>Rabbitbrush</td>
</tr>
<tr>
<td>Lessingia lemmontii</td>
<td>Lemmon’s Lessingia</td>
</tr>
<tr>
<td>Tetradyinia stenolopis</td>
<td>Narrowleaf Felt Thorn</td>
</tr>
<tr>
<td>BORAGINACEAE</td>
<td>BORAGE FAMILY</td>
</tr>
<tr>
<td>Amsinckia tesselata</td>
<td>Devil’s Lettuce</td>
</tr>
<tr>
<td>BRASSICACEAE</td>
<td>MUSTARD FAMILY</td>
</tr>
<tr>
<td>Hirschfeldia incana</td>
<td>Short-pod Mustard*</td>
</tr>
<tr>
<td>CHENOPODIACEAE</td>
<td>GOOSEFOOT FAMILY</td>
</tr>
<tr>
<td>Atriplex canescens</td>
<td>Four-winged Saltbush</td>
</tr>
<tr>
<td>Salsola tragus</td>
<td>Russian Thistle*</td>
</tr>
<tr>
<td>MYRTACEAE</td>
<td>MYRTLE FAMILY</td>
</tr>
<tr>
<td>Eucalyptus polyanthemos</td>
<td>Silver Dollar Gum*</td>
</tr>
<tr>
<td>POLYGONACEAE</td>
<td>BUCKWHEAT FAMILY</td>
</tr>
<tr>
<td>Eriogonum</td>
<td>Anderson’s Boxthron</td>
</tr>
<tr>
<td>SOLANACEAE</td>
<td>NIGHTSHADE FAMILY</td>
</tr>
<tr>
<td>Lycium andersonii</td>
<td>Anderson’s Thornbush</td>
</tr>
<tr>
<td>ZYGOPHYLLACEAE</td>
<td>CALTROP FAMILY</td>
</tr>
<tr>
<td>Larrea tridentata</td>
<td>Creosote bush</td>
</tr>
<tr>
<td><strong>MONOCOTYLEDONS</strong></td>
<td></td>
</tr>
<tr>
<td>AGAVACEAE</td>
<td>AGAVE FAMILY</td>
</tr>
<tr>
<td>Yucca brevifolia</td>
<td>Joshua Tree</td>
</tr>
<tr>
<td><strong>ANGIOSPERMAE</strong></td>
<td></td>
</tr>
<tr>
<td>DICOTS</td>
<td></td>
</tr>
</tbody>
</table>

November 7, 2019 Baldy Mesa (Phelan) LIL19-114
POACEAE
Bromus diandrus
Bromus madritensis ssp. rubens
Hordeum vulgare
Schismus barbatus
Stipa speciosa

GRASS FAMILY
Ripgut Brome*
Red Brome*
Barley*
Mediterranean grass*
Desert Needlegrass

Animals

CLASS REPTILIA
REPTILES
Phrynosomatidae
Uta stansburiana

Spiny Lizards
Side-blotched Lizard

CLASS AVES
BIRDS

Accipitridae
Circus cyaneus
Buteo jamaicensis

Hawks and Eagles
Northern Harrier
Red-tailed Hawk

Laudidae
Eremophila alpestris

Larks
Horned Lark

Apodidae
Aeronautes saxatalis

Swifts
White-throated Swift

Cathartidae
Cathartes aura

New World Vultures
Turkey Vulture

Columbidae
Zenaida macroura
Columba livia

Doves and Pigeons
Mourning Dove
Rock Pigeon*

Corvidae
Corvus corax

Crows and Jays
Common Raven

Emberizidae
Artemisiospiza belli
Amphispiza bilineata
Zonotrichia leucophrys

New World Sparrows
Bell's Sparrow
Black-throated Sparrow
White-crowned Sparrow

Falco sparverius

Falcons
American Kestrel

Fringillidae
Haemorhous mexicanus

Finches
House Finch

Icteridae
Sturnella neglecta

Blackbirds
Western Meadowlark

Mimidae
Toxostoma redivivum
Mimus polyglottos

Mimics
California Thrasher
Northern Mockingbird

Passeridae
Passer domesticus

Old World Sparrows
House Sparrow*
Kuri Storage  
General Biological Assessment  

**Troglodytidae**  
_Campylorhynchus brunneicapillus_  
**Wrens**  
_Cactus Wren_  

**Tyrannidae**  
_Sayornis saya_  
**Tyrant Flycatchers**  
_Say's Phoebe_  

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**CLASS MAMMALIA**  
**MAMMALS**  

**Leporidae**  
_Lepus californicus_  
Rabbits and Hares  
Black-tailed Hare  
_Desert Cottontail_  

_Sylvilagus audubonii_  
_Desert Cottontail_  

**Heteromyidae**  
_Dipodomys merriami merriami_  
_Pocket mice and kangaroo rats_  
_Merriam's kangaroo rat_  

**Sciuridae**  
_Otospermophilus beecheyi_  
_Squirrels_  
_Beechey Ground Squirrel_