

# **GENERAL BIOLOGICAL RESOURCES ASSESSMENT**

**ADELANTO, SAN BERNARDINO COUNTY, CALIFORNIA  
(Township 5 North, Range 5 West, Section 18)  
(APN: 3102-081-02, 07 and 08)**

*Prepared for:*

**United Engineering Group  
8885 Haven Avenue, Suite 195  
Rancho Cucamonga, CA 91730**

*Prepared by:*

**RCA Associates, Inc.  
15555 Main Street, #D4-235  
Hesperia, California 92345  
(760) 596-0017**

**Principal Investigators:**

**Ryan Hunter, Lead Environmental Scientist/Biologist  
Jessica Hensley, Environmental Scientist/Biologist  
Brian Bunyi, Environmental Scientist/Wildlife Biologist**



EST. 1980

**Project: #2022-25 BA**

**March 10, 2022**

## **TITLE PAGE**

**Date Report Written:** March 10, 2022

**Date Field Work Completed:** March 7, 2022

**Report Title:** General Biological Resources Assessment

**Project Location:** Adelanto, California  
APN: 3102-081-02, 07 and 08

**Prepared for:** United Engineering Group  
8885 Haven Avenue, Suite 195  
Rancho Cucamonga, CA 91730

**Principal Investigators:** Ryan Hunter, Lead Environmental Scientist/Biologist  
Brian Bunyi, Environmental Scientist/Wildlife Biologist  
Jessica Hensley, Environmental Scientist/Biologist

**Contact Information:** Randall C. Arnold, Jr.  
RCA Associates, Inc.  
15555 Main Street, #D4-235  
Hesperia, California 92345  
(760) 596-0017  
[rarnold@rcaassociatesllc.com](mailto:rarnold@rcaassociatesllc.com)  
[www.rcaassociatesllc.com](http://www.rcaassociatesllc.com)

# Table of Contents

1.0	INTRODUCTION AND SUMMARY .....	1
2.0	EXISTING CONDITIONS.....	2
3.0	METHODOLOGIES .....	4
4.0	LITERATURE SEARCH .....	5
5.0	RESULTS .....	6
5.1	General Biological Resources	6
5.2	Federal and State Listed Species	7
5.3	Species of Special Concern	8
5.4	Jurisdictional Waters and Riparian Habitat	8
5.5	Protected Plants	8
6.0	IMPACTS AND MITIGATION MEASURES .....	9
6.1	General Biological Resources	9
6.2	Federal and State Listed and Species of Special Concern	9
7.0	CONCLUSIONS AND RECOMMENDATIONS .....	10
8.0	BIBLIOGRAPHY .....	11
	CERTIFICATION .....	13

Appendix A – Tables and Figures  
REGULATORY CONTEXT

## **1.0 INTRODUCTION AND SUMMARY**

Biological surveys were conducted on a 30-acre parcel (Approximate), located on the southwest corner of the intersection of Aster Road and Villa Street in the City of Adelanto, California (Township 5 North, Range 5 West, Section 18, USGS Adelanto, California Quadrangle, 1956) (Figures 1 and 2). The property is located in an area zoned for residential usage (R-1) in Adelanto, California.

As part of the environmental process, California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) data sources were reviewed. Following the data review, surveys were performed on the site on March 7, 2022, during which the biological resources on the site and in the surrounding areas were documented by biologists from RCA Associates, Inc. As part of the surveys, the property and adjoining areas were evaluated for the presence of native habitats which may support populations of sensitive wildlife species. The property was also evaluated for the presence of sensitive habitats including wetlands, vernal pools, riparian habitats, and jurisdictional areas.

Habitat assessments were also conducted for the desert tortoise, burrowing owl, and Mohave ground squirrel. Based on data from USFWS, CDFW, and a search of the California Natural Diversity Database (CNDDDB, 2022). Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2016) and Whitaker (1980).

## 2.0 EXISTING CONDITIONS

The property is approximately 30-acres and is located on the southwest corner of the intersection of Aster Road and Villa Street in the City of Adelanto, California (APN: 3102-081-02, 07 and 08). The site is located in Section 18, Township 5 North, Range 5 West (USGS Adelanto, CA 7.5-minute quadrangle) (Figures 1 and 2). Vacant land is located to the north and south of the property with residential communities located directly east of the site. Columbia Middle School is located south west along Aster Road and Adelanto High School is located to the north of the property beyond Mojave Drive.

The relatively flat site is approximately 920 meters above sea level and contains no slope. The vegetation community present on site supports a heavily disturbed desert scrub habitat encompassing mainly native plants and some non-native grasses. The site is dominated by creosote bush (*Larrea tridentata*), rubber rabbitbrush (*Ericameria nauseosa*), Nevada jointfir (*Ephedra nevadensis*), Asian mustard (*Brassica tournefortii*), Flatspine burr ragweed (*Ambrosia acanthicarpa*) and cheatgrass (*Bromus tectorum*). Section 5.0 provides a more detailed discussion of the various plant species observed during the surveys.

The site supports a variety of wildlife, with many of them being birds. Although not seen, coyote signs were also observed on site including canid digs and scat throughout the property. Species that were not observed, but are expected to occur on site given their abundance in the surrounding areas include California ground squirrel (*Otospermophilus beecheyi*) and antelope ground squirrel (*Ammospermophilus leucurus*).

Birds observed included common ravens (*Corvus corax*), house finch (*Carpodacus mexicanus*), horned lark (*Eremophila alpestris*) and rock pigeon (*Columba livia*). Section 5.0 provides a more detailed discussion of the various species observed during the surveys.

No reptiles were observed during the field investigation due to the temperature and time of year. Species that are expected to occur on site include the common side-blotched lizard (*Uta stansburiana*) and western whiptail lizard (*Cnemidophorus tigris*). Table 2 provides a compendium of wildlife species.

During the field surveys, a potential channel was observed that runs through the middle of the property from south to north. It is the opinion of RCA Associates, Inc. that additional surveys maybe required at another time.

In addition, no sensitive habitats (e.g., sensitive species, critical habitats, etc.) have been documented in the immediate area according to the CNDDDB (2022) and none were observed during the field investigations.

### 3.0 METHODOLOGIES

General biological surveys were conducted on March 7, 2022, during which biologists from RCA Associates, Inc. initially walked meandering transects throughout the property. During the surveys, data was collected on the plant and animal species present on the site. All plants and animals detected during the surveys were recorded and are provided in Tables 1 & 2 (Appendix A). The property was also evaluated for the presence of habitats which might support sensitive species. Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2016) and Whitaker (1980). Following completion of the initial reconnaissance survey, habitat assessments were conducted for the desert tortoise, burrowing owl, and Mohave ground squirrel. Weather conditions consisted of wind speeds of 10 to 15 mph, temperatures in the 40's to low 50's (°F) (AM), and 0% cloud cover. The applicable methodologies are summarized below.

**General Plant and Animal Surveys:** Meandering transects were walked on the site and in surrounding areas (i.e., the zone of influence) where accessible at a pace that allowed for careful documentation of the plant and animal species present on the site. All plants observed were identified in the field or sampled and brought back for further identification. Wildlife was identified through visual observations and/or by vocalizations. Habitat assessments were conducted for the desert tortoise, burrowing owl, and Mohave ground squirrel. Tables 1 and 2 (Appendix A) provides a comprehensive compendium of the various plant and animal; species observed during the field investigations.

#### 4.0 LITERATURE SEARCH

As part of the environmental process, a search of the California Natural Diversity Database (CNDDDB) search was performed. Based on this review, it was determined that five special status species have been documented within the Adelanto quad of the property. The following tables provide data on each special status species which has been documented in the area.

**Table 4-1: Federal and State Listed Species and State Species of Special Concern.**

E = Endangered; T = Threatened; SSC = Species of special concern; CNPS = California Native Plant Society; CNDDDB = California Natural Diversity Data Base

NAME	STATUS	HABITAT REQUIREMENTS	PRESENCE/ ABSENCE ON PROPERTY
<b>Wildlife Species</b>			
<b>Within Adelanto Quadrangle</b>			
Desert tortoise ( <i>Gopherus agassizii</i> )	Federal: Threatened State: Threatened	Desert scrub	The site is located within the known distribution of the species. An evaluation of the area and property was conducted and no tortoises or suitable habitat was observed.
Burrowing owl ( <i>Athene cunicularia</i> )	Federal: None State: None CDFW: SSC	Grasslands and desert habitats	The site does support suitable habitat for the species; however, no owls or owl sign, or suitable burrows, were observed during field surveys.
Mohave ground squirrel ( <i>Xerospermophilus mohavensis</i> )	Federal: None State: Threatened	Desert scrub	The site does not support suitable habitat for the species. Species has not been identified in the area; therefore, species is not likely to inhabit the site.
Swainson's Hawk ( <i>Buteo swainsoni</i> )	Federal: None State: Threatened	Open grasslands	Site does not support suitable habitat for the species; and no Swainson's hawks were observed during the field survey.
Le Conte's thrasher ( <i>Toxostoma lecontei</i> )	Federal: None State: None CDFW: SSC	Desert scrub	Site does not support suitable habitat for the species; and no thrashers were observed during the field survey.



## 5.0 RESULTS

### 5.1 General Biological Resources

The site supports a heavily disturbed desert scrub community which sparsely covers the property (Figure 3). Species present on the site included kelch grass (*Schismus barbatus*), creosote bush (*Larrea tridentata*), Asian mustard (*Brassica tournefortii*), Nevada jointfir (*Ephedra nevadensis*), white bursage (*Ambrosia dumosa*), California buckwheat (*Eriogonum fasciculatum*), and rubber rabbitbrush (*Ericameria nauseosa*). Table 1 provides a compendium of all plants occurring on the site and/or in the immediate surrounding area.

Birds observed included ravens (*Corvus corax*), rock pigeon (*Columba livia*), lesser gold finch (*Spinus psaltria*) and house finch (*Haemorhous mexicanus*). Table 2 provides a complete compendium of wildlife species occurring on site or in the surrounding area

Mammals that were observed on site black-tailed jackrabbit (*Lepus californicus*). Although the Antelope Ground squirrel (*Ammospermophilus leucurus*) were not present during the field investigation we can assume they are in the area due to current conditions and population distributions. Coyote (*Canis latrans*) scat and tracks were observed during the field investigations and the species is expected to traverse the site during hunting activities. Other wildlife species that may occur on site include desert cottontails (*Sylvilagus audubonii*) and California ground squirrels (*Otospermophilus beecheyi*), and Merriam's kangaroo rats (*Dipodomys merriami*) may also occur on the site given their wide-spread distribution in the region. Tables 1 and 2 (Appendix A) provides a compendium of the various plant and animal species identified during the field investigations and those common to the area. No distinct wildlife corridors were identified on the site or in the immediate area.

No reptiles were observed on site during the March 2022 field investigations. However, some reptiles that may inhabit the site include the Side-blotched lizard (*Uta stansburiana*), and the Western Whiptail Lizard (*Cnemidophorus tigris*).

No sensitive habitats (e.g., wetlands, vernal pools, critical habitats for sensitive species, etc.) were observed on the site during the field investigations.

The following are the listed and special status species that have the ability to occur on the project site. It is not a comprehensive list of all the species in the quad. This information has been taken from the California Natural Diversity Database and is using the most current version.

## **5.2 Federal and State Listed Species**

**Desert Tortoise:** The site is located within the documented tortoise, a state and federal threatened species, habitat according to CNDDDB (2022). The property supports marginal habitat for the desert tortoise based on the location of the site in a semi-developed area of Adelanto. No tortoises were observed anywhere within the property boundaries during the March 7, 2022 surveys. The species is not expected to move onto the site in the near future based on the absence of any potential burrows or sign, absence of any recent observations in the immediate area, and the presence of busy roadways and developments in the immediate area which may act as barriers to migration of tortoises. The protocol survey results are valid for one year as per CDFW and USFWS requirements.

**Mohave Ground Squirrel:** The Mohave ground squirrel is a California state threatened species that have a short, flat, furred, white, underside tail, uniformly brown (with no spots or stripes). They inhabit open desert scrub, alkali desert scrub, and annual grasslands on sandy to gravelly surfaces in the Mojave Desert. Occupiable burrows were found on the site, but no Mohave ground squirrels were detected. It is the opinion of RCA Associates, Inc. that the habitat is not prime Mohave ground squirrel habitat and is very unlikely to support populations of the species based on the following criteria, that there have been two recent sightings, within 20 years, of the species in the Adelanto quadrangle.

**Swainson's Hawk:** The site is located within documented Swainson's hawk habitat, a state threatened raptor, according to CNDDDB (2022). No hawks were seen on the property during the survey, and no suitable habitat was observed due to previous grading of the site. Swainson's hawks occupy grasslands and breed in trees that are the only ones seen for miles. Swainson's hawks are not expected to occur on the site due to lack of habitat and prime vegetation.

### 5.3 Species of Special Concern

**Burrowing Owl:** The site is located within documented burrowing owl habitat according to CNDDDB (2022). No owls were seen on the property during the survey, and minimal suitable habitat was observed. Burrowing owls are not expected to occur on the site due to lack of suitable vegetation and burrows.

**Le Conte's thrasher:** Le Conte's thrashers have not been recently observed in the area according to CNDDDB (2022). Thrashers are not expected to occur on the site due to lack of critical vegetation used by the species, such as saltbush and catclaw acacia. Thrashers may be very infrequent in the area given the low population levels in the region as well as the lack of any recent sightings according to the CNDDDB.

### 5.4 Jurisdictional Waters and Riparian Habitat

No riparian vegetation (e.g., cottonwoods, willows, etc.) exist on the site. A drainage channel was observed within the site boundary that runs south to north across the middle of the plot. It is the opinion of RCA Associates, Inc. that additional surveys maybe necessary.

### 5.5 Protected Plants

**As of September 22, 2020, the California Department of Fish and Wildlife temporarily listed the western Joshua tree (*Yucca brevifolia*) as an endangered species until a final decision is made in 2022. No Joshua trees were observed on site during the March 7, 2022 field investigations.**

## **6.0 IMPACTS AND MITIGATION MEASURES**

### **6.1 General Biological Resources**

Future development of the site will impact the general biological resources present on site, because most if not all of the vegetation will be removed during future construction activities. The site is expected to support very few wildlife species which will be impacted by development activities. Those species with limited mobility (i.e., small mammals and reptiles) will experience increases in mortality during the construction phase. However, more mobile species (i.e., birds, large mammals) will be displaced into adjacent areas and will likely experience minimal impacts. Therefore, loss of about 30-acres of a relatively disturbed desert scrub habitat is not expected to have a significant cumulative impact on the overall biological resources in the region given the presence of similar habitat throughout the surrounding area. No sensitive habitats (e.g., wetlands, vernal pools, critical habitats for sensitive species, etc.) were observed on the site during the field investigations.

### **6.2 Federal and State Listed and Species of Special Concern**

No federal or State-listed species were observed on the site during the field investigations including the Mohave ground squirrel and desert tortoise. In addition, there are no documented observations of these species either on the site or in the immediate area. The site is not expected to support populations of the desert tortoise based on the absence of habitat, suitable burrows, or signs.

The Western Joshua tree (*Yucca brevifolia*), a candidate threatened species under the California Endangered Species Act (CESA), was not observed. Refer to section 5.5 for more information on the status and requirements on this species.

A pre-construction burrowing owl survey may be required by CDFW to determine if any owls have moved on to the site since March 7, 2022 surveys. As stated in CDFW's *Staff Report on Burrowing Owl Mitigation*, the most effective method of completing a pre-construction survey (take avoidance survey) should be performed within 30 days of ground disturbance, followed by a final pre-construction survey within 24 hours of breaking ground.

## 7.0 CONCLUSIONS AND RECOMMENDATIONS

Future development activities include the grading and removal of all vegetation from the 30-acre parcel; however, cumulative impacts to the general biological resources (plants and animals) in the surrounding area are expected to be negligible. This assumption is based on the habitat containing scarce vegetation of non-native species. As discussed above, the site does not support any desert tortoises or burrowing owls due to the lack of suitable habitat and potential burrows. In addition, no Joshua trees (a state candidate species) were observed in the field investigations during March 2022. The following mitigation measures are recommended:

1. Pre-construction surveys for burrowing owls, desert tortoise, and nesting birds protected under the Migratory Bird Treaty Act and Section 3503 of the California Fish and Wildlife Code shall be conducted prior to the commencement of Project-related ground disturbance.
  - a. Appropriate survey methods and timeframes shall be established, to ensure that chances of detecting the target species are maximized. In the event that listed species, such as the desert tortoise, are encountered, authorization from the USFWS and CDFW must be obtained. If nesting birds are detected, avoidance measures shall be implemented to ensure that nests are not disturbed until after young have fledged.
  - b. Pre-construction surveys shall encompass all areas within the potential footprint of disturbance for the project, as well as a reasonable buffer around these areas.
2. A focused plant survey is recommended for all special status plant species that have the potential to occur on the site to be performed during the blooming season (April - June) to determine the potential environmental effects of the proposed projects on special status plants and sensitive natural communities following recommended protocols by the Department of Fish and Wildlife

If any sensitive species are observed on the property during future activities, CDFW and USFWS (as applicable) should be contacted to discuss specific mitigation measures which may be required for the individual species. CDFW and USFWS are the only agencies which can grant authorization for the “take” of any sensitive species and can approve the implementation of any applicable mitigation measures.

## 8.0 BIBLIOGRAPHY

- Baldwin, Bruce G, et. al.  
2002. The Jepson Desert Manual. Vascular Plants of Southeastern California. University of California Press, Berkeley, CA.
- Bureau of Land Management  
January 2005. Final Environmental Impact Report and Statement for the West Mojave Plan. Vol. 1A.
- California Burrowing Owl Consortium  
1993. Burrowing Owl Survey Protocol and Mitigation Guidelines.
- California Department of Fish and Game  
1990. California Wildlife: Volume 1 (Amphibians and Reptiles), Volume II (Birds), and Volume III (Mammals).
- California Department of Fish and Game  
2003. Mohave Ground Squirrel Survey Guidelines.
- California Department of Fish and Game  
2014. Rarefind 3 Natural Diversity Database. Habitat and Data Analysis Branch. Sacramento, CA.
- California Department of Fish and Game  
March 7, 2013. Staff Report on Burrowing Owl Mitigation. 34 pp.
- California Native Plant Society  
2001. Inventory of Rare and Endangered Plants of California (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA x + 388 pp.
- Ehrlich, P., Dobkin., Wheye, D.  
Birder's Handbook. A Field Guide to the Natural History of North American Birds. Simon & Schuster Building Rockefeller Center 1230 Avenue of the Americas. New York, New York 10020.
- Hickman, James C.  
The Jepson Manual Higher Plants of California. University of California Press. Berkeley, CA. 3<sup>rd</sup> Edition. 1996.
- Jaeger, Edmund C.  
1969. Desert Wild Flowers. Stanford University Press, Stanford, California. 321 pp.
- Kays, R. W. & Wilson, D. E.  
Mammals of North America. Princeton University Press, Princeton, New Jersey. 2002.

- Munz, Philip A.  
1974. A Flora of Southern California. University of California Press, Berkeley, California. 1086 pp.
- Tugel, Arlene J., Woodruff, George A.  
Soil Conservation Service, 1978. Soil Survey of San Bernardino County California, Mojave River Area.
- Sibley, David Allen.  
Sibley Birds West: Field Guide to Birds of Western North America. Knopf. 2016
- Stebbins, Robert C.  
A Field Guide to Western Reptiles and Amphibians. Houghton Mifflin Company. 2003.
- U.S. Fish and Wildlife Service  
2010 Desert Tortoise Survey Protocol.
- Whitaker, John O.  
The Audubon Society Field Guide to North American Mammals. Alfred A Knopf, Inc. 1980.

## CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits, presents the 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. Fieldwork conducted for this assessment was performed by Ryan Hunter, Jessica Hensley, and Brian Bunyi. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date: 03/10/2022 Signed: *Ryan Hunter*  
*Jessica Hensley*  
*Brian Bunyi*

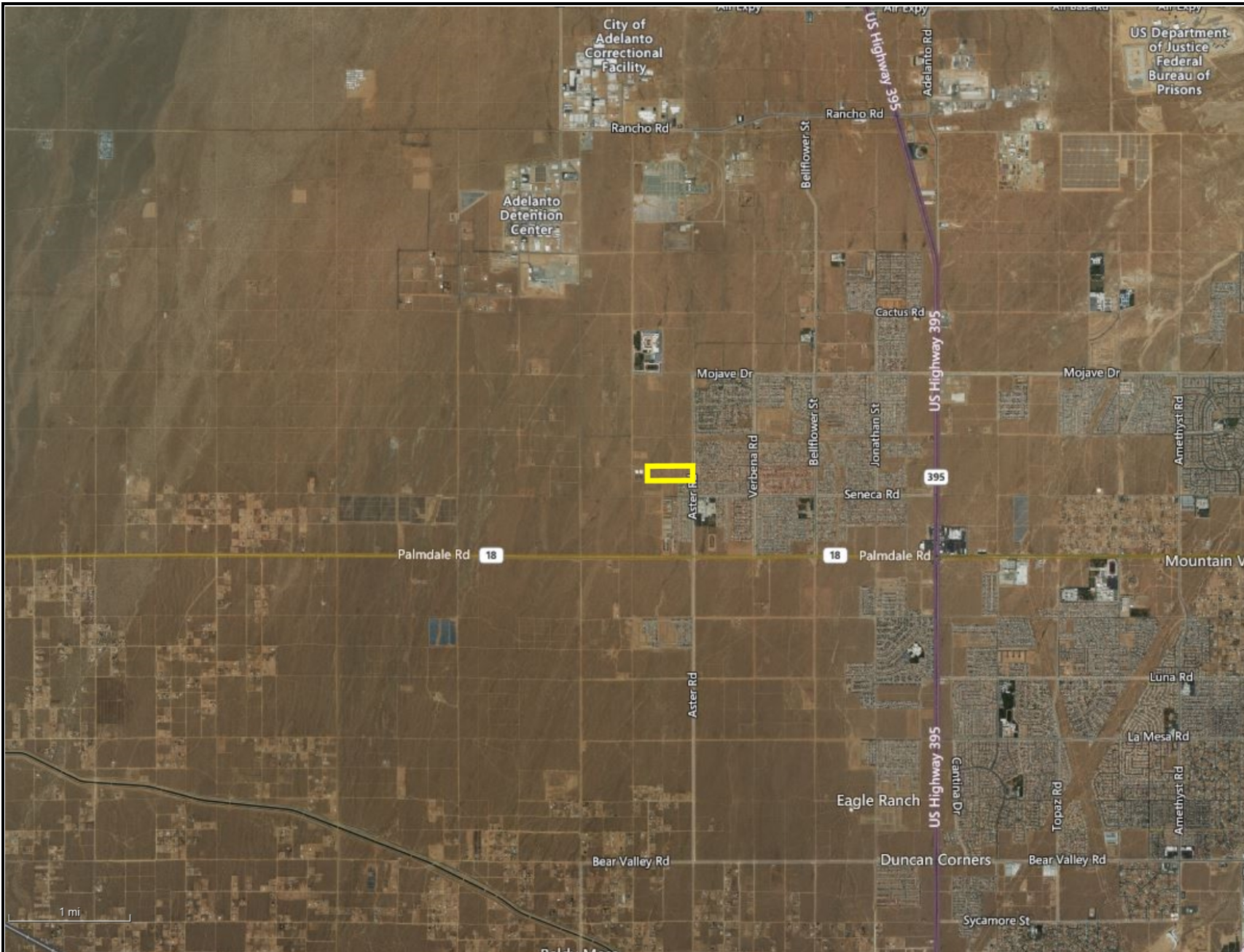
Field Work Performed By: Ryan Hunter  
Environmental Scientist/Biologist

Field Work Prepared By: Jessica Hensley  
Environmental Scientist/Biologist


Field Work Performed By: Brian Bunyi  
Environmental Scientist/Biologist



**Appendix A**  
**Tables and Figures**



**Legend**

 Project Boundary



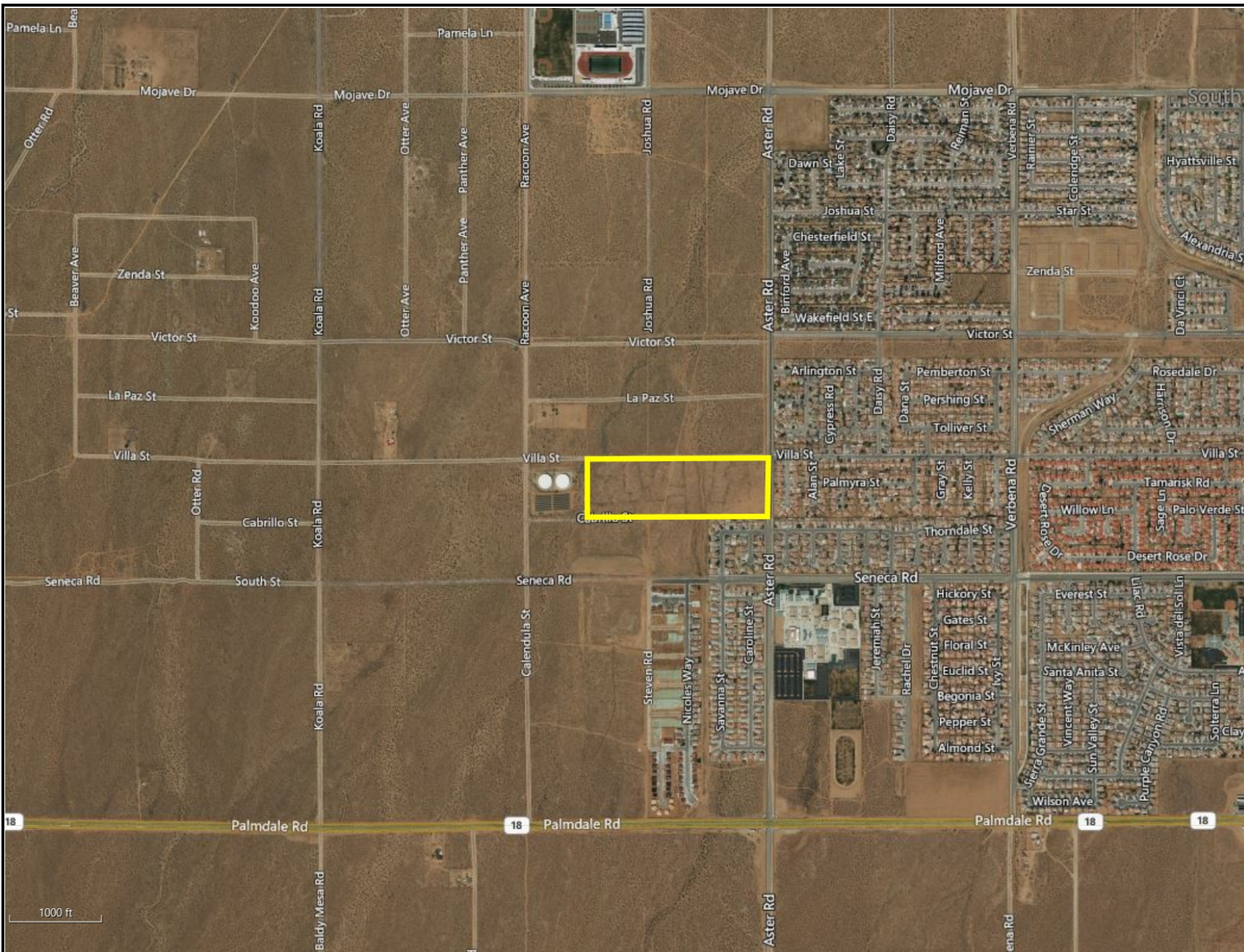
**Figure 1: Regional Exhibit**

Performed By: RCA Associates Inc.

**SW Corner of Aster Road  
and Villa Street**

Source:	Uinta Software
Acreage:	30 Acres
Project #:	2022-25





**Legend**  
 Project Boundary



**Figure 2: Vicinity Exhibit**

Performed By: RCA Associates Inc.

**SW Corner of Aster Road  
and Villa Street**

Source:	Uinta Software
Acreage:	30 Acres
Project #:	2022-25



CENTER OF SITE LOOKING NORTH



CENTER OF SITE LOOKING EAST



FIGURE 3: PHOTOGRAPHS OF SITE

CENTER OF SITE LOOKING SOUTH



CENTER OF SITE LOOKING WEST



FIGURE 3, cont: PHOTOGRAPHS OF SITE

**Table 1 - Plants observed on the site and known to occur in the immediate surrounding area.**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Location</b>
Asian mustard	<i>Brassica tournefortii</i>	On Site and in the surrounding area.
Redstem stork's bill	<i>Erodium cicutarium</i>	“
Rubber rabbitbrush	<i>Ericameria nauseosa</i>	“
Silver cholla	<i>Cylindropuntia echinocarpa</i>	“
Nevada jointfir	<i>Ephedra nevadensis</i>	“
Creosote bush	<i>Larrea tridentata</i>	“
Cheatgrass	<i>Bromus tectorum</i>	“
Tumbleweed	<i>Kali tragus var. tragus</i>	“
Flatspine bur ragweed	<i>Ambrosia acanthicarpa</i>	“
Shortpod mustard	<i>Hirschfeldia incana</i>	“
Western tansymustard	<i>Descurainia pinnata</i>	“
White bursage	<i>Ambrosia dumosa</i>	“
California buckwheat	<i>Eriogonum fasciculatum</i>	“
Common burrobrush	<i>Ambrosia salsola</i>	“
Kelch grass	<i>Schismus barbatus</i>	“

Note: The above list is not intended to be a comprehensive list of every plant which may occur on the site or in the zone of influence.

**Table 2 - Wildlife observed on the site during the field investigations.**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Location</b>
Common raven	<i>Corvus corax</i>	On-site and in the surrounding area.
House finch	<i>Carpodacus mexicanus</i>	“
Rock pigeon	<i>Columba livia</i>	“
Lesser goldfinch	<i>Spinus psaltria</i>	“
California Gull	<i>Larus californicus</i>	“
Black-tailed jackrabbit	<i>Lepus californicus</i>	“
House sparrow	<i>Passer domesticus</i>	“
Coyote (Scat)	<i>Canis Latrans</i>	“

Note: The above Table is not a comprehensive list of every animal species which may occur in the area, but is a list of those common species which were identified on the site or which have been observed in the region by biologists from RCA Associates, Inc.

## **REGULATORY CONTEXT**

The following provides a summary of federal and state regulatory jurisdiction over biological and wetland resources. Although most of these regulations do not directly apply to the site, given the general lack of sensitive resources, they provide important background information.

### **Federal Endangered Species Act**

The USFWS has jurisdiction over federally listed threatened and endangered plant and animal species. The federal Endangered Species Act (ESA) and its implementing regulations prohibit the take of any fish or wildlife species that is federally listed as threatened or endangered without prior approval pursuant to either Section 7 or Section 10 of the ESA. ESA defines “take” as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Federal regulation 50CFR17.3 defines the term “harass” as an intentional or negligent act that creates the likelihood of injuring wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns such as breeding, feeding, or sheltering (50CFR17.3). Furthermore, federal regulation 50CFR17.3 defines “harm” as an act that either kills or injures a listed species. By definition, “harm” includes habitat modification or degradation that actually kills or injures a listed species by significantly impairing essential behavior patterns such as breeding, spawning, rearing, migrating, feeding, or sheltering (50CFR217.12).

Section 10(a) of the ESA establishes a process for obtaining an incidental take permit that authorizes non federal entities to incidentally take federally listed wildlife or fish. Incidental take is defined by ESA as take that is “incidental to, and not the purpose of, the carrying out of another wise lawful activity.” Preparation of a habitat conservation plan, generally referred to as an HCP, is required for all Section 10(a) permit applications. The USFWS and National Oceanic and Atmospheric Administration’s National Marine Fisheries Service (NOAA Fisheries Service) have joint authority under the ESA for administering the incidental take program. NOAA Fisheries Service has jurisdiction over anadromous fish species and USFWS has jurisdiction over all other fish and wildlife species.



Section 7 of the ESA requires all federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any species listed under the ESA, or result in the destruction or adverse modification of its habitat. Federal agencies are also required to minimize impacts to all listed species resulting from their actions, including issuance or permits or funding. Section 7 requires consideration of the indirect effects of a project, effects on federally listed plants, and effects on critical habitat (ESA requires that the USFWS identify critical habitat to the maximum extent that it is prudent and determinable when a species is listed as threatened or endangered). This consultation results in a Biological Opinion prepared by the USFWS stating whether implementation of the HCP will result in jeopardy to any HCP Covered Species or will adversely modify critical habitat and the measures necessary to avoid or minimize effects to listed species.

Although federally listed animals are legally protected from harm no matter where they occur, section 9 of the ESA provides protection for endangered plants by prohibiting the malicious destruction on federal land and other “take” that violates State law. Protection for plants not living on federal lands is provided by the California Endangered Species Act.

### **California Endangered Species Act**

CDFW has jurisdiction over species listed as threatened or endangered under Section 2080 of the California Fish and Wildlife Code. Section 2080 prohibits the take of a species listed by CDFW as threatened or endangered. The state definition of take is similar to the federal definition, except that Section 2080 does not prohibit indirect harm to listed species by way of habitat modification. To qualify as take under the state ESA, an action must have direct, demonstrable detrimental effect on individuals of the species. Impacts on habitat that may ultimately result in effects on individuals are not considered take under the state ESA but can be considered take under the federal ESA.

Proponents of a project affecting a state-listed species must consult with CDFW and enter into a management agreement and take permit under Section 2081. The state ESA consultation process is similar to the federal process. California ESA does not require preparation of a state biological assessment; the federal biological assessment and the CEQA analysis or any other relevant information can provide the basis for consultation. California ESA requires that CDFW coordinate

consultation for joint federally listed and state-listed species to the extent possible; generally, the state opinion for the listed species is brief and references provisions under the federal opinion.

#### **Clean Water Act, Section 404**

The COE and the U.S. Environmental Protection Agency regulate the placement of dredged or fill material into “Waters of the United States” under Section 404 of the Clean Water Act. Waters of the United States include lakes, rivers, streams, and their tributaries, and wetlands. Wetlands are defined for regulatory purposes as “areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 Code of Federal Regulations [CFR] 328.3, 40 CFR 230.3).

The COE may issue either individual permits on a case-by-case basis or general permits on a program level. General permits are pre-authorized and are issued to cover similar activities that are expected to cause only minimal adverse environmental effects. Nationwide permits (NWP’s) are general permits issued to cover particular fill activities. All NWP’s have general conditions that must be met for the permits to apply to a particular project, as well as specific conditions that apply to each NWP.

#### **Clean Water Act, Section 401**

Section 401 of the Clean Water Act requires water quality certification and authorization of placement of dredged or fill material in wetlands and Other Waters of the United States. In accordance with Section 401 of the Clean Water Act, criteria for allowable discharges into surface waters have been developed by the State Water Resources Control Board, Division of Water Quality. As such, proponents of any new project which may impair water quality as a result of the project are required to create a post construction stormwater management plan to ensure offsite water quality is not degraded. The resulting requirements are used as criteria in granting National Pollution Discharge Elimination System (NPDES) permits or waivers, which are obtained through the Central Valley Regional Water Quality Control Board (RWQCB). Any activity or facility that will discharge waste (such as soils from construction) into surface waters, or from which waste

may be discharged, must obtain an NPDES permit or waiver from the RWQCB. The RWQCB evaluates an NPDES permit application to determine whether the proposed discharge is consistent with the adopted water quality objectives of the basin plan.

### **California Fish and Wildlife Code, Sections 1600-1616**

Under the California Fish and Wildlife Code, Sections 1600-1616 CDFW regulates projects that divert, obstruct, or change the natural flow or bed, channel, or bank of any river, stream, or lake. Proponents of such projects must notify CDFW and enter into a streambed alteration agreement with them.

Section 1602 of the California Fish and Wildlife Code requires a state or local government agency, public utility, or private entity to notify CDFW before it begins a construction project that will: (1) divert, obstruct, or change the natural flow or the bed, bank, channel, or bank of any river, stream, or lake; (2) use materials from a streambed; or (3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake. Once the notification is filed and determined to be complete, CDFW issues a streambed alteration agreement that contains conditions for construction and operations of the proposed project.

### **California Fish and Wildlife Code, Section 3503.5**

Under the California Fish and Wildlife Code, Section 3503.5, it is unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks, eagles, and falcons) or Strigiformes (owls). Take would include the disturbance of an active nest resulting in the abandonment or loss of young.

### **Migratory Bird Treaty Act**

The federal Migratory Bird Treaty Act (MBTA) prohibits the taking, hunting, killing, selling, purchasing, etc. of migratory birds, parts of migratory birds, or their eggs and nests. As used in the MBTA, the term “take” is defined as “to pursue, hunt, shoot, capture, collect, kill, or attempt to pursue, hunt, shoot, capture, collect, or kill, unless the context otherwise requires.” Most bird species native to North America are covered by this act.

### **Sensitive Natural Communities**

The California Office of Planning and Research and the Office of Permit Assistance (1986) define project effects that substantially diminish habitat for fish, wildlife, or plants, or that disrupt or divide the physical arrangement of an established community as significant impacts under CEQA. This definition applies to certain natural communities because of their scarcity and ecological values and because the remaining occurrences are vulnerable to elimination. For this study, the term “sensitive natural community” includes those communities that, if eliminated or substantially degraded, would sustain a significant adverse impact as defined under CEQA. Sensitive natural communities are important ecologically because their degradation and destruction could threaten populations of dependent plant and wildlife species and significantly reduce the regional distribution and viability of the community. If the number and extent of sensitive natural communities continue to diminish, the status of rare, threatened, or endangered species could become more precarious, and populations of common species (i.e., not special status species) could become less viable. Loss of sensitive natural communities also can eliminate or reduce important ecosystem functions, such as water filtration by wetlands and bank stabilization by riparian woodlands for example.

### **Protected Plants**

The California Desert Native Plant Act was passed in 1981 to protect non-listed California desert native plants from unlawful harvesting on both public and privately-owned lands. Harvest, transport, sale, or possession of specific native desert plants is prohibited unless a person has a valid permit. The following plants are under the protection of the California Desert Native Plants Act:

- Dalea spinosa (smoketree)
- All species of the genus Prosopis (mesquites)
- All species of the family Agavaceae (century plants, nolinias, yuccas)
- All species of Cactus
- Creosote Rings, ten feet in diameter or greater
- All Joshua Trees

The project would be required to comply with the County of San Bernardino Desert Native Plant Protection Ordinance. The removal of any trees listed under Section 88.01.060 would be required

to comply with Section 88.01.050, which requires the project applicant to apply for a Tree or Plant Removal Permit prior to removal from the project site.