# GENERAL BIOLOGICAL RESOURCES ASSESSMENT

**HESPERIA, SAN BERNARDINO COUNTY, CALIFORNIA**
**(Township 4 North, Range 4 West, Section 28)**
**(APN's: 0410-242-03 & 04)**

***Prepared for:***

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**Project: #2024-158 BA**

**November 12, 2024**

**(Updated January 20, 2025)**

# TITLE PAGE

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|---|---|
| **Date Report Written:** | **November 12, 2024, Updated January 20, 2025** |
| **Date Field Work Completed:** | **October 15, 2024, December 9, 2024** |
| **Report Title:** | **General Biological Resources Assessment** |
| **Project Location:** | **8651 C Ave.**<br>**Hesperia, CA 92345**<br>**APN 0410-2242-03 & 04** |
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## 1.0 INTRODUCTION AND SUMMARY

Biological surveys were conducted on a 4.71-acre parcel (Approximate), located on the northwest corner of Lime Street and C Avenue in the city of Hesperia, California. (Township 4 North, Range 4 West, Section 28, USGS Hesperia, California Quadrangle, 1956) (Figures 1 and 2). The property is located in an area zoned for Medium Density Residential (MDR) in the city of Hesperia.

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 October 15, 2024, 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 (CNDDB, 2024). 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 4.71-acres, located on the northwest corner of Lime Street and C Avenue in the city of Hesperia, California. (Township 4 North, Range 4 West, Section 28, USGS Hesperia, California Quadrangle, 1956) (Figures 1 and 2). Existing medium density residential housing exists that surround the project site in all directions.

The site is relatively flat and approximately 961 meters above sea level. The vegetation community present on site supports a heavily disturbed desert scrub habitat that has been previously graded and developed which encompasses few native plants and some non-native grasses. The site is dominated by Asian mustard (*Brassica tournefortii*), Menzies fiddleneck (*Amsinckia menziesii*), London rocket (*isymbrium irio*), Tree of heaven (*Ailanthus altissima*), Nevada jointfir (*Ephedra nevadensis*), kelch grass (*Schismus barbatus*), Water jacket (*Lycium andersonii*), California buckwheat (*Eriogonum fasciculatum*), and flatspine bur ragweed (*Ambrosia acanthicarpa*). 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. Only the desert cotton tail (*Sylvilagus audubonii*) was observed on site during the October 2024 field investigations. Although not observed, species such as the antelope ground squirrel (*Ammospermophilus leucurus*), California ground squirrel (*Otospermophilus beecheyi*) and black-tailed jackrabbit (Lepus californium) are expected to occur on site given their widespread distribution in the region.

Birds observed included common ravens (*Corvus corax*), house finch (*Carpodacus mexicanus*), Eurasian collared dove (*Streptopelia decaocto*), white crowned sparrow (*Zonotrichia leucophrys*), California scrub jay (*Aphelocoma californica*), northern mockingbird (*Mimus polyglottos*), and Anna's hummingbird (*Calypte anna*). Section 5.0 provides a more detailed discussion of the various species observed during the surveys.

No reptiles were observed during the field investigations. Species such as the side-blotched lizard (*Uta stansburiana*) and the western fence lizard (*Sceloporus occidentalis*) may occur on site given their widespread distribution in the region. Table 2 provides a compendium of wildlife species.

In addition, no sensitive habitats (e.g., sensitive species, critical habitats, etc.) have been documented in the immediate area according to the CNDDB (2024) and none were observed during the field Investigations.

## 3.0 METHODOLOGIES

General biological surveys were conducted on October 15, 2024, 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 0 to 5 mph, temperatures in the low to mid 90'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) provide 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 (CNDDB) search was performed. Based on this review, it was determined that thirteen special status species, ten wildlife and three plant species, have been documented within the Hesperia quadrangle 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.
CNDDB = California Natural Diversity Data Base

| NAME | STATUS | HABITAT REQUIREMENTS | PRESENCE/ ABSENCE ON PROPERTY |
|---|---|---|---|
| **PLANTS** | | | |
| **Within Hesperia Quadrangle** | | | |
| Short-joint beavertail (Opuntia basilaris var. brachyclada) | Federal: None<br>State: None<br>CNPS: 1B.2 | Chaparral, Joshua tree woodland, pinyon and juniper woodland | The site does not contain suitable habitat for the species, none were observed on site and are not expected to occur on site given their low population numbers in the area. |
| Booth's evening-primrose (*Eremothera boothii ssp. boothii*) | Federal: None<br>State: Threatened<br>CNPS: 2B.3 | Joshua tree woodland, pinyon and juniper woodland | The site does not contain suitable habitat for the species, none were observed on site and are not expected to occur on site given their low population numbers in the area. |
| White pygmy-poppy (*Canbya candida*) | Federal: None<br>State: None<br>CNPS: 4.2 | Joshua tree woodland, Mojave Desert scrub, gravely, sandy habitat | The site does not contain suitable habitat for the species, none were observed on site and are not expected to occur on site given their low population numbers in the area. |

**Notes:**

Status abbreviations:

CNPS List 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
CNPS List 1B: Plants rare, threatened, or endangered in California and elsewhere
CNPS List 2A: Plants presumed extirpated in California, but more common somewhere else
CNPS List 2B: Plants rare, threatened, or endangered in California, but more common somewhere else
CNPS List 3: Plants about which more information is needed - a review list
CNPS List 4: Plants of limited distribution - a watch list

.1 Seriously threatened in California (over 80% of occurrences threatened/ high degree and immediacy of threat)
.2 Moderately threatened in California (20-80% occurrences threatened/ moderate degree and immediacy of threat)
.3 No very threatened in California (<20% of occurrences threatened/ low degree and immediacy of threat or no current threats known)

**Table 4-2: Special status wildlife and insects documented in the region (Source: CNDDB, 2024) or likely to occur in the region.**

| NAME | STATUS | HABITAT REQUIREMENTS | PRESENCE/ ABSENCE ON PROPERTY |
|---|---|---|---|
| **Wildlife Species** | | | |
| **Within Hesperia Quadrangle** | | | |
| Yellow warbler (*Setophaga petechia*) | Federal: None<br>State: None<br>CDFW: SSC | Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. | The site does not support suitable habitat for the species. None were observed during the field investigations. Species not likely to occur on site in the future. |
| Burrowing owl (*Athene cunicularia*) | Federal: None<br>State: None<br>CDFW: SSC | Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. | Some suitable habitat observed on site. No occupiable burrows present on site, and no owls or owl sign was observed during the survey. |
| Cooper's hawk (*Accipiter cooperii*) | Federal: None<br>State: None | Woodland, chiefly of open, interrupted or marginal type. | The site does not contain suitable habitat for the Cooper's hawk, and none were observed. This mobile species occurs throughout southern California and could potentially be observed flying over the site during foraging activities. |
| Pallid bat (*Antrozous pallidus*) | Federal: None<br>State: None<br>CDFW: SSC | Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. | The site does not support suitable habitat for the species. None were observed during the field investigations. Species not likely to occur on site in the future. |
| Long-eared owl (*Asio otus*) | Federal: None<br>State: None<br>CDFW: SSC | Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. | The site does not support suitable habitat for the species. None were observed during the field investigations. Species not likely to occur on site in the future. |
| Coast horned lizard (*Phrynosoma blainvillii*) | Federal: None<br>State: None<br>CDFW: SSC | Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. | The site does not support suitable habitat for the species. None were observed during the field investigations. Species not likely to occur on site in the future. |

| | | | |
|---|---|---|---|
| Le Conte's thrasher (*Toxostoma lecontei*) | Federal: None<br>State: None<br>CDFW: SSC | Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. | The site does not support suitable habitat for the species. None were observed during the field investigations. Species not likely to occur on site in the future. |
| Gray vireo (*Vireo vicinior*) | Federal: None<br>State: None<br>CDFW: SSC | Dry chaparral; west of desert, in chamise-dominated habitat; mountains of Mojave Desert, associated with juniper and Artemisia. | The site does not support suitable habitat for the species. None were observed during the field investigations. Species not likely to occur on site in the future. |
| Mohave tui chub (*Siphateles bicolor mohavensis*) | Federal: Endangered<br>State: Endangered<br>CDFW: Fully protected | Endemic to the Mojave River basin, adapted to alkaline, mineralized waters. | The site does not contain suitable habitat for the species. A fully protected species, there are only three populations being maintained with the nearest population in Camp cady, with an introducing population being carried in the Mojave River. This species will not occur on site. |
| Mohave ground squirrel (*Xerospermophilus mohavensis*) | Federal: None<br>State: Threatened | Open desert scrub, alkali scrub and Joshua tree woodland. Also feeds in annual grasslands. Restricted to Mojave Desert. | The site does not support suitable habitat for the species. None were observed during the field investigations. Species not likely to occur on site in the future. |

## 5.0 RESULTS

### 5.1 General Biological Resources

The site supports a heavily disturbed desert scrub community that has been developed into two separate residential homes. Two existing residential structures and detached garages exist on the project site. The site has been previously developed and contains many ornamental plants and some native plants. Species present include Asian mustard (*Brassica tournefortii*), Menzies fiddleneck (*Amsinckia menziesii*), London rocket (*isymbrium irio*), Tree of heaven (*Ailanthus altissima*), Nevada jointfir (*Ephedra nevadensis*), kelch grass (*Schismus barbatus*), Water jacket (*Lycium andersonii*), California buckwheat (*Eriogonum fasciculatum*), and flatspine bur ragweed (*Ambrosia acanthicarpa*). Table 1 provides a compendium of all plants occurring on the site and/or in the immediate surrounding area.

Birds observed included common ravens (*Corvus corax*), house finch (*Carpodacus mexicanus*), Eurasian collared dove (*Streptopelia decaocto*), white crowned sparrow (*Zonotrichia leucophrys*), California scrub jay (*Aphelocoma californica*), northern mockingbird (*Mimus polyglottos*), and Anna's hummingbird (*Calypte anna*). Only the desert cotton tail (*Sylvilagus audubonii*) was observed on site during the October 2024 field investigations. Some mammal signs were observed such as burrows for species like the California ground squirrel (*Otospermophilus beecheyi*) and antelope ground squirrel (*Ammospermophilus leucurus*). No reptiles were observed on site. Other reptilian species that may occur include the common side-blotched lizard (*Uta stansburiana*) and western fence lizard (*Sceloporus occidentalis*). Tables 1 and 2 (Appendix A) provide 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 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

**Mohave Ground Squirrel:** The Mohave ground squirrel is a California state threatened species that has 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 Hesperia quadrangle and because the site has been developed in the past.

**Booth's Evening-Primrose:** The Booth's evening primrose is a California threatened annual plant species that thrives in arid areas, and has hairy reddish-green stems, mottled foliage, with smaller flowers which have either white, red, or yellowish petals. The flower's optimal preferred habitat includes Joshua tree and pinyon/juniper woodland including sandy flats and steep loose slopes. It is the opinion of RCA Associates, Inc. that the habitat is not prime habitat for the Booth's evening primrose given the lack of recent sightings, and few sandy areas occurring on the site along with few remaining undeveloped areas on site.

## 5.3 Species of Special Concern

**Sensitive Plants:** There are two plant species of special concern that have been documented in the Hesperia quad, the short-joint beavertail cactus and white-pygmy-poppy. In recent years, only the short-joint beavertail has been seen within the Hesperia quad, while the white pygmy-poppy has not been observed for over 20 years. The site currently does not support suitable habitat for the two species, and none were observed on site during the October 15, 2024, field investigations. These species are not expected to occur on the site in the foreseeable future based on the length of time they have not been observed in the area and lack of suitable habitat due to human disturbance, and therefore the project is not expected to impact any sensitive species.

**Sensitive Wildlife:** Within the Hesperia Quad, seven species are listed as Species of Special Concern. These are the yellow warbler, burrowing owl, pallid bat, long-eared owl, coast horned

lizard, Le Conte's thrasher, and gray vireo. The property does not contain suitable prime habitat for any of the species listed. The site does not contain suitable sized burrows for burrowing owls and no owl signs (i.e. scat, whitewash, castings, feathers) was observed during the field surveys. Burrowing owls are not expected to inhabit the site at the time of the October 2024 survey.

### 5.4 Jurisdictional Waters and Riparian Habitat

No riparian vegetation (e.g., cottonwoods, willows, etc.) exist on the site nor do any channels or depressions that may indicate jurisdictional areas. It is the opinion of RCA Associates, Inc., that a comprehensive jurisdictional delineation will not be required at a future date.

### 5.5 Protected Plants

**As of July 10, 2023, California legislature passed and signed the Western Joshua Tree Conservation Act (WJTCA, Senate Bill 122) into effect listing the western Joshua tree (*Yucca brevifolia*) as an endangered species. The WJTCA authorizes CDFW to oversee the various permitting processes dealing with mitigation and/or removal of western Joshua trees. Dead Western Joshua trees were observed on the property during the October 2024 field investigations. The dead tree matter was removed from the project site after the applicant gained approval from CDFW. CDFW staff informed the applicant after he submitted a western Joshua tree hazardous management permit application, that the tree matter found on the project site could be removed without the need for a permit since the debris was less than one foot by one foot.**

## 6.0 IMPACTS AND MITIGATION MEASURES

### 6.1 General Biological Resources

Future development of the site will have minimal impact on the general biological resources present on site. The site is expected to support a variety of 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 4.71-acres of heavily 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 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.

A pre-construction burrowing owl survey will be required by CDFW to determine if any owls have moved on to the site since October 15, 2024, 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 no less than 14 days of ground disturbance, followed by a final pre-construction survey within 24 hours of breaking ground.

## 7.0 CONCLUSIONS AND CONSIDERATIONS

Future development activities include grading the property and removing vegetation from the approximate 4.71-acre parcel; however, cumulative impacts to the general biological resources (plants and animals) on site are expected to be negligible. This assumption is based on the fact that the site has been graded and developed in the past. In addition, future development activities are not expected to have any impact on any State or Federal listed or State special status plant or animal species. As discussed above, the site does not support any desert tortoises. In addition, burrowing owls do not inhabit the site and are not expected to be impacted given the absence of any active burrows. Some mitigation measures that may be considered are:

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) 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, 2012. 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. 3rd 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 D. Hunter and Brian S. 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: 11/12/2024 Signed: Ryan D. Hunter
Brian S. Bunyi

Field Work Performed By: Ryan D. Hunter
Principal Environmental Scientist & Wildlife Biologist

Field Work Performed By: Brian S. Bunyi
Environmental Scientist & Wildlife Biologist

# Appendix A

# Tables and Figures

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

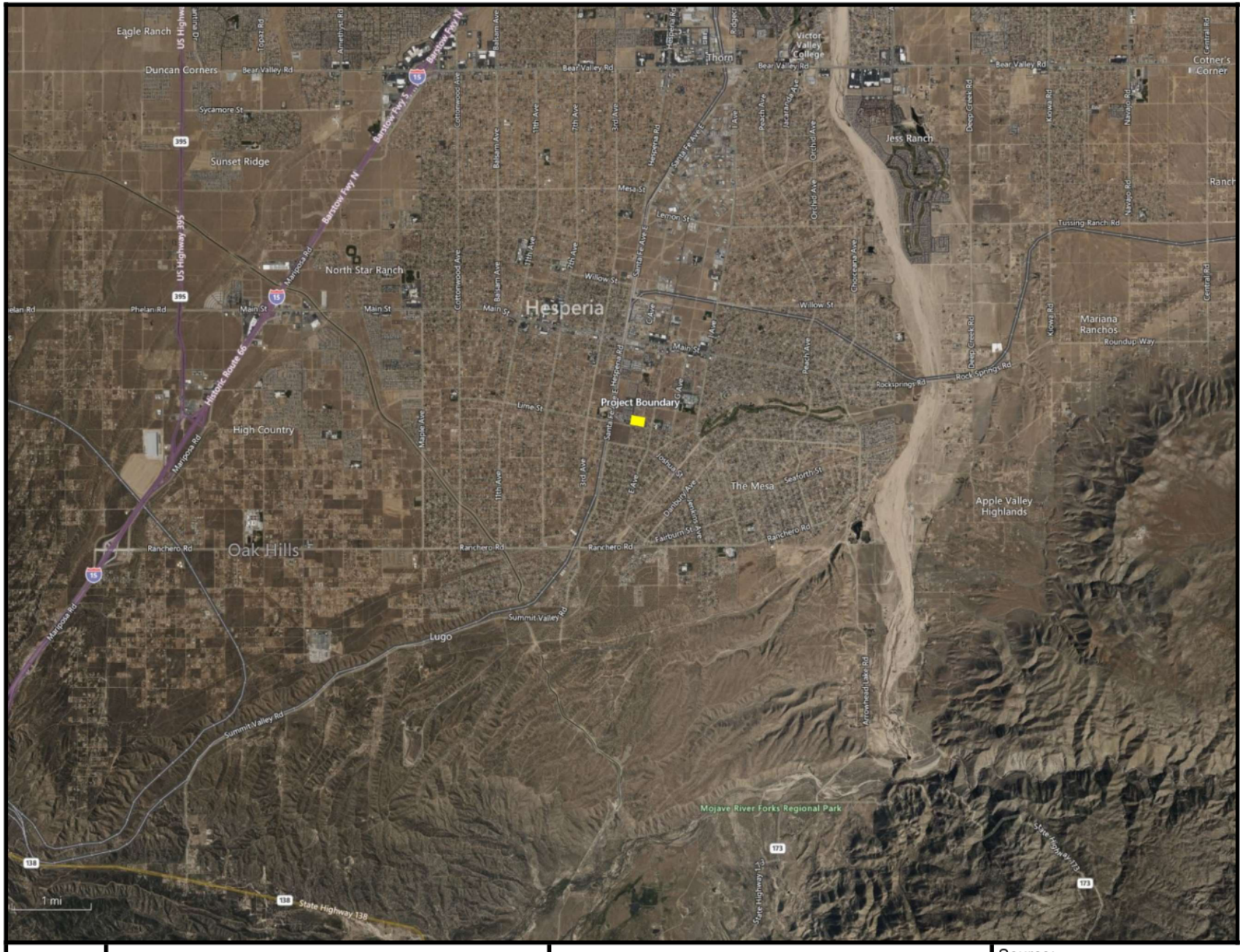
| Common Name | Scientific Name | Location |
|---|---|---|
| Asian mustard | *Brassica tournefortii* | On Site |
| Rubber rabbitbrush | *Ericameria nauseosa* | " |
| Nevada jointfir | *Ephedra nevadensis* | " |
| Western joshua tree | *Yucca brevifolia* | " |
| Menzies fiddleneck | *Amsinckia menziesii* | " |
| Tree of Heaven | *Ailanthus altissima* | " |
| Tumbleweed | *Kali tragus* | " |
| Cheatgrass | *Bromus tectorum* | " |
| Jerusalem thorn | *Parkinsonia aculeata* | " |
| Common burrobrush | *Ambrosia salsola* | " |
| Redstem stork's bill | *Erodium cicutarium* | " |
| Kelch grass | *Schismus barbatus* | " |
| California buckwheat | *Erigonum fasciculatum* | " |
| Flatspine bur ragweed | *Ambrosia acanthicarpa* | " |
| Short pod mustard | *Hirschfeldia incana* | " |
| Asian mustard | *Brassica tournefortii* | " |
| California juniper | *Juniperus californica* | " |
| Western jimson weed | *Datura wrightii* | " |
| Water jacket | *Lycium andersonii* | " |
| London rocket | *Sisymbrium irio* | " |
| Red brome | *Bromus rubens* | " |
| Siberian elm | *Ulmus pumila* | " |
| Mexican bladdersage | *Salazaria mexicana* | " |
| Horseweed | *Erigeron canadensis* | " |

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.**

| Common Name | Scientific Name | Location |
|---|---|---|
| Common raven | *Corvus corax* | On-site and in the surrounding area. |
| House finch | *Carpodacus mexicanus* | " |
| Anna's hummingbird | *Calypte anna* | " |
| White crowned sparrow | *Zonotrichia leucophrys* | " |
| Eurasian collared dove | *Streptopelia decaocto* | " |
| Mourning dove | *Zenaida macroura* | " |
| California scrub jay | *Aphelocoma californica* | " |
| Rock pigeon | *Columba livia* | " |
| Northern mockingbird | *Mimus polyglottos* | " |
| Desert cottontail | *Sylvilagus audubonii* | " |

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.




| | | | |
|---|---|---|---|
| | **Figure 1: Regional Exhibit**<br>Produced By: RCA Associates Inc. | **NE of the Intersection of Lime St. and C Ave. in Hesperia, CA.** | Source: Uinta Software<br>Acreage: 4.71-acres (Approximately)<br>Project #: 2024-158 |

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**Figure 2: Vicinity Exhibit**

Produced By: RCA Associates Inc.

**NE of the Intersection of Lime St. and C Ave. in Hesperia, CA.**

| | |
|---|---|
| Source: | Uinta Software |
| Acreage: | 4.71-acres (Approximately) |
| Project #: | 2024-158 |

RCA EST. 1990 ASSOCIATES, INC

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

## REGULATORY CONTENT

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).

Section10(a) of the ESA establishes a process for obtaining an incidental take permit that authorizes nonfederal 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 orders 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, nolinas, 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.

RCA
EST. 1990
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**April 24, 2025**

Mr. Andrew Taylor
8561 "C" Avenue
Hesperia, CA 92345

**Re: Western Joshua tree presence/absence survey for a 4.71-acre site (APN 0410-242-03 & 04) located in, Hesperia, California. RCA # 2025-158 JT PA**

Dear: Mr. Andrew Taylor:

At the request of the project proponent, RCA Associates, Inc. conducted a western Joshua tree presence/absence survey on the property referenced above to evaluate the site for the presence of living and dead western Joshua trees. The project proponent is proposing to build apartments on the 4.71-acre site. The property is located on the northwest corner of Lime Street and C Avenue in the city of Hesperia, California. Vacant undeveloped land borders the site in the east with existing residential dwellings in all other directions. The site has two standing houses on site with existing desert vegetation and ornamental vegetation. Plants observed during the April 17, 2025, field investigations included Asian mustard (Brassica tournefortii), Menzies fiddleneck (Amsinckia menziesii), London rocket (isymbrium irio), Tree of heaven (Ailanthus altissima), Nevada jointfir (Ephedra nevadensis), kelch grass (Schismus barbatus), Water jacket (Lycium andersonii), California buckwheat (Eriogonum fasciculatum), and flatspine bur ragweed (Ambrosia acanthicarpa). The survey was conducted by Mr. Ryan D. Hunter and Brian S. Bunyi of RCA Associates, Inc. The purpose of the survey was to evaluate the project area for the existence of western Joshua trees. This includes all living and dead western Joshua trees as well as any significant remnant pieces of western Joshua trees.

**As of July 10, 2023, California legislature passed and signed the Western Joshua Tree Conservation Act (WJTCA, Senate Bill 122) into effect listing the western Joshua tree (Yucca brevifolia) as a candidate endangered species. The WJTCA authorizes CDFW to oversee the various permitting processes dealing with mitigation and/or removal and relocation of western Joshua trees. Therefore, any attempt to remove a Joshua tree from its current position will require a California Endangered Species Act Incidental Take Permit (CESA, ITP) or a Western Joshua Tree Conservation Act Incidental Take Permit (WJTCA, ITP). CDFW is the lead agency in the decision making of the projects forward progress pertaining to western Joshua trees.**

## Methodologies

Pedestrian surveys were walked throughout the site and biologists from RCA Associates, Inc. evaluated the site for the presence of any western Joshua trees on April 17, 2025, from 1130 to 1230. Temperatures during the survey were in the mid 60's to high 60's (°F), wind speeds of about 0-5 mph, 5% (percent) cloud cover. Survey transects were walked throughout the property at a distance ranging from about 20-30 meters.

Joshua trees occur throughout the Mojave Desert in Southern California and are typically found at an elevation of 400 to 1,800 meters (~1,200 to ~5,400 feet). Joshua trees within the western portion of the Mojave Desert typically receive more annual precipitation during the "normal" years; consequently, cloning occurs more often resulting in numerous trunks sprouting from the same root system (Rowland, 1978). Joshua tree habitats provide habitats for a variety of wildlife species including desert wood rats (Neotoma sp.) and night lizards (Xantusia sp.) both of which utilize the base of the trees. A variety of birds also utilize Joshua trees for nesting such as hawks, common ravens, and cactus wren. CDFW consider Joshua tree woodlands as areas that support relatively high species diversity and as such are considered to be a sensitive desert community. Joshua trees are also considered a significant resource under the California Environmental Quality Act (CEQA) and are included in the Desert Plant Protection Act, Food and Agricultural Code (80001-80006), and have recently been given a temporary threatened species status by CDFW on September 22, 2020.

## Results

Based on the results of the April 17, 2025, field investigations, there were no western Joshua trees located withing the project's footprint, also no dead Joshua trees or parts and pieces of western Joshua trees. It is the professional opinion of RCA Associates Inc. that there is no need for a Western Joshua Tree Conservation Act Census to be performed on site. Due to the absence of western Joshua trees on site there is no need to apply for a Hazardous Removal Permit, California Endangered Species Act Incidental Take Permit, or a Western Joshua Tree Conservation Act Incidental Take Permit. The project proponent should be able to move forward with their build and not pay any mitigations for western Joshua trees.

If you have any questions, please call me Ryan D. Hunter at (760) 596-0017 or Brian S. Bunyi at (760) 998-7165.

Sincerely,

Ryan D. Hunter
President and Senior Biologist
RCA Associates, Inc.

## References


California Burrowing Owl Consortium

1993. Burrowing Owl Survey Protocol and Mitigation Guidelines

California Department of Fish and Game

March 7, 2012. Staff Report on Burrowing Owl Mitigation. 34 pp.

California Department of Fish and Game

2023. Rarefind 5 Natural Diversity Database. Habitat and Data Analysis Branch. Sacramento, CA.

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

Holing, Dwight

1998 California Wild Lands. Chronical Books. San Francisco, CA. 211 pp.

Holland, Robert F.

1986 Preliminary Description of the Terrestrial Natural Communities of California.Prepared for the California Natural Diversity Data Base. California Department of Fish and Game. Sacramento, California. 160 pp.

Johnson, H.

1976 vegetation and Plant Communities of Southern California Deserts- a functional view. In Symposium proceedings: Plant communities of Southern California. June Latting, editor. California Native Plant Society, Spec. No. 2 Berkeley, CA.