## BIOLOGICAL RESOURCES ASSESSMENT FOR LITTLE LAKE BASIN RECHARGE MODIFICATIONS

**Prepared** for:

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## **1.0 INTRODUCTION**

#### **1.1 PROJECT LOCATION**

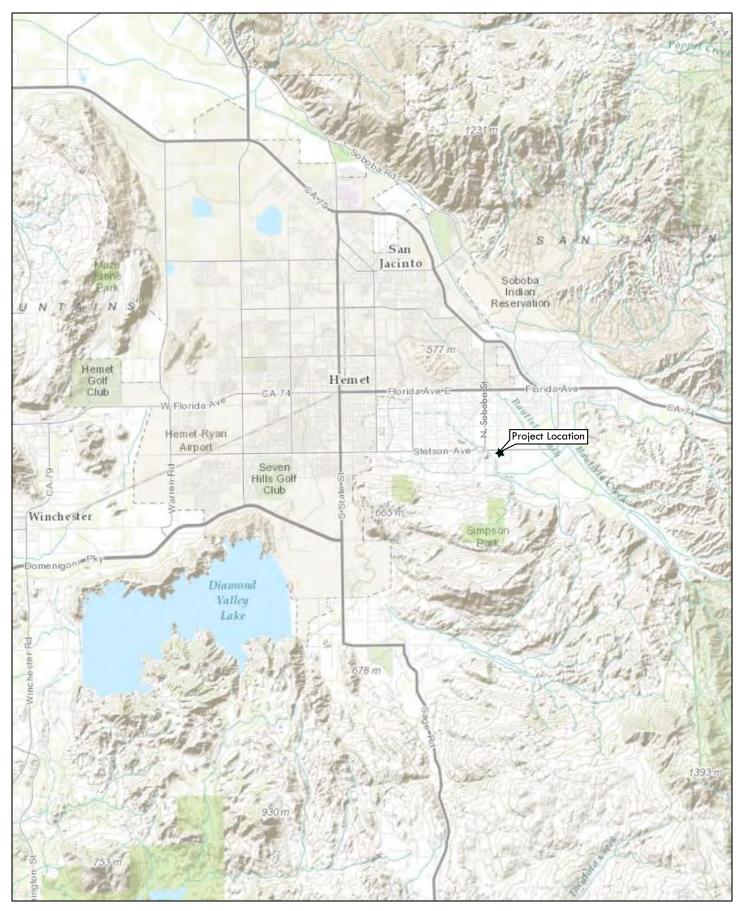
Little Lake Basin (Basin) is located in the unincorporated community of East Hemet in the County of Riverside (See Figure 1). The Basin is located on the southeast corner of Lake Street and Stetson Avenue (Figure 2). The project location is found on the Hemet USGS 7.5-minute quadrangle within Section 19, Township 5 South, Range 1 East. The latitude and longitude coordinates are 33° 43' 43.5" North, 116° 54' 47.6" West.

#### **1.2 PROJECT DESCRIPTION**

The Lake Hemet Municipal Water District is proposing the conversion of the existing approximately 6-acre flood control detention basin (Little Lake Basin) into a retention basin. Refer to Figures 1 and 2 for a Regional Location Map and Vicinity Map/Aerial Photograph of the subject property. The objective of the project is to increase groundwater recharge opportunities and to use the basin for infiltration of San Jacinto River water, storm water runoff, and/or imported State Water Project (SWP) water. The District currently recharges an average of 7,500 acre-feet of State Water Project water annually to the aquifers in the San Jacinto and Hemet basins, meeting requirements of the Stipulated Judgment entered April 18, 2013 (*Eastern Municipal Water District v. City of Hemet, City of San Jacinto, and Lake Hemet Municipal Water District, Case No. RIC 1207274*). Construction of basin improvements would allow an additional opportunity for recharging SWP water when it is available. An existing pipeline will be extended to accommodate the use of SWP water to be delivered by Eastern Municipal Water District (See Figure 3).

The use of Little Lake Basin for groundwater recharge was identified in the Hemet/San Jacinto Groundwater Management Area Water Management Plan as the Little Valley Project (Water Resources & Information Management Engineering, Inc., 2007). The Water Management Plan identifies Little Lake Basin as one of seven preferred project sites for direct recharge of groundwater. Direct recharge is generally described as the use of imported water, surface water, or recycled water to recharge groundwater through surface spreading. Little Lake Basin was identified as a preferred site based on screening criteria that included: general site characteristics, hydrogeological suitability, sub-basin interaction, engineering suitability, land use suitability, and environmental impacts.

The estimated quantity of recharge supplied by surface flows will depend on rain events. By excavating and deepening the basin it is estimated that an additional 15 acre-feet of water will be captured with each rain event and allowed to percolate into the aquifer, that otherwise would have flowed downstream. Assuming 15 rain events at 15 acre-feet each would total an estimated 225 acre-feet per year of recharge. Dry season recharge would be limited to 225 acre-feet per year maximum from Northern California imported water purchased from Eastern Municipal Water District via Metropolitan Water District and the State Water Project when surplus water is available.





#### **REGIONAL VICINITY** Little Lake Basin Recharge Modifications Riverside County, California



PROJECT LOCATION Little Lake Basin Recharge Modifications Riverside County, California Figure 2



500







Basin/Sparse Vegetation Semi-Natural Herbaceous Vegetation

## **EXISTING CONDITIONS**

Little Lake Basin Recharge Modifications Riverside County, California Construction of the retention basin will involve the excavation of approximately 35,000 cubic yards of material to lower the basin depth by approximately five-feet. This will allow excess stormwater flows and unused/excess irrigation water to be retained for direct recharge of groundwater. The Project will also include construction of an approximate 150-foot extension of the existing irrigation pipeline located in Stetson Avenue. This 8-inch PVC pipeline extension will allow the excess irrigation water to flow into the converted retention basin.

Complete construction is anticipated within 60 days of initiation. Excavators would access the basin bottom via the existing access ramps and remove sediment to an upland location. No stockpiling would occur within the basin banks during construction.

Long-term maintenance of the basin bottom and internal slopes will continue to be provided by Lake Hemet Water District and the outer slopes will continue to be maintained by the Riverside County Flood Control and Water Conservation District.

#### 1.3 PURPOSE OF BIOLOGICAL RESOURCES ASSESSMENT

The purpose of this Biological Resources Assessment is to:

- Identify sensitive habitats in the project area;
- Identify sensitive species in the project area;
- Identify if the project area is within a wildlife corridor; and
- Identify any Habitat Conservation Plans of Natural Community Conservation Plans that are associated with the project area.

## 2.0 RARE, THREATENED, OR ENDANGERED SPECIES

This section discusses sensitive plant and animal species that may occur within the project area; these potentially occurring species were the focus of the survey conducted for this BRA. A probability of occurrence has been assigned to each of these species following consideration of available literature materials and field survey results. The probabilities of occurrence range from not present, to low, moderate, or high. Corresponding percentage equivalents for these ranges are:

Not present	0%
Low	less than 50%
Moderate	51 - 75%
High	more than 76%

Sensitive species are those animals and plants which have a federal designation of Candidate, Threatened or Endangered, or a State designation of Rare, Threatened, or Endangered. Additionally, in California, a plant may be designated as sensitive by the California Native Plant Society (CNPS) classification system. CNPS has created five "lists" in an effort to categorize degrees of concern. The CNPS lists are described as follows:

#### List 1A: Plants Presumed Extinct in California

The plants of List 1A (less than 30 taxa) are presumed extinct because they have not been seen or collected in the wild in California for many years. This list includes plants that are both presumed extinct in California, as well as those plants which are presumed extirpated in California. A plant is extinct in California if it no longer occurs in or outside of California. A plant that is extirpated from California has been eliminated from California, but may still occur elsewhere in its range.

All of the plants constituting List 1A meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. Should these taxa be rediscovered, it is mandatory that they be fully considered during preparation of environmental documents relating to the California Environmental Quality Act (CEQA).

#### List 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere

The plants of List 1B are rare throughout their range with the majority of them endemic to California. Most of the plants of List 1B have declined significantly over the last century. List 1B plants constitute the majority of the plants in CNPS' Inventory with more than 1,000 plants assigned to this category of rarity.

All of the plants constituting List 1B meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

## List 2: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

Except for being common beyond the boundaries of California, the plants of List 2 would have appeared on List 1B. From the federal perspective, plants common in other states or countries are not eligible for consideration under the provisions of the Endangered Species Act. Until 1979, a similar policy was followed in California. However, after the passage of the Native Plant Protection Act, plants were considered for protection without regard to their distribution outside the state.

With List 2, CNPS recognizes the importance of protecting the geographic range of widespread species. In this way, CNPS protects the diversity of the state's flora and helps maintain the evolutionary process and genetic diversity within species. All of the plants constituting List 2 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

#### List 3: Review List

The plants that comprise List 3 are united by one common theme - CNPS lacks the necessary information to assign them to one of the other lists or to reject them. Nearly all of the plants remaining on List 3 are taxonomically problematic.

Some of the plants constituting List 3 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. The CNPS strongly recommends that List 3 plants be evaluated for consideration during preparation of environmental documents relating to CEQA.

#### List 4: Plants of Limited Distribution - A Watch List

The plants in this category are of limited distribution or infrequent throughout a broader area in California, and their vulnerability or susceptibility to threat appears relatively low at this time.

Very few of the plants constituting List 4 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and few, if any, are eligible for state listing.

## 2.1 POTENTIALLY OCCURRING RARE, THREATENED OR ENDANGERED PLANT SPECIES

The following is a list of Rare, Threatened, or Endangered plant species that have the potential to occur at the Project Site. These species were identified as potentially occurring from California Natural Diversity Data Base (CNDDB) observation records. This BRA documents the probability of occurrence for these species through direct observation of the species or the existence of suitable habitat for the species.

Plant species which are considered Rare under the CDFG January 2013 State and Federally Listed Endangered, Threatened, and Rare Plants of California but not classified as Candidate, Threatened or Endangered under the State and Federal Endangered Species Acts were evaluated during the field survey and are listed in the Species Probability List included in this report as Appendix A.

Listed below are plant species that may occur at the Project Site that are under the protection of the State and Federal Endangered Species Acts, or species that require special permits or consultation with State and Federal agencies.

Scientific Name	Common Name	Listing
Allium munzii	Munz's onion	FE, ST, 1B.1
Ambrosia pumila	San Diego ambrosia	FE, 1B.1

Atriplex coronata var. notatior	San Jacinto Valley crownscale	FE, 1B.1
Berberis nevinii	Nevin's barberry	FE, SE, 1B.1
Brodiaea filifolia	thread-leaved brodiaea	FT, SE, 1B.1
Deinandra mohavensis	Mojave tarplant	SE
Delphinium hesperium ssp. cuyamacae	Cuyamaca larkspur	SR
Dodecahema leptoceras	slender-horned spineflower	FE, SE, 1B.1
Navarretia fossalis	spreading navarretia	FT, 1B.1
Orcuttia californica	California orcutt grass	FE, SE, 1B.1

FE: Federally Endangered, FT: Federally Threatened, SE: State Endangered, ST: State Threatened, SR: State Rare

#### 2.2 POTENTIALLY OCCURRING SENSITIVE ANIMAL SPECIES

The following is a list of Candidate, Threatened, or Endangered animal species that have the potential to occur at the project area. These species were identified as potentially occurring from CNDDB observation records and the USFWS San Bernardino County Species List. This BRA documents the probability of occurrence for these species through direct observation of the species or the existence of suitable habitat for the species.

Animal species which are considered Species of Special Concern under the California Department of Fish and Wildlife January 2013 Special Animal List but not classified as Candidate, Threatened or Endangered under the State and Federal Endangered Species Acts were evaluated during the field survey and are listed in the Species Probability List included in this report as Appendix A.

Scientific Name	Common Name	Listing
Ambystoma californiense	California tiger salamander	FT, ST, SC
Anaxyrus californicus	arroyo toad	FE, SC
Athene cunicularia	burrowing owl	SC
Branchinectalynchi	vernal pool fairy shrimp	FT
Charina umbratica	southern rubber boa	ST
Coccyzus americanus occidentalis	western yellow-billed cuckoo	FC, SE
Dipodomys merriami parvus	San Bernardino kangaroo rat	FE, SC

Dipodomys stephensi	Stephen's kangaroo rat	FE, ST
Euphydryas editha quino	quino checkerspot butterfly	FE
Haliaeetus leucocephalus	bald eagle	FD, SE
Polioptila californica californica	coastal California gnatcatcher	FT
Rana muscosa	Sierra Madre yellow-legged frog	FE
Streptocephalus woottoni	Riverside fairy shrimp	FE
Vireo bellii pusillus	least Bell's vireo	FE, SE

FE: Federally Endangered, FT: Federally Threatened, SE: State Endangered, ST: State Threatened, SR: State Rare

## 3.0 WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT CONSERVATION PLAN

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) includes 40 species of plants and animals that may require surveys for potential project impacts. Of these, certain species were not listed to occur in the vicinity of the Project Site on the CNDDB and therefore were not included in the Probability of Occurrence list. Rare, Threatened, or Endangered species identified in the Probability of Occurrence list are identified in Sections 2.1 and 2.2.

The Proposed Project is located on a parcel with a MSHCP designation of Public/Quasi-Public Lands, and surrounded by land with a MSHCP designation of agricultural land on all sides. The Project Site is located in the San Jacinto Valley Area Plan of the MSHCP and is not located within an area plan sub-unit, or in the vicinity of any identified criteria cell or cell group. The Project Site has habitat assessment requirements for burrowing owl (*Athene cunicularia*) as identified through the Riverside County Integrated Project Conservation Summary Report Generator online tool. The site does not have habitat assessment requirements for amphibian species, criteria area species, mammalian species, narrow endemic plant species, or special linkage areas.

## 4.0 **REGULATORY BACKGROUND**

#### 4.1 STATE AND FEDERAL SENSITIVE SPECIES REGULATIONS

#### 4.1.1 Endangered Species Act

The Endangered Species Act (Act) provides broad protection for species of fish, wildlife and plants that are listed as threatened or endangered in the U.S. or elsewhere. The Act makes provisions for listing species, as well as for recovery plans and for the designation of critical

habitat of listed species. The Act outlines procedures for federal agencies to follow when taking actions that may jeopardize listed species, and contains exceptions and exemptions.

Congress found that various species of fish, wildlife and plants in the U.S. have been rendered extinct while others have been depleted to the point of being in danger of or threatened with extinction. Congress declared that depleted species are of aesthetic, ecological, educational, historical, recreational, and scientific value. As a result, the U.S. has pledged to conserve various species facing extinction pursuant to several international treaties and agreements. To encourage conservation, federal financial assistance and a system of incentives has been put in place so that states and other interested parties may develop conservation programs that meet national and international standards and safeguard the nation's heritage in fish, wildlife and plants.

The purposes of the Act are to: provide a means of conserving the ecosystems upon which endangered and threatened species depend; provide a program for conserving those species; and take steps necessary to achieve the purposes of the international treaties and conventions. The policy of Congress is that federal agencies must seek to conserve endangered and threatened species and use their authorities in to further the Act's purposes.

#### 4.1.2 California Endangered Species Act

The California Endangered Species Act (CESA) states that all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected or preserved. The California Department of Fish and Wildlife (formerly called the California Department of Fish and Game: http://www.dfg.ca.gov) will work with all interested persons, agencies and organizations to protect and preserve such sensitive resources and their habitats.

However, CESA also allows for take incidental to otherwise lawful development projects. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate mitigation planning to offset project caused losses of listed species.

#### 4.1.3 California Environmental Quality Act

The California Environmental Quality Act (CEQA) is California's broadest environmental law. CEQA helps to guide the California Department of Fish and Wildlife during issuance of permits and approval of projects. Courts have interpreted CEQA to afford the fullest protection of the environment within the reasonable scope of the statutes. CEQA applies to all discretionary projects proposed to be conducted or approved by a California public agency, including private projects requiring discretionary government approval.

The purpose of CEQA is to:

- Disclose to the public the significant environmental effects of a proposed discretionary project, through the preparation of an Initial Study (IS), Negative Declaration (ND), or Environmental Impact Report (EIR).
- Prevent or minimize damage to the environment through development of project alternatives, mitigation measures, and mitigation monitoring.
- Disclose to the public the agency's decision making process utilized to approve discretionary projects through findings and statements of overriding consideration.
- Enhance public participation in the environmental review process through scoping meetings, public notice, public review, hearings, and the judicial process.
- Improve interagency coordination through early consultations, scoping meetings, notices of preparation, and State Clearinghouse review.

California Public Resources Code Sections 21000-21004 generally state that:

- State agencies shall regulate the activities of private individuals, corporations, and other public agencies whose activities may affect the environment shall regulate to prevent environmental damage.
- State government agencies shall develop standards and procedures necessary to maintain, protect, rehabilitate and enhance environmental quality, including fish and wildlife populations and plant and animal communities.
- Projects carried out by public agencies shall be subject to the same level of review as private projects requiring approval by public agencies.
- No projects which would cause significant environmental effects should be approved as proposed if there are feasible alternatives or mitigation measures that would lessen those effects.
- Environmental impact reports (EIRs) shall be used to provide full public disclosure of the environmental impacts of a proposed project.
- EIRs shall include identification of all significant effects, alternatives, and potential mitigation measures.
- Local agencies should integrate CEQA with other environmental review, planning, and information gathering so as to cut costs and time and to apply the conservation of financial, governmental, physical, and social resources towards better mitigation.
- Identification of significant effects, alternatives and mitigation measures, as well as comments from the public and public agencies, and relevant information about significant effects should be made as early as possible in the process.

Failure to comply with CEQA to provide full disclosure of information during the CEQA process, which would result in relevant information not being presented to the public agency, would constitute prejudicial abuse of discretion leaving the project proponent open to possible lawsuits.

#### 4.1.4 Western Riverside County Multiple Species Habitat Conservation Plan

The final MSHCP was approved by the County of Riverside Board of Supervisors on June 17, 2003. The federal and state permits were issued on June 22, 2004 and implementation of the MSHCP began on June 23, 2004. The MSHCP is intended to balance the demands of the growth of western Riverside County with the need to preserve open space and protect species of plants and animals that are threatened with extinction. The overall goals of the Western Riverside County MSHCP are as follows:

- Promote the biological viability and recovery of western Riverside County's ecosystems and habitats and species dependent thereupon, toward a goal of reducing the need to list additional species in the future.
- Provide a comprehensive means to coordinate, standardize, streamline, and ensure closure regarding mitigation requirements of the ESA, CESA, and other applicable laws and regulations related to biological and natural resources within the plan area.
- Assure property owners, local governments, and other affected parties that conservation measures undertaken for species and wildlife habitat are adequately covered by the Western Riverside County MSHCP and will satisfy mitigation requirements of the ESA, CESA, and other applicable laws and regulations concerning impacts to those covered species and habitats.
- Establish and emphasize the use of incentives to encourage property owners to voluntarily conserve habitats and species as an alternative to regulatory mandates.
- Facilitate economic growth and prosperity so that it occurs in a manner consistent with the conservation of biological resources within the plan area.
- Provide the basis for issuance of incidental take permits for species, both listed and unlisted, that are adequately covered by the Western Riverside County MSHCP.
- Establish consistent mitigation standards for covered species for potential application by the USFWS under Section 7 of the ESA.

The Western Riverside County MSHCP addresses incidental take of "covered" species. Of the 146 covered species addressed in the Western Riverside County MSHCP, 118 are considered to be adequately conserved simply by implementing the conservation program. Incidental take of these 118 species is permitted by the Western Riverside County MSHCP. The remaining 28 covered species are considered to be partially conserved – they would be adequately conserved when certain additional conservation requirements are implemented. The additional requirements are identified in the species-specific conservation objectives for those 28 species.

To provide adequate conservation of the covered species, the Western Riverside County MSHCP is designed to facilitate the assembly of an approximate 500,000-acre conservation area. The conservation area is expected to include approximately 347,000 acres of public and quasi-public lands, and approximately 153,000 acres of acquired private lands that are permanently protected and managed for the benefit of the covered species. Local permittees, including Riverside County and the participating incorporated cities, must collectively contribute approximately

97,000 acres of acquired private lands to the conservation area. The acquisition of these lands is funded by dedications and fee payments on private development.

## 5.0 METHODOLOGY

#### 5.1 LITERATURE SEARCH

A literature search was conducted to obtain information for this BRA. The following sources were used to gather species information and topographic data, and to identify potential habitat resources, and federal and state jurisdictions:

- California Natural Diversity Data Base; United States Geological Survey Topographic Quadrangles: Hemet, Bachelor Mountain, Blackburn Canyon, Cahuilla Mountain, Lake Fulmor, Lakeview, Sage, San Jacinto, and Winchester;
- United States Fish and Wildlife Service Critical Habitat Portal;
- United States Fish and Wildlife Service Environmental Conservation Online Service;
- Terraserver USA;
- Calflora;
- National Agricultural Imagery Program;
- Landsat 7 Color Imagery; and,
- Western Riverside County Multiple Species Habitat Conservation Plan.

#### 5.2 FIELD SURVEYS

A field survey of the project area was conducted on July 30, 2013 for the purpose of assessing habitat present within and immediately adjacent to the project area, and to determine the presence or probability of presence of Candidate, Threatened, or Endangered species or their habitats as listed in Section 2.1 and 2.2 above. The survey was conducted at approximately 10:00am, cloud cover was 0%, and the temperature was approximately 85°F. A pedestrian survey was conducted and dominant species of plants and animals were recorded. All species with the potential to occur, including sensitive species are listed in Appendix A. All wildlife species observed during the field surveys are listed in Appendix B. Representative photographs of the habitat are included in Appendix C.

#### 5.3 BURROWING OWL FOCUSED STUDIES

The Project Site has MSHCP habitat assessment requirements for burrowing owl. The MSHCP survey guidelines are based on the 2006 California Department of Fish and Wildlife protocol. The Step I survey for burrowing owl was conducted on July 30, 2013 and followed the *Burrowing Owl Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area.* The survey methodology included pedestrian surveys of the basin to identify the presence of burrowing owl habitat. Additionally, a 500-feet buffer zone around the project boundary was surveyed where accessible.

### 6.0 **RESULTS**

#### 6.1 HABITAT/VEGETATION

The Project Site is developed and maintained as a flood control basin operated by Riverside County Flood Control and Water Conservation District. The District conducts regular maintenance of the basin including vegetation clearing. At the time of the survey the basin was predominantly devoid of vegetation. Soil on the basin bottom was cracked and had sparse herbaceous vegetation; plant species observed included: mustard (*Sisymbrium altissimum*), Russian thistle (*Salsola tragus*), tree tobacco (*Nicotiana glauca*), telegraph weed (*Heterothca grandiflora*), ragweed (*Ambrosia psilostachya*), dove weed (*Croton setigerus*), wire lettuce (*Stephanomeria pauciflora*), and tarragon (*Artemisia dracunculus*). The basin banks were devoid of vegetation and had compact soils with tractor tracks visible. One cement spillway occurs on the south bank of the basin. Three culvert inlet structures with riprap were observed on the south, east, and north banks. The basin outlet structure is located on the northwest corner of the basin. See Figure 3 and Appendix C: Representative Site Photos.

#### 6.2 RARE, ENDANGERED, OR SENSITIVE SPECIES AND HABITAT RESULTS

The project area was evaluated for the potential presence of threatened, endangered, or candidate plant and animal species. The evaluation was based on either direct observation of the species or presence of suitable habitat for that species. If suitable habitat was present, the probability for presence of the species was determined by other factors such as: human influences, existing records and proximity of similar observed species, and any other factors that would either benefit or detract from the species being present. Appendix B lists all species observed on-site.

#### 6.2.1 Federally And State Listed Flora Presence/Absence

#### Munz's Onion (Allium munzii)

Munz's onion is a federally-listed endangered species, state-listed threatened species, and Group 3 MSHCP covered species. Munz's onion specialized habitat requirements include clay and cobbly clay soils. As reported in the MSHCP the species has a limited geographic distribution in Riverside County, population records include Estelle Mountain and the Gavilan Plateau at Harford Springs Park southeast through the hills north of Lake Elsinore, to the Pomona Valley, Skunk Hollow, and the Lake Skinner Area.

*Conclusion:* The Project Site does not have habitat for the species. The species is not present.

#### San Diego Ambrosia (Ambrosia pumila)

San Diego ambrosia is a federally-listed endangered species and Group 3 MSHCP covered species with narrow endemic species survey requirements. Its general habitat includes chaparral, coastal scrub, and valley and foothill grasslands. Specialized habitat requirements include sandy loam or clay soil. As reported in the MSHCP the species has limited geographic distribution in Riverside County with only three known populations in the Riverside Lowland Bioregion.

*Conclusion:* The Project Site does not have habitat for the species. The species is not present.

#### San Jacinto Valley Crownscale (Atriplex coronate var. notatior)

San Jacinto Valley crownscale is a federally-listed endangered species and a Group 3 MSHCP covered species. The species is primarily restricted to alkali floodplains, the MSHCP reports records in the San Jacinto River, Mystic Lake, and Salt Creek in associationwith Willows, Domino, and Traver soils.

*Conclusion:* The Project Site does not have habitat for the species. The species is not present.

#### Nevin's Barberry (Berberis nevinii)

Nevin's barberry is a federally- and state-listed endangered species and a Group 3 MSHCP covered species. The MSHCP defines the geographic distribution of the species within Riverside County to the San Timoteo/Badlands area, Vail Lake, and Agua Tibia Mountains. The species occurs in varied topography including nearly flat sandy washes, terraces, benches, and canyon floors, gravelly wash margins, steeply-sloped banks of drainages, steep rocky slopes, ridges, and mountain summits. The species occurs in association with plant communities that include: alluvial scrub, cismontane chaparral, coastal sage scrub, oak woodland, and/or riparian scrub or woodland.

*Conclusion:* The Project Site does not have habitat for the species. The species is not present.

#### Thread-leaved Brodiaea (Brodiaea filifolia)

Thread-leaved brodiaea is a federally-listed threatened species, state-listed endangered species and a Group 3 MSHCP covered species. The species is generally associated with annual grassland and vernal pools, is often surrounded by shrubland habitats, and occurs in openings on clay. The MSHCP reports two complexes with twelve populations occurring in Western Riverside County; the complexes are generally located along the San Jacinto River near Perris and Lakeview and at the Santa Rosa Plateau.

*Conclusion*: The Project Site does not have habitat for the species. The species is not present.

#### Mojave Tarplant (Deinandra mohavensis)

Mojave tarplant is a state-listed endangered species and a Group 2 MSHCP covered species. Per the MSHCP the species is restricted to the San Jacinto Mountains, primarily on U.S. Forest Service lands. The MSHCP reports populations of Mojave tarplant as restricted to low sand bars in river beds, along stream channels, and in ephemeral grassy areas in riparian scrub and chaparral at elevations between 850 meters and 1,575 meters (~2,800 feet and ~5,170 feet) in the San Jacinto Mountains Bioregion.

*Conclusion*: The Project Site does not have habitat for the species. The species is not present.

#### Cuyamaca Larkspur (Delphinium hesperium ssp. cuyamacae)

Cuyamaca larkspur is a state-listed rare species. The species range extends from the San Jacinto Mountains south into eastern San Diego County. Its general habitat includes lower montane coniferous forests, meadows and seeps, and vernal pools.

*Conclusion*: The Project Site does not have habitat for the species. The species is not present.

#### Slender-horned Spineflower (Dodecahema leptoceras)

Slender-horned spineflower is a federally and state-listed endangered species and a Group 3 MSHCP covered species. The species is dependent on mature alluvial scrub that is maintained by periodic flooding and sediment transport. Per the MSHCP, in western Riverside County the species only occurs along Arroyo Seco and Kolb Creeks, Temescal Wash at Indian Creek, central Bautista Creek, Vail Lake and the upper San Jacinto River near Valle Vista and Hemet.

*Conclusion*: The Project Site does not have habitat for the species. The species is not present.

#### **Spreading Navarretia** (*Navarretia fossalis*)

Spreading navarretia is a federally-listed threatened species and a Group 3 MSHCP covered species. According to the MSHCP, in western Riverside County the species is limited to alkali floodplains of the San Jacinto River, Mystic Lake and Salt Creek in association with Willows, Domino and Traver soils.

Conclusion: The Project Site does not have habitat for the species. The species is not present.

#### California Orcutt Grass (Orcuttia californica)

California orcutt grass is a federally and state-listed endangered species, and a Group 3 MSHCP covered species. In western Riverside County the species is primarily restricted to the southern basaltic claypan vernal pools at the Santa Rosa Plateau, and alkaline vernal pools at Skunk Hollow and at Salt Creek west of Hemet.

*Conclusion:* The Project Site does not have habitat for the species. The species is not present.

#### 6.2.2 Federally- and State-Listed Fauna Presence/Absence

#### California Tiger Salamander (Ambystoma californiense)

The California tiger salamander is a federally and state-listed threatened species. The species is found in vernal pools or other seasonal water sources in northern and central California.

*Conclusion:* The Project Site does not have habitat for the species. The species is not present.

#### Arroyo Toad (Anaxyrus californicus)

The arroyo toad is a federally-listed endangered species and a Group 3 MSHCP covered species. Primary habitat for the species includes suitable riparian habitat with secondary habitats including adjacent upland areas. Due to its specific habitat requirements, the MSHCP has identified a limited number of suitable habitat locations for the species within Western Riverside County. Suitable habitat is known to occur at: Temecula Creek, Arroyo Seco Creek, Tenaja Creek, and Wilson Creek.

*Conclusion:* The Project Site does not have habitat for the species. The species is not present.

#### Vernal Pool Fairy Shrimp (Branchinecta lynchi)

Vernal pool fairy shrimp is a federally-listed threatened and a Group 3 MSHCP covered species. The vernal pool fairy shrimp has an ephemeral life cycle and exists only in vernal pools or vernal pool-like habitats; the species does not occur in riverine, marine, or other permanent bodies of water. The MSHCP describes a narrow distribution of suitable habitat in three key locations, the Santa Rosa Plateau Ecological Reserve, Skunk Hollow, and Salt Creek in west Hemet.

*Conclusion:* The Project Site does not have habitat for the species. The species is not present.

#### Southern Rubber Boa (Charina umbratica)

The southern rubber boa is a state-listed threatened species and a Group 2 MSHCP covered species. Per the MSHCP the southern rubber boa population is narrowly defined within the San Jacinto Mountains. The species is often found in fallen debris, rock piles, and steep, rocky montane areas with coniferous forests, woodlands, chaparral, and grasslands above 1,540 meters (5,052.5 feet) in elevation.

Conclusion: The Project Site does not have habitat for the species. The species is not present.

#### Western Yellow-Billed Cuckoo (Coccyzus americanus occidentalis)

The western yellow-billed cuckoo is a federal candidate species for listing, a state-listed endangered species, and a Group 3 MSHCP covered species. The species' preferred habitat is riparian scrub and forest; it prefers lower flood bottoms of larger rivers. The species nests in riparian vegetation of willows and cottonwoods with an understory of blackberry, nettles, or wild grapes.

*Conclusion:* The Project Site does not have habitat for the species. The species is not present.

#### San Bernardino Kangaroo Rat (Dipodomys merriami parvus)

The San Bernardino kangaroo rat is a federally-listed endangered species, a state-listed species of special concern, and a Group 3 MSHCP covered species. The species occurs in alluvial fan sage scrub with sandy soils and is usually associated with wash area with vegetative seral stages. The MSHCP identifies two locations with suitable habitat for the species as occurring within the plan area; the locations include: 1) the San Jacinto river from about Highway 79 in the north to the boundary with Forest Service land to the east; and 2) Bautista Creek from about Bautista Dam to the north and the Hixon Flat trailhead to the south.

Conclusion: The Project Site does not have habitat for the species. The species is not present.

#### Stephen's Kangaroo Rat (Dipodomys merriami parvus)

Stephen's kangaroo rat is a federally-listed endangered species, a state-listed threatened species, and a Group 2 MSHCP covered species. The species is found primarily in annual and perennial grassland, and may be found on coastal scrub with sparse vegetation cover.

*Conclusion:* The Project Site does not have habitat for the species. The species is not present.

#### Quino Checkerspot Butterfly (Euphydryas editha quino)

Quino checkerspot butterfly if a federally-listed endangered species and a Group 3 MSHCP covered species. The species may occur in nearly any upland habitat that is relatively open and has availability of the host plants. Generally, the species is associated with sage scrub, open chaparral, grasslands, and vernal pools.

*Conclusion:* The Project Site does not have habitat for the species. The species is not present.

#### Bald Eagle (Haliaeetus lucocephalus)

The bald eagle is federally-delisted, state-listed endangered species and a Group 1 MSHCP covered species. Per the MSHCP the species has a wide distribution throughout the MSHCP Plan Area within its suitable habitat. The species occurs, or has been known to occur, at every open water body within the Plan Area. Predominantly, the species occurs within the Plan Area as a winter visitor with casual occurrences in the summer.

*Conclusion:* The Project Site does not have habitat for the species. The species is not present.

#### Coastal California Gnatcatcher (*Polioptila californica californica*)

The coastal California gnatcatcher is a federally-listed threatened species and a Group 2 MSHCP covered species. The species is found in coastal sage scrub and arid washes within the lowland and foothill bioregions of Western Riverside County.

*Conclusion:* The Project Site does not have habitat for the species. The species is not present.

#### Sierra Madre Yellow-Legged Frog (Rana muscosa)

The Sierra Madre yellow-legged frog is a federally-listed endangered species. The species most often inhabits creeks with permanent water in at least some portion of the reach. The species is diurnal and is rarely found more than one meter away from water. Perennial flows are necessary for reproduction, larval growth and survival, and hydration of juveniles and adults.

Conclusion: The Project Site does not have habitat for the species. The species is not present.

#### **Riverside Fairy Shrimp** (*Streptocephalus woottoni*)

The Riverside fairy shrimp is a federally-listed endangered species and a Group 3 MSHCP covered species. Per the MSHCP the species is narrowly distributed within the MSHCP Plan Area. These are in five locations of deep vernal pools at the Santa Rosa Plateau, Skunk Hollow, Murrieta and Lake Elsinore back basin.

Conclusion: The Project Site does not have habitat for the species. The species is not present.

#### Least Bell's Vireo (Vireo bellii pusillus)

Least Bell's vireo is a federally and state-listed endangered species and a Group 2 MSHCP covered species. Least Bell's vireos are found in areas with riparian vegetation. The species nests primarily in willows but also uses a variety of other shrub and tree species for nest placement. Least Bell's vireos forage in riparian and adjoining upland habitats.

*Conclusion:* The Project Site does not have habitat for the species. The species is not present.

#### 6.2.3 Burrowing Owl Focused Studies Results

The Project Site has MSHCP habitat assessment requirements for burrowing owl. Focused surveys for burrowing owl were conducted on July 30, 2013 following the protocol established in the Burrowing Owl Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area. Cloud cover was 0%, no rain events occurred in the five days previous to the survey, and the temperature was approximately 85°F. The survey area included the Little Lake Basin and a 500-foot buffer zone around the perimeter of the basin. Pedestrian transects were spaced to allow 100% visual coverage of the ground surface.

The Project Site and surrounding developed land were not identified to have habitat suitable for burrowing owl. Soil on the Project Site was compact and not amenable for digging of burrows. Land uses adjacent to the Project Site and within the 500-feet survey radius included agricultural land, undeveloped disked fields, and the Little Lake recreational area (see Figure 4). The agricultural lands are susceptible to regular disturbance and no burrowing owls were observed. The adjacent undeveloped land is vegetated with semi-natural herbaceous cover and appears to be disked to control vegetation growth. No burrowing owls or sign of burrowing owls were observed within the survey area.

A search of the California Natural Diversity Database indicated that the closest burrowing owl records are located approximately 2<sup>1</sup>/<sub>2</sub> miles north of the Project Site near the San Jacinto River.

## 7.0 CRITICAL HABITAT

The Project Site is not located within critical habitat as identified the United States Fish and Wildlife Service. Critical Habitat Unit 5 (Bautista Creek) for San Bernardino kangaroo rat is the nearest critical habitat unit and is located just over one-mile east of the Project Site. The Project Site does not support habitat for San Bernardino kangaroo rat and the Proposed Project would not result in impacts to the critical habitat unit.

## 8.0 WILDLIFE CORRIDORS

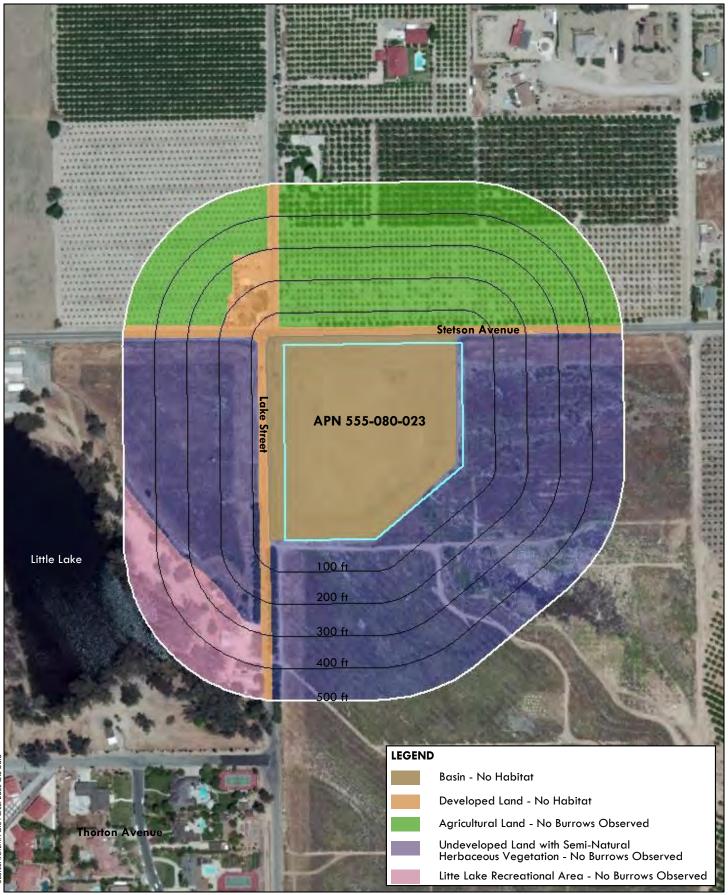
The Project Site is located in a relatively developed area and the wildlife corridor utility is largely fragmented. Surrounding land uses include fallow and active citrus groves, residential development, and the Little Lake recreational facility are located west of the Project Site. Parcels south of the Little Lake Basin are undeveloped and covered with semi-natural herbaceous stands that provide connectivity to the Santa Rosa Hills. The Proposed Project would not impact the existing limited wildlife corridor functions.

# 9.0 HABITAT CONSERVATION PLANS OR NATURAL COMMUNITY CONSERVATION PLANS

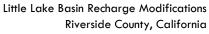
The Proposed Project is located within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) – San Jacinto Valley Area Plan and the Riverside County Habitat Conservation Agency, Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County, California.

#### 9.1 MSHCP COMPLIANCE REQUIREMENTS

The Project Site is not part of a MSHCP Sub-Unit, is independent of a MSHCP cell group, and is not a part of a MSHCP cell. The Riverside County Integrated Project Conservation Summary Report Generator for the Project Site indicates habitat assessment requirements for burrowing owl. The Project Site is located on a parcel identified as Public/Quasi-Public Land within the MSHCP.



## **BURROWING OWL SURVEY AREA**



re: RCTI MA GIS Parcel Basic GIS D

Approximate Feet LILBURN CORPORATION 300

Figure 4

Per Section 7.0 of the MSHCP "public facilities within existing Public/Quasi-Public Lands may be maintained by Permitees within the existing disturbance area of each existing facility, and without changes in the operating characteristics of the facility that would affect Covered Species" (Section 7.2.5 MSHCP). The Proposed Project is the conversion of the Little Lake Basin flood control detention basin into a retention basin. Under existing conditions the basin is a flood control facility that captures storm water before releasing it to the storm drain system. Under the proposed conditions, the existing basin bottom would be lowered by five feet to allow for the capture and infiltration of up to 15 acre-feet of water per storm event. The elevation of the existing basin outlet will not be changed and any storm flows in excess of 15 acre-feet would continue through the existing storm drain system. Should surplus water be available from the State Water Project during the dry season, the basin may be used for the recharge of purchased surplus water as available.

Implementation of the Proposed Project would increase the amount of time water remains ponded in the basin. The amount of time the basin may be expected to be ponded would be a function of the amount of storm water or State Water Project available and infiltration rates. Under existing conditions the basin does not provide any habitat that for MSHCP covered species. The Proposed Project is not anticipated to result in a change in operating characteristics that would affect covered species. Under the proposed conditions, a maintenance plan similar to the existing annual vegetation clearing and basin slope restoration would be implemented.

#### 9.2 MSHCP CONSISTENCY ANALYSIS

The Proposed Project is located outside of the MSHCP Criteria Area; however, per Section 6 of the MSHCP all projects must be reviewed for compliance with plan policies pertaining to Riparian/Riverine resources, narrow endemic plant species, urban/wildlands interface, and additional survey needs as applicable. The following findings were made for the MSHCP consistency analysis.

## MSHCP Section 6.1.2: Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

A biological resources assessment survey of the Project Site was conducted on July 30, 2013. No riparian areas were observed to occur within the project area. The project area is an existing flood control basin with compacted soils and no woody vegetation. All project impacts would be limited to the existing basin area. The Proposed Project will not result in impacts to riparian/riverine or vernal pool resources.

#### MSHCP Section 6.1.3: Protection of Narrow Endemic Plant Species

As indicated in the Riverside County Integrated Project Conservation Summary Report the Project Site is not located within a narrow endemic plant species plant survey area. A biological resources assessment survey of the Project Site was conducted on July 30, 2013. Vegetation on the site was limited to sparser herbaceous species on the basin bottom. Soils at the site were compacted and no woody species occur within the project area. The site does not provide habitat for narrow endemic plant species as listed in Section 6.1.3 of the MSHCP and the project would result in no impacts to these species.

#### MSHCP Section 6.1.4: Guidelines Pertaining to the Urban/Wildlands Interface

The Urban/Wildland Interface guidelines of the MSHCP address indirect effects associated with locating development in proximity to the MSHCP Conservation Area. The Proposed Project is located on a parcel with a MSHCP designation of Public/Quasi-Public Lands; the basin parcel is the only location in the vicinity with a designation of Public/Quasi-Public Land. The parcel is not located in the vicinity of the MSHCP Criteria Areas for the San Jacinto Valley Area Plan.

The Project Site is located in a relatively rural area; surrounding land uses include fallow and active citrus groves and the Little Lake recreational facility. Parcels south of the Little Lake Basin are described as fallow citrus groves, currently supporting semi-natural herbaceous stands. The Proposed Project would not result in a change to existing conditions and would not result in long-term edge effects such drainage, toxics, lighting, noise, invasive species, or grading to the adjacent land uses or habitat in the MSHCP conservation area.

The Proposed Project is the conversion of an existing flood control basin to a retention basin. Construction siting of the Proposed Project is limited to the footprint of the existing basin and no impacts outside of the existing disturbed area would occur.

#### MSHCP Section 6.3.2: Additional Survey Needs and Procedures

As indicated in the Riverside County Integrated Project Conservation Summary Report the Project Site is located in an area with habitat assessment requirements for burrowing owl. A habitat assessment was completed on July 30, 2013.

The Project Site and surrounding developed land were not identified to have habitat suitable for burrowing owl. Soil on the Project Site was compact and not amenable for digging of burrows. Land uses adjacent to the Project Site and within the 500-foot survey radius included agricultural land, disked fields, and the Little Lake recreational area (refer to Figure 4). The agricultural lands are susceptible to regular disturbance and no burrowing owls were observed. The adjacent undeveloped land is vegetated with semi-natural herbaceous cover and appears to be disked to control vegetation growth. No burrowing owls or sign of burrowing owls were observed within the survey area.

#### 9.3 HABITAT CONSERVATION PLAN FOR THE STEPHENS' KANGAROO RAT IN WESTERN RIVERSIDE COUNTY, CALIFORNIA

The species objectives for SKR in the Western Riverside MSHCP were designed to incorporate the objectives and be consistent with the Long-Term Stephens' Kangaroo Rat Habitat Conservation Plan. The Project Site does not occur within a core habitat area as identified in either of the plans and does not have a MSHCP requirement for habitat assessment. The Project Site is located within the SKR Fee Area.

## **10.0 PROJECT IMPACTS**

Construction of the Proposed Project would result in disturbance to the entire approximately 7.27-acre property (see Figure 5). Per the proposed grading plan, conversion of the flood control basin to a retention basin would involve deepening the basin by approximately five feet.



IMPACT MAP Little Lake Basin Recharge Modifications Riverside County, California



Figure 5

Approximately 35,000 cubic yards of material would be excavated from the existing basin bottom. The basin bottom elevation would change from the existing 1,782 feet amsl to 1,777 feet amsl.

The Project Site contains sparse herbaceous vegetation on the basin bottom. Soil on the basin bottom was cracked; on the basin slopes soil was compacted and tractor tracks were visible throughout. The site does not support habitat that would provide value for wildlife species. Construction of the Proposed Project is not anticipated to result in impact to plant or animal species as discussed in Sections 6.2.1 and 6.2.2 above, result in an impact to a MSHCP covered species, or conflict with the MSHCP guidelines for establishment of the MSHCP Conservation Area.

## 11.0 PROPOSED RECOMMENDITIONS AND MITIGATION MEASURES

The following recommendations should be implemented as mitigation for the Proposed Project to avoid potential impacts to biological resources.

- Conduct take avoidance pre-construction surveys for burrowing owl. Although no sign of burrowing owl was observed during the habitat assessment survey take avoidance surveys of the Project Site should be conducted a maximum of 14 days prior to ground moving activities. Take avoidance surveys may detect changes in owl presence such as colonizing owls that have recently moved onto the site, migrating owls, resident burrowing owls changing burrow use, or young of the year that are present and have not dispersed. If owls or burrows are identified, take of active nests will be avoided as described in the BMP Appendix C of the MSHCP or passive relocation should be implemented as appropriate.
- Pre-construction notifications or applications for regulatory permits should be submitted to the regulatory agencies as appropriate. Jurisdictional issues are discussed in the Jurisdictional Delineation for the Little Lake Basin Recharge Modifications project prepared by Lilburn Corporation, September 2013.

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# APPENDIX A Species Probability List

Scientific Name	Common Name	Federal Status	State Status	CDFG	CNPS	General Habitat	Micro Habitat	Ecological Community	Probability of Occurance
Abronia villosa var. aurita	chaparral sand-verbena				1B.1	CHAPARRAL, COASTAL SCRUB	SANDY AREAS. 80-1600M.	UNUSUAL DESERT-LIKE SCRUB OF OPUNTIA PARRYI, YUCCA SCHIDIGERA, PROSOPIS GLANDULOSA, LYCIUM ANDERSONII, ATRIPLEX CANESCENS, ETC.	Not Present
Accipiter cooperii	Cooper's hawk					WOODLAND, CHIEFLY OF OPEN, INTERRUPTED OR MARGINAL TYPE.	NEST SITES MAINLY IN RIPARIAN GROWTHS OF DECIDUOUS TREES, AS IN CANYON BOTTOMS ON RIVER FLOOD-PLAINS; ALSO, LIVE OAKS.	RURAL RESIDENTIAL WITH OPEN GRAZED FIELDS AND CROPPED AG FIELDS. RIVERSIDEAN SAGE SCRUB IS IN THE VICINITY.	Moderate Probability
Agelaius tricolor	tricolored blackbird			SC		MOST NUMBEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.	REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.	ABOUT A 50 ACRE MAN-MADE BULRISH WETLAND PLANTED IN 1993. SITE BURNED BETWEEN 1997-1999 & BULRUSHES REMOVED. FORAGING HABITAT IS ALFALFA. SITE MANAGED AS A RESEARCH FACILITY (UC RIVERSIDE) IN THE USE OF MARSHES FOR FILTERING WASTE WATER.	Not Present
Aimophila ruficeps canescens	southern California rufous- crowned sparrow					RESIDENT IN SOUTHERN CALIFORNIA COASTAL SAGE SCRUB AND SPARSE MIXED CHAPARRAL.	FREQUENTS RELATIVELY STEEP, OFTEN ROCKY HILLSIDES WITH GRASS & FORB PATCHES.	HABITAT CONSISTS OF RIVERSIDEAN SAGE SCRUB.	Not Present
Allium marvinii	Yucaipa onion				1B.1	CHAPARRAL.	IN OPENINGS ON CLAY SOILS. 760- 1065 M.		Not Present
Allium munzii	Munz's onion	Endangered	Threatened		1B.1	CHAPARRAL, COASTAL SCRUB, CISMONTANE WOODLAND, PINYON-JUNIPER WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	HEAVY CLAY SOILS; GROWS IN GRASSLANDS & OPENINGS WITHIN SHRUBLANDS OR WOODLANDS. 300-1035M.	IN GRASSY OPENING IN COASTAL SAGE SCRUB ON CLAY SOIL. ASSOCIATED WITH SISYRINCHIUM BELLUM, FESTUCA SP., BROMUS MOLLIS, LASTHENIA CHRYSOSTOMA, DICHELLOSTEMMA PULCHELLA, CHLOROGALUM PARVIFLORUM, AVENA BARBATA AND HARPAGONELLA PALMERI.	Not Present
Ambrosia pumila	San Diego ambrosia	Endangered			1B.1	CHAPARRAL, COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND.	SANDY LOAM OR CLAY SOIL. IN VALLEYS; PERSISTS WHERE DISTURBANCE HAS BEEN SUPERFICIAL. SOMETIMES ON MARGINS OR NEAR VER	CLEARING WITHIN NON- NATIVE GRASSLAND SURROUNDING VERNAL POOL, IN LAS POSAS LOAM. SEVERAL RARE PLANTS IN VERNAL POOL: ORCUTTIA CALIFORNICA, NAVARRETIA FOSSALIS, AND ERYNGIUM ARISTULATUM.	

Scientific Name	Common Name	Federal Status	State Status	CDFG	CNPS	General Habitat	Micro Habitat	Ecological Community	Probability of Occurance
Ambystoma californiense	California tiger salamander	Threatened	Threatened	SC		CENTRAL VALLEY DPS FEDERALLY LISTED AS THREATENED. SANTA BARBARA & SONOMA COUNTIES DPS FEDERALLY LISTED AS ENDANGERED.	NEED UNDERGROUND REFUGES, ESPECIALLY GROUND SQUIRREL BURROWS & VERNAL POOLS OR OTHER SEASONAL WATER SOURCES FOR BREEDING	GENERAL HABITAT TYPE FOR TIGER SALAMANDER IS FOOTHILL AND VALLEY GRASSLAND.	Not Present
Amphispiza belli belli	Bell's sage sparrow					NESTS IN CHAPARRAL DOMINATED BY FAIRLY DENSE STANDS OF CHAMISE. FOUND IN COASTAL SAGE SCRUB IN SOUTH OF RANGE.		HABITAT CONSISTS OF RIVERSIDEAN DESERT SCRUB.	Not Present
Anaxyrus californicus	arroyo toad	Endangered		SC		SEMI-ARID REGIONS NEAR WASHES OR INTERMITTENT STREAMS, INCLUDING VALLEY FOOTHILL AND DESERT RIPARIAN, DESERT WASH, ETC.	RIVERS WITH SANDY BANKS, WILLOWS, COTTONWOODS, AND SYCAMORES; LOOSE, GRAVELLY AREAS OF STREAMS IN DRIER PARTS OF RANGE.	HABITAT CONSISTED OF LOW GRADIENT SANDY STREAM BED WITH SLOW MOVING WATER. CROTALUS RUBER, BUFO BOREAS, HYLA REGILLA, SPEA HAMMONDII & COLEONYX VARIEGTUS ALSO OBSERVED HERE.	Not Present
Aquila chrysaetos	golden eagle					ROLLING FOOTHILLS,	CLIFF-WALLED CANYONS PROVIDE NESTING HABITAT IN MOST PARTS OF RANGE; ALSO, LARGE TREES IN OPEN AREAS.	CA BUCKWHEAT SCRUB IN FOREGROUND W/SCALEBROOM IN CREEK BED. BACKGROUND IS BRASSICA, MARRUBUIM VULGARE, GRASSLAND AND OPEN HABITAT W/CA GROUND SQUIRRELS & MANY BLACK- TAILED JACKRABBITS & COTTONTAILS.	Not Present
Aspidoscelis hyperythra	orangethroat whiptail			SC		INHABITS LOW-ELEVATION COASTAL SCRUB, CHAPARRAL, AND VALLEY- FOOTHILL HARDWOOD HABITATS.	PREFERS WASHES & OTHER SANDY AREAS WITH PATCHES OF BRUSH & ROCKS. PERENNIAL PLANTS NECESSARY FOR ITS MAJOR FOOD-TERMITES		Moderate Probability
Aspidoscelis tigris stejnegeri	coastal whiptail					FOUND IN DESERTS & SEMIARID AREAS WITH SPARSE VEGETATION AND OPEN AREAS. ALSO FOUND IN WOODLAND & RIPARIAN AREAS.	GROUND MAY BE FIRM SOIL, SANDY, OR ROCKY.	HABITAT CONSISTS RIVERSIDEAN DESERT SCRUB.	Moderate Probability
Astragalus pachypus var. jaegeri	Jaeger's milk-vetch				1B.1	COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND.	DRY RIDGES AND VALLEYS AND OPEN SANDY SLOPES; OFTEN IN GRASSLAND AND OAK- CHAPARRAL. 365-915M.	COASTAL SAGE SCRUB.	Not Present

Scientific Name	Common Name	Federal Status	State Status	CDFG	CNPS	General Habitat	Micro Habitat	Ecological Community	Probability of Occurance
Athene cunicularia	burrowing owl			SC		OPEN, DRY ANNUAL OR PERENIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW- GROWING VEGETATION.	SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.		Not Present
Atriplex coronata var. notatior	San Jacinto Valley crownscale	Endangered			1B.1	PLAYAS, CHENOPOD SCRUB, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.	DRY, ALKALINE FLATS IN THE SAN JACINTO RIVER VALLEY. 400- 500M.	FOUND AROUND THE DUCK PONDS OR DISTURBED AREAS IN THE VICINITY.	Not Present
Atriplex parishii	Parish's brittlescale				1B.1	ALKALI MEADOWS, VERNAL POOLS, CHENOPOD SCRUB, PLAYAS.	USUALLY ON DRYING ALKALI FLATS WITH FINE SOILS. 25-1900 M.	FOUND ON DRYING ALKALINE FLATS WITH FINE SOILS IN ASSOCIATION WITH ATRIPLEX CORONATA VAR. NOTATIOR, LEPIDIUM DICTYOTUM, HORDEUM DEPRESSUM, SUAEDA TORREYANA, LEPIDIUM LATIPES, DESCHAMPSIA DANTHONIOIDES, LASTHENIA CALIFORNICA, & PLANTAGO.	Not Present
Atriplex serenana var. davidsonii	Davidson's saltscale				1B.2	COASTAL BLUFF SCRUB, COASTAL SCRUB.	ALKALINE SOIL. 3-250M.	ALKALI SINK SCRUB AND GRASSLAND. STRONGLY SALINE ALKALINE SOIL. ASSOCIATED WITH SUAEDA TORREYANA, FRANKENIA GRANDIFOLIA, SALICORNIA SUBTERMINALIS, DISTICHLIS SPICATA, ATRIPLEX ARGENTEA, A. CORONATA VAR. NOTATIOR, LASTHENIA CALIFORNICA, ETC.	Not Present
Berberis nevinii	Nevin's barberry	Endangered	Endangered		1B.1	CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB, RIPARIAN SCRUB.	ON STEEP, N-FACING SLOPES OR IN LOW GRADE SANDY WASHES. 290-1575M.	IN DRAINAGE BOTTOM WITH ADENOSTOMA FASCICULATUM, RHUS OVATA, QUERCUS BERBERIDIFOLIA, BROMUS RUBENS, CEANOTHUS CRASSIFOLIS, RHAMNUS CROCEA, HAPLOPAPPUS PALMERI, ERIASTRUM SAPPHARINUM, SCHISMUS BARBATUS, AND ERIOGONUM FASCICULATUM.	Not Present

Scientific Name	Common Name	Federal Status	State Status	CDFG	CNPS	General Habitat	Micro Habitat	Ecological Community	Probability of Occurance
Branchinecta lynchi	vernal pool fairy shrimp	Threatened				ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.	INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS.	HABITAT CONSISTS OF A SEASONALLY ASTATIC SWALE POOL, DEEPENED SOMEWHAT BY EXCAVATION AND LOCATED IN A THIN STRIP OF DISTURBED COASTAL SAGE SCRUB AND GRASSLAND VEGETATION.	Not Present
Brodiaea filifolia	thread-leaved brodiaea	Threatened	Endangered		1B.1	CHAPARRAL (OPENINGS), CISMONTANE WOODLAND, COASTAL SCRUB, PLAYAS, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.	USUALLY ASSOCIATED WITH ANNUAL GRASSLAND AND VERNAL POOLS; OFTEN SURR BY SHRUBLAND HABITATS. OCCURS IN OPENINGS ON CLAY	COW PASTURE WITH ALKALINE SINK AND VERNAL POOL HABITAT. ASSOCIATES INCLUDE HORDEUM DEPRESSUM, LASTHENIA CALIFORNICA, FRANKENIA GRANDIFOLIA, LEPIDIUM DICTYOTUM, ATRIPLEX CORONATA NOTATIOR, CRESSA TRUXILLENSIS AND PLAGIOBOTHRYS LEPTOCLADUS.	Not Present
Buteo regalis	ferruginous hawk					OPEN GRASSLANDS, SAGEBRUSH FLATS, DESERT SCRUB, LOW FOOTHILLS & FRINGES OF PINYON-JUNIPER HABITATS.	EATS MOSTLY LAGOMORPHS, GROUND SQUIRRELS, AND MICE. POPULATION TRENDS MAY FOLLOW LAGOMORPH POPULATION CYCLES.	HABITAT CONSISTS OF UNDISTURBED COASTAL SAGE SCRUB VEGETATED BY ERIOGONUM FASCICULATUM, ARTEMISIA CALIFORNICA, RHUS OVATA, SALVIA APIANA AND SALVIA MELLIFERA.	Low Probability
California macrophylla	round-leaved filaree				1B.1	CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	CLAY SOILS. 15-1200M.		Not Present
Calochortus palmeri var. munzii	San Jacinto mariposa-lily				1B.2	LOWER MONTANE CONIFEROUS FOREST, CHAPARRAL, MEADOWS.	SEEN IN OPEN JEFFREY PINE FOREST AS WELL AS IN CHAPARRAL. 1200-2200 M.	GROWING IN OPEN FOREST OF JEFFREY PINE.	Not Present
Calochortus plummerae	Plummer's mariposa-lily				4.2	COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 100- 1700 M.	IN CHAPARRAL ON SOUTH- FACING ROCKY SLOPES WITH DRY, SANDY SOIL.	Not Present
Calochortus weedii var. intermedius	intermediate mariposa-lily				1B.2	COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND.	DRY, ROCKY OPEN SLOPES AND ROCK OUTCROPS. 120-850M.	DRY RIDGELINE IN COASTAL SCRUB/CHAMISE, IN ROCKY SUBSTRATE.	Not Present

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Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren			SC		SOUTHERN CALIFORNIA COASTAL SAGE SCRUB.	WRENS REQUIRE TALL OPUNTIA CACTUS FOR NESTING AND ROOSTING.	HABITAT DOMINATED BY BRITTLEBUSH, INTERIOR FLAT- TOPPED BUCKWHEAT, CALIFORNIA SAGE & VALLEY CHOLLA W/LARGE PATCH OF COASTAL PRICLKLY PEAR CACTUS. BADLAND HILLS AREA BURNED (2000) & MAY NO LONGER HAVE SUITABLE HABITAT;AREA IS RECOVERING	Not Present
Canyon Live Oak Ravine Forest	Canyon Live Oak Ravine Forest							MAPPED BY WIESLANDER SURVEY (1935) AS CLOSED CANOPY QUERCUS CHRYSOLEPIS AND Q. AGRIFOLIA.	Not Present
Caulanthus simulans	Payson's jewel-flower				4.2	CHAPARRAL, COASTAL SCRUB.	FREQUENTLY IN BURNED AREAS, OR IN DISTURBED SITES SUCH AS STREAMBEDS; ALSO ON ROCKY, STEEP SLOPES. 90-2200M.	IN LAKEVIEW MOUNTAINS, IN CHAMISE CHAPARRAL AND COASTAL SAGE SCRUB ON THIN COBBLY SOIL.	Not Present
Centromadia pungens ssp. laevis	smooth tarplant				1B.1	VALLEY AND FOOTHILL GRASSLAND, CHENOPOD SCRUB, MEADOWS, PLAYAS, RIPARIAN WOODLAND.	ALKALI MEADOW, ALKALI SCRUB; ALSO IN DISTURBED PLACES. 0- 640 M.	RUDERAL ROADSIDE SETTING WITH ATRIPLEX ARGENTEA, SALSOLA IBERICA, AVENA FATUA, A. BARBATA, AMBROSIA ACANTHICARPA, BROMUS DIANDRUS, B. RUBENS, SCHISMUS BARBATA, CRESSA TRUXILLENSIS, AND CYNODON DACTYLON.	Not Present
Chaetodipus californicus femoralis	Dulzura pocket mouse			SC		VARIETY OF HABITATS INCLUDING COASTAL SCRUB, CHAPARRAL & GRASSLAND IN SAN DIEGO CO.		TOP OF CHAPARRAL COVERED RIDGE. CEANOTHUS, ARCTOSTAPHYLOS DOMINANT. RIDGE RUNS ROUGHLY E-W. TRAPPING WAS CONCENTRATED ON THE TOP AND DOWN THE NORTH (DRY) FACE.	Not Present
Chaetodipus fallax fallax	northwestern San Diego pocket mouse			SC		COASTAL SCRUB, CHAPARRAL, GRASSLANDS, SAGEBRUSH, ETC. IN WESTERN SAN DIEGO CO.	SANDY, HERBACEOUS AREAS, USUALLY IN ASSOCIATION WITH ROCKS OR COARSE GRAVEL.	COASTAL SAGE SCRUB HABITAT. SPARCE RUDERAL GRASSLAND, WITH GENERALLY LOAMY SOILS AND PATCHES OF SANDY/LOAMY SUBSTRATE.	Not Present

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Chaetodipus fallax pallidus	pallid San Diego pocket mouse			SC		DESERT BORDER AREAS IN EASTERN SAN DIEGO CO. IN DESERT WASH, DESERT SCRUB, DESERT SUCCULENT SCRUB, PINYON-JUNIPER, ETC.	SANDY HERBACEOUS AREAS, USUALLY IN ASSOCIATION WITH ROCKS OR COARSE GRAVEL.		Not Present
Charina trivirgata	rosy boa					DESERT & CHAPARRAL FROM THE COAST TO THE MOJAVE & COLORADO DESERTS. PREFERS MODERATE TO DENSE VEGETATION & ROCKY COVER.	HABITATS WITH A MIX OF BRUSHY COVER & ROCKY SOIL SUCH AS COASTAL CANYONS & HILLSIDES, DESERT CANYONS, WASHES & MOUNTAINS	HABITAT CONSISTS OF COASTAL SAGE SCRUB W/KECKIELLA ANTIRHINOIDES, ERIOGONUM FASCICULATUM & VARYING AMOUNTS OF ANNUAL GRASSES, FORBS. WASHES VEGETATED BY COASTAL SAGE SCRUB, ANNUAL GRASSES, FORBS. PIPELINE: ANNUAL GRASSES, EXOTIC MUSTARDS.	Not Present
Charina umbratica	southern rubber boa		Threatened			RESTRICTED TO THE SAN BERNARDINO AND SAN JACINTO MTNS; FOUND IN A VARIETY OF MONTANE FOREST HABITATS.	FOUND IN VICINITY OF STREAMS OR WET MEADOWS; REQUIRES LOOSE, MOIST SOIL FOR BURROWING; SEEKS COVER IN ROTTING LOGS.	HABITAT IS MOSTLY MANZANITA WITH LOTS OF DEAD PINE SNAGS, YELLOW PINE TREES AND ROCK OUTCROPS. CURRENT LAND USE IS USFS RECREATION.	Not Present
Chorizanthe parryi var. parryi	Parry's spineflower				1B.1	COASTAL SCRUB, CHAPARRAL.	DRY SLOPES AND FLATS; SOMETIMES AT INTERFACE OF 2 VEG TYPES, SUCH AS CHAP AND OAK WDLAND; DRY, SANDY SOILS. 40-1705M.	GROWING IN LOW HILLS AT END OF VALLEY.	Not Present
Chorizanthe polygonoides var. longispina	long-spined spineflower				1B.2	CHAPARRAL, COASTAL SCRUB, MEADOWS AND SEEPS, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.	GABBROIC CLAY. 30-1530 M.	SOUTHWEST-FACING SLOPE.	Not Present
Chorizanthe xanti var. leucotheca	white-bracted spineflower				1B.2		SANDY OR GRAVELLY PLACES. 300-1200M.		Not Present
Circus cyaneus	northern harrier			SC		COASTAL SALT & FRESH- WATER MARSH. NEST & FORAGE IN GRASSLANDS, FROM SALT GRASS IN DESERT SINK TO MOUNTAIN CIENAGAS.	NESTS ON GROUND IN SHRUBBY VEGETATION, USUALLY AT MARSH EDGE; NEST BUILT OF A LARGE MOUND OF STICKS IN WET AREAS.	HABITAT CONSISTS OF OPEN GRASSLAND, OPEN COASTAL SAGE SCRUB AND DISKED LAND. PAIR OBSERVED FORAGING OVER THE COASTAL SAGE SCRUB.	Not Present
Clinopodium chandleri	San Miguel savory				1B.2	CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB, RIP WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	ROCKY, GABBROIC OR METAVOLCANIC SUBSTRATE. 120- 1005M.		Not Present

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Coccyzus americanus occidentalis	western yellow-billed cuckoo	Candidate	Endangered			RIPARIAN FOREST NESTER, ALONG THE BROAD, LOWER FLOOD-BOTTOMS OF LARGER RIVER SYSTEMS.	NESTS IN RIPARIAN JUNGLES OF WILLOW, OFTEN MIXED WITH COTTONWOODS, W/ LOWER STORY OF BLACKBERRY, NETTLES, OR WILD GRAPE.		Not Present
Coleonyx variegatus abbotti	San Diego banded gecko					COASTAL & CISMONTANE SOUTHERN CALIFORNIA.	FOUND IN GRANITE OR ROCKY OUTCROPS IN COASTAL SCRUB & CHAPARRAL HABITATS.	PART OF A MODERATE-SIZED FRAGMENT SEPARATED FROM OTHER NEARBY HILLS BY AG. WILL SOON HAVE RESERVOIR ON SOUTH. SITE IS RELATIVELY UNDISTURBED COASTAL SAGE SCRUB WITH BRITTLE BUSH & GRASSLAND. PART OF SW RIVERSIDE CO MULTISPECIES RESERVE.	Not Present
Crotalus ruber	red-diamond rattlesnake			SC		CHAPARRRAL, WOODLAND, GRASSLAND, & DESERT AREAS FROM COASTAL SAN DIEGO COUNTY TO THE EASTERN SLOPES OF THE MOUNTAINS.	OCCURS IN ROCKY AREAS & DENSE VEGETATION. NEEDS RODENT BURROWS, CRACKS IN ROCKS OR SURFACE COVER OBJECTS.	HABITAT CONSISTS RIVERSIDEAN DESERT SCRUB.	Not Present
Cypseloides niger	black swift			SC		COASTAL BELT OF SANTA CRUZ & MONTEREY CO; CENTRAL & SOUTHERN SIERRA NEVADA; SAN BERNARDINO & SAN JACINTO MOUNTAINS.	BREEDS IN SMALL COLONIES ON CLIFFS BEHIND OR ADJACENT TO WATERFALLS IN DEEP CANYONS AND SEA-BLUFFS ABOVE THE SURF; FORAG	RARE, LOCAL SUMMER RESIDENT OF MOUNTAIN FOOTHILL CANYONS WHICH ARRIVES IN MID-MAY FOR NESTING. NESTS ONLY ON CLIFFS BEHIND OR ADJACENT TO WATERFALLS.	Not Present
Deinandra mohavensis	Mojave tarplant		Endangered		1B.3	RIPARIAN SCRUB, CHAPARRAL.	LOW SAND BARS IN RIVER BED; MOSTLY IN RIPARIAN AREAS OR IN EPHEMERAL GRASSY AREAS. 850-1600M.	IN SANDY/GRAVELLY SOIL IN WASH ALONG CANYON BOTTOM WITH SALIX; CHAPARRAL ON ADJACENT SLOPES.	Not Present
Delphinium hesperium ssp. cuyamacae	Cuyamaca larkspur		Rare		1B.2	LOWER MONTANE CONIFEROUS FOREST, MEADOWS AND SEEPS, VERNAL POOLS.	ON DRIED EDGE OF GRASSY MEADOWS, ALSO DESCRIBED AS IN MESIC SITES. 1220-1630 M.		Not Present
Dendroica petechia brewsteri	yellow warbler			SC		RIPARIAN PLANT ASSOCIATIONS. PREFERS WILLOWS, COTTONWOODS, ASPENS, SYCAMORES, & ALDERS FOR NESTING & FORAGING.	ALSO NESTS IN MONTANE SHRUBBERY IN OPEN CONIFER FORESTS.	HABITAT CONSISTS OF SOUTHERN COTTONWOOD WILLOW RIPARIAN FOREST.	Not Present
Desert Fan Palm Oasis Woodland	Desert Fan Palm Oasis Woodland							UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.	Not Present

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Diadophis punctatus modestus	San Bernardino ringneck snake					MOST COMMON IN OPEN, RELATIVELY ROCKY AREAS. OFTEN IN SOMEWHAT MOIST MICROHABITATS NEAR INTERMITTENT STREAMS.	AVOIDS MOVING THROUGH OPEN OR BARREN AREAS BY RESTRICTING MOVEMENTS TO AREAS OF SURFACE LITTER OR HERBACEOUS VEG.	HABITAT CONSISTS OF RIVERSIDIAN SAGE SCRUB.	Not Present
Dipodomys merriami collinus	Earthquake Merriam's kangaroo rat					KNOWN ONLY FROM SAN DIEGO & RIVERSIDE CO. ASSOCIATED WITH RIVERSIDEAN SAGE SCRUB, CHAPARRAL, & NON-NATIVE GRASSLAND.	NEED SANDY LOAM SUBSTRATES FOR DIGGING OF BURROWS.	HABITAT: COASTAL SAGE SCRUB WITH COARSE GRANITIC SOILS. VISIBLE DISTURBANCES: FIRE (PROBABLY HAPPENED WITHIN LAST COUPLE OF YEARS). OTHER SPECIES: DIPODOMYS STEPHENSI, CHAETODIPUS FALLAX FALLAX, ONYCHOMYS TORRIDUS RAMONA.	Not Present
Dipodomys merriami parvus	San Bernardino kangaroo rat	Endangered		SC		ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	NEEDS EARLY TO INTERMEDIATE SERAL STAGES.		Not Present
Dipodomys stephensi	Stephens' kangaroo rat	Endangered	Threatened			PRIMARILY ANNUAL & PERENNIAL GRASSLANDS, BUT ALSO OCCURS IN COASTAL SCRUB & SAGEBRUSH WITH SPARSE CANOPY COVER.	PREFERS BUCKWHEAT, CHAMISE, BROME GRASS & FILAREE. WILL BURROW INTO FIRM SOIL.	HABITAT CONSISTS OF PREVIOUSLY-CULTIVATED ANNUAL GRASSLAND SURROUNDED BY RIVERSIDIAN SAGE SCRUB. SOIL:CIENEBA, EXETER, GORGONIO, GREENFIELD, HANFORD, MONSERATE, PACHAPPA, PLACENTIA, RAMONA, VISTA. SLOPE: 0- 15%. POST CONSTR SURVEY SHOWS SKR.	Not Present
Dodecahema leptoceras	slender-horned spineflower	Endangered	Endangered		1B.1	CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB (ALLUVIAL FAN SAGE SCRUB).	FLOOD DEPOSITED TERRACES AND WASHES; ASSOC INCLUDE ENCELIA, DALEA, LEPIDOSPARTUM, ETC. 200-760 M.	WITHIN RIPARIAN AND ALLUVIAL FAN SAGE SCRUB COMMUNITIES. W/ LASTARRIACEA CORIACEA, ERIASTRUM FILIFOLIA, ERIOGONUM FASCICULATUM, ENCELIA ACTONII, PSOROTHAMNUS FREMONTII V. SIMPLICIFOLIUS, SAMBUCUS MEXICANA, LOTUS SCOPARIUS, OPUNTIA, ETC.	Not Present
Dudleya multicaulis	many-stemmed dudleya				1B.2	CHAPARRAL, COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND.	IN HEAVY, OFTEN CLAYEY SOILS OR GRASSY SLOPES. 0-790M.		Not Present

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Elanus leucurus	white-tailed kite					ROLLING FOOTHILLS AND VALLEY MARGINS WITH SCATTERED OAKS & RIVER BOTTOMLANDS OR MARSHES NEXT TO DECIDUOUS WOODLAND.	OPEN GRASSLANDS, MEADOWS, OR MARSHES FOR FORAGING CLOSE TO ISOLATED, DENSE- TOPPED TREES FOR NESTING AND PERCHING.	HABITAT CONSISTS OF SOUTHERN RIPARIAN SCRUB. LAND TO NORTH AND SOUTH IS VACANT, WHILE TRACT HOMES ARE LOCATED TO THE EAST AND WEST. 2 ADULT NORTHERN HARRIERS OBS ON PROJECT SITE	Not Present
Emys marmorata	western pond turtle			SC		A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS & IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BE	NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYIN		Not Present
Eremophila alpestris actia	California horned lark					COASTAL REGIONS, CHIEFLY FROM SONOMA CO. TO SAN DIEGO CO. ALSO MAIN PART OF SAN JOAQUIN VALLEY & EAST TO FOOTHILLS.	SHORT-GRASS PRAIRIE, "BALD" HILLS, MOUNTAIN MEADOWS, OPEN COASTAL PLAINS, FALLOW GRAIN FIELDS, ALKALI FLATS.	HABITAT CONSISTS OF NON- NATIVE GRASSLAND.	Not Present
Euphydryas editha quino	quino checkerspot butterfly	Endangered				SUNNY OPENINGS WITHIN CHAPARRAL & COASTAL SAGE SHRUBLANDS IN PARTS OF RIVERSIDE & SAN DIEGO COUNTIES.	HILLS & MESAS NEAR THE COAST. NEED HIGH DENSITIES OF FOOD PLANTS PLANTAGO ERECTA, P. INSULARIS, ORTHOCARPUS PURPURESCENS	HABITAT CONSISTS OF COASTAL SAGE SCRUB, DOMINATED BY KECKIELLA SP, ERIOGONUM FASCICULATUM, AND SALVIA MELLIFERA, ON A STEEP EAST-FACING SLOPE, 2100-2400 FEET. QUINO FOODPLANT (PLANTAGO) IS PRESENT ON THIS SITE.	Not Present
Galium angustifolium ssp jacinticum	. San Jacinto Mountains bedstraw				1B.3	LOWER MONTANE CONIFEROUS FOREST.	OPEN MIXED FOREST. 1630- 1940M.	NORTHEAST SLOPE & DRAINAGE IN PINUS LAMBERTIANA, P. JEFFREYI, ABIES CONCOLOR FOREST WITH QUERCUS CHRYSOLEPIS WOODLAND. ASSOCIATED WITH MONARDELLA NANA SSP. TENUIFLORA, CORDYLANTHUS SP., PHORADENDRON VILLOSUM, BROMUS TECTORUM, ETC.	Not Present

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Galium californicum ssp. primum	Alvin Meadow bedstraw				1B.2	CHAPARRAL, LOWER MONTANE CONIFEROUS FOREST.		LOWER EDGE OF PINE BELT. ECOTONE BETWEEN PINE FOREST & CHAPARRAL. WITH G. NUTTALLII, PINUS COULTERI, P. PONDEROSA, CERCOCARPUS BETULOIDES, QUERCUS WISLIZENII, CALOCEDRUS DECURRENS, GALIUM APARINE, & GALIUM PORRIGENS.	Not Present
Githopsis diffusa ssp. filicaulis	Mission Canyon bluecup				3.1	CHAPARRAL.	PROBABLY IN OPEN, GRASSY PLACES AND MESIC, DISTURBED AREAS; MUCH OVERLOOKED. 450- 700 M.	ROCKY, GENTLE HILLS, ON COARSE SANDY SOIL IN OPENINGS IN CHAMISE- MANZANITA CHAPARRAL. ORIGINAL LOCATION DESCRIBED AS BEING ON SERPENTINE, BUT SO FAR INVESTIGATORS IN RIVERSIDE COUNTY HAVE NOT FOUND SERPENTINE IN THE AREA.	Not Present
Haliaeetus leucocephalus	bald eagle	Delisted	Endangered			OCEAN SHORE, LAKE MARGINS, & RIVERS FOR BOTH NESTING & WINTERING. MOST NESTS WITHIN 1 MI OF WATER.	NESTS IN LARGE, OLD-GROWTH, OR DOMINANT LIVE TREE W/OPEN BRANCHES, ESPECIALLY PONDEROSA PINE. ROOSTS COMMUNALLY IN WINTE		Not Present
Harpagonella palmeri	Palmer's grapplinghook				4.2	CHAPARRAL, COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND.	CLAY SOILS; OPEN GRASSY AREAS W/IN SHRUBLAND. 15- 830M.	ON COBBLY CLAY SOIL IN COASTAL SAGE SCRUB. ASSOCIATED WITH BROMUS MOLLIS, PLANTAGO ERECTA.	Not Present
Imperata brevifolia	California satintail				2.1	COASTAL SCRUB, CHAPARRAL, RIPARIAN SCRUB, MOJAVEAN SCRUB, MEADOWS AND SEEPS (ALKALI).	MESIC SITES, ALKALI SEEPS, RIPARIAN AREAS. 0-500M.	SEEPS WITH WASHINGTONIA FILIFERA.	Not Present
Lampropeltis zonata (parvirubra)	California mountain kingsnake (San Bernardino population)			SC		BIGCONE SPRUCE & CHAPARRAL AT LOWER ELEV. BLACK OAK, INCENSE CEDAR, JEFFREY PINE & PONDEROSA PINE AT HIGHER ELEVATIONS.	WELL-LIT CANYONS WITH ROCKY OUTCROPS OR ROCKY TALUS.	OAK SCRUB ON MODERATELY ROCKY NORTH FACING SLOPE NEAR DRAINAGE.	Not Present
Lanius Iudovicianus	loggerhead shrike			SC		BROKEN WOODLANDS, SAVANNAH, PINYON-JUNIPER, JOSHUA TREE, & RIPARIAN WOODLANDS, DESERT OASES, SCRUB & WASHES.	PREFERS OPEN COUNTRY FOR HUNTING, WITH PERCHES FOR SCANNING, AND FAIRLY DENSE SHRUBS AND BRUSH FOR NESTING.	NEST LOCATED IN A BLACK WILLOW NEAR WETLANDS ASSOCIATED WITH A WATER TREATMENT FACILITY; WILLOW RIPARIAN, OPEN WATER HABITAT.	Not Present

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Lasiurus xanthinus	western yellow bat			SC		FOUND IN VALLEY FOOTHILL RIPARIAN, DESERT RIPARIAN, DESERT WASH, AND PALM OASIS HABITATS.	ROOSTS IN TREES, PARTICULARLY PALMS. FORAGES OVER WATER AND AMONG TREES.		Not Present
Lasthenia glabrata ssp. coulteri	Coulter's goldfields				1B.1	COASTAL SALT MARSHES, PLAYAS, VALLEY AND FOOTHILL GRASSLAND, VERNAL POOLS.	USUALLY FOUND ON ALKALINE SOILS IN PLAYAS, SINKS, AND GRASSLANDS. 1-1400M.	GROWING ON AN ALKALI PLAYA DEVELOPED ON SILTY CLAY SOIL IN AREA SEASONALLY INUNDATED. ASSOCIATED WITH PLAGIOBOTHRYS LEPTOCLADUS, RUMEX SP., SPERGULARIA SP., SISYMBRIUM IRIO, SUAEDA MOQUINII, HORDEUM DEPRESSUM, LEPIDIUM DICTYOTUM, ETC.	Not Present
Lepidium virginicum var. robinsonii	Robinson's pepper-grass				1B.2	CHAPARRAL, COASTAL SCRUB.	DRY SOILS, SHRUBLAND. 1-945M.	COASTAL SAGE SCRUB & ANNUAL GRASSLAND, MOSTLY ON CLAY SOILS DERIVED FROM GABBRO. MAJOR CLAY OPENINGS WITH FEW SHRUBS PRESENT. ASSOCIATED WITH SALVIA MELLIFERA, S. APIANA, ERIOGONUM FASCICULATUM, ERIODICTYON CRASSIFOLIUM, CRYPTANTHA, ETC.	Not Present
Lepus californicus bennettii	San Diego black-tailed jackrabbit			SC		INTERMEDIATE CANOPY STAGES OF SHRUB HABITATS & OPEN SHRUB / HERBACEOUS & TREE / HERBACEOUS EDGES.	COASTAL SAGE SCRUB HABITATS IN SOUTHERN CALIFORNIA.	RIVERSIDIAN SAGE SCRUB W/CA BUCKWHEAT, CA SAGEBRUSH, WHITE & BLACK SAGES, DEERWEED, PLANTAGO ERECTA & SOME NON-NATIVE GRASSLAND. ALSO, WILLOW/MULEFAT SCRUB & RUDERAL. RESIDENTIAL TO WEST, EAST & SOUTH. PROPERTY BECOMING ISOLATED.	Not Present

Scientific Name	Common Name	Federal Status	State Status	CDFG	CNPS	General Habitat	Micro Habitat	Ecological Community	Probability of Occurance
Lilium parryi	lemon lily				1B.2	LOWER MONTANE CONIFEROUS FOREST, MEADOWS AND SEEPS, RIPARIAN FOREST, UPPER MONTANE CONIFEROUS FOREST.	WET, MOUNTAINOUS TERRAIN; GEN IN FORESTED AREAS; ON SHADY EDGES OF STREAMS, IN OPEN BOGGY MEADOWS & SEEPS. 1300-2790M.	MIXED CONIFER FOREST IN RIPARIAN ZONE. SPECIES FOUND ALONG CANYON BOTTOM INCLUDE: CALOCEDRUS DECURRENS, RHODODENDRON OCCIDENTALE, EUONYMUS OCCIDENTALIS, RIBES NEVADENSE, PTERIDIUM AQUILINUM, CHIMAPHILA MENZIESII, AND WOODWARDIA FIMBRIATA.	Not Present
Monardella macrantha ssp. hallii	Hall's monardella				1B.3	BROADLEAVED UPLAND FOREST, CHAPARRAL, LOWER MONTANE CONIFEROUS FOREST, CISMONTANE WOODLAND, VALLEY & FOOTHILL GRASSLAND.	DRY SLOPES AND RIDGES IN OPENINGS WITHIN THE ABOVE COMMUNITIES. 695-2195M.	LOCALLY COMMON AMONG ROCKS AND UNDER SHRUBS WITH PINUS JEFFREYI, QUERCUS CHRYSOLEPIS, ARCTOSTAPHYLOS PRINGLEI, CEANOTHUS LEUCODERMIS, ERIOPHYLLUM CONFERTIFOLIUM, ELYMUS GLAUCUS, BROMUS GRANDIS, B. SITCHENSIS, AND KOELERIA PYRAMIDATA.	Not Present
Myosurus minimus ssp. apus	little mousetail				3.1	VERNAL POOLS. THIS SUBSPECIES HAS TAXONOMIC PROBLEMS; DISTINGUISHING BETWEEN THIS AND M. SESSILIS IS DIFFICULT. HYBRID?	ALKALINE SOILS. 20-640M. (NOTE: CENTRAL VALLEY EO'S NOT MAPPED).	TRUXILLENSIS, SUAEDA TORREYANA, HORDEUM DEPRESSUM, BROMUS MADRITENSIS RUBENS, AMSINCKIA INTERMEDIA, LAYIA PLATYGLOSSA, ET AL.	Not Present
Nama stenocarpum	mud nama				2.2	MARSHES AND SWAMPS.	LAKE SHORES, RIVER BANKS, INTERMITTENTLY WET AREAS. 5- 500M.	MUD ALONG DRYING LAKE SHORE ON ALKALINE SOIL WITH CRYPSIS VIRGINICA, LEPTOCHLOA UNINERVIA, CYPERUS ERYTHRORHIZOS, PETUNIA PARVIFLORA, AND AMMANNIA COCCINEA. PLANTS WERE TALLER AND DENSER AT HIGH WATER LINE NEAR ROAD.	Not Present

Scientific Name	Common Name	Federal Status	State Status	CDFG	CNPS	General Habitat	Micro Habitat	Ecological Community	Probability of Occurance
Navarretia fossalis	spreading navarretia	Threatened			1B.1	VERNAL POOLS, CHENOPOD SCRUB, MARSHES AND SWAMPS, PLAYAS.	SAN DIEGO HARDPAN & SAN DIEGO CLAYPAN VERNAL POOLS; IN SWALES & V.P'S, OFTEN SURR. BY OTHER HABITAT TYPES. 30- 665 M.	VERNAL POOL AREA ASSOCIATED WITH ALKALINE SINK SCRUB. WITH PLANTAGO BIGELOVII, PSILOCARPHUS, MYOSURUS MINIMUS APUS, VERONICA PEREGRINA, LASTHENIA CALIFORNICA, ETC. IN WILLOWS SILTY CLAY SOILS. STRONGLY ALKALINE, SALINE SOIL.	Not Present
Neotoma lepida intermedia	San Diego desert woodrat			SC		COASTAL SCRUB OF SOUTHERN CALIFORNIA FROM SAN DIEGO COUNTY TO SAN LUIS OBISPO COUNTY.	MODERATE TO DENSE CANOPIES PREFERRED. THEY ARE PARTICULARLY ABUNDANT IN ROCK OUTCROPS & ROCKY CLIFFS & SLOPES.	HABITAT CONSISTS OF RIVERSIDEAN DESERT SCRUB, CHAMISE CHAPARRAL, RED SHANK CHAPARRAL, NON- NATIVE GRASSLAND, RIVERSIDEAN ALLUVIAL FAN SAGE SCRUB, FRESHWATER SEEP AND SOUTHERN WILLOW SCRUB. ELANUS LEUCURUS OBSERVED IN VICINITY.	Not Present
Onychomys torridus ramona	southern grasshopper mouse			SC		DESERT AREAS, ESPECIALLY SCRUB HABITATS WITH FRIABLE SOILS FOR DIGGING. PREFERS LOW TO MODERATE SHRUB COVER.	FEEDS ALMOST EXCLUSIVELY ON ARTHROPODS, ESPECIALLY SCORPIONS & ORTHOPTERAN INSECTS.		Not Present
Orcuttia californica	California Orcutt grass	Endangered	Endangered		1B.1	VERNAL POOLS.	15-660 M.	IN VALLEY-TYPE ALKALINE VERNAL POOL WITH SILTY CLAY BED. OUTSIDE AND ADJACENT TO THE POOL ARE POPULATIONS OF AMBROSIA PUMILA AND ALLIUM FIMBRIATUM VAR. MUNZII. WITHIN INUNDATION AREA ARE ELEOCHARIS & MAVELLA LEPROSA.	Not Present
Penstemon californicus	California beardtongue				1B.2	CHAPARRAL, LOWER MONTANE CONIFEROUS FOREST, PINYON-JUNIPER WOODLAND.	STONY SLOPES AND SHRUBBY OPENINGS; SANDY OR GRANITIC SOILS. 1160-2300M.		Not Present
Perognathus longimembris brevinasus	Los Angeles pocket mouse			SC		LOWER ELEVATION GRASSLANDS & COASTAL SAGE COMMUNITIES IN AND AROUND THE LOS ANGELES BASIN.	OPEN GROUND WITH FINE SANDY SOILS. MAY NOT DIG EXTENSIVE BURROWS, HIDING UNDER WEEDS & DEAD LEAVES INSTEAD.		Not Present

Scientific Name	Common Name	Federal Status	State Status	CDFG	CNPS	General Habitat	Micro Habitat	Ecological Community	Probability of Occurance
Perognathus longimembris internationalis	Jacumba pocket mouse			SC		DESERT RIPARIAN, DESERT SCRUB, DESERT WASH, COASTAL SCRUB & SAGEBRUSH.	RARELY FOUND ON ROCKY SITES, USES ALL CANOPY COVERAGES.	HABITAT IS DISTURBED GRASSLAND, WITH SANDY, ALLUVIAL SUBSTRATE.	Not Present
Phrynosoma blainvillii	coast horned lizard			SC			OPEN AREAS FOR SUNNING, BUSHES FOR COVER, PATCHES OF LOOSE SOIL FOR BURIAL, & ABUNDANT SUPPLY OF ANTS & OTHER INSECTS.		Low Probability
Plegadis chihi	white-faced ibis					SHALLOW FRESH-WATER MARSH.	DENSE TULE THICKETS FOR NESTING INTERSPERSED WITH AREAS OF SHALLOW WATER FOR FORAGING.		Not Present
Polioptila californica californica	coastal California gnatcatcher	Threatened		SC		OBLIGATE, PERMANENT RESIDENT OF COASTAL SAGE SCRUB BELOW 2500 FT IN SOUTHERN CALIFORNIA.	LOW, COASTAL SAGE SCRUB IN ARID WASHES, ON MESAS & SLOPES. NOT ALL AREAS CLASSIFIED AS COASTAL SAGE SCRUB ARE OCCUPIED.	HABITAT IS RIVERSIDEAN SAGE SCRUB DOMINATED BY KECKIELLA ANTIRRHINOIDES, ARTEMISIA CALIFORNICA, SALVIA MELLIFERA, AND ERIOGONUM FASCICULATUM.	Not Present
Progne subis	purple martin			SC		INHABITS WOODLANDS, LOW ELEVATION CONIFEROUS FOREST OF DOUGLAS-FIR, PONDEROSA PINE, & MONTEREY PINE.	NESTS IN OLD WOODPECKER CAVITIES MOSTLY, ALSO IN HUMAN-MADE STRUCTURES. NEST OFTEN LOCATED IN TALL, ISOLATED TREE/SNAG.	HABITAT CONSISTS OF CHAPARRAL.	Not Present
Rana muscosa	Sierra Madre yellow-legged frog	Endangered		SC		FEDERAL LISTING REFERS TO POPULATIONS IN THE SAN GABRIEL, SAN JACINTO & SAN BERNARDINO MOUNTAINS ONLY.		HABITAT CONSISTED OF A SMALL TRIBUTARY DRAINAGE TO HALL (CANYON) CREEK, PARTIALLY SHADED BY CONIFERS & DECIDUOUS TREES, WITH SMALL POOLS & SEEPS AMONG BOULDERS; WEST-FACING EXPOSURE. FROGS MAY NOT BE AT LAKE (DISTURB), BUT ARE IN CANYON.	Not Present
Salvadora hexalepis virgultea	coast patch-nosed snake			SC		BRUSHY OR SHRUBBY VEGETATION IN COASTAL SOUTHERN CALIFORNIA.	REQUIRE SMALL MAMMAL BURROWS FOR REFUGE AND OVERWINTERING SITES.	HABITAT CONSISTS RIVERSIDEAN DESERT SCRUB.	Not Present
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap				1B.2	CHAPARRAL, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	IN GRAVELLY SOILS ON STREAMBANKS OR IN MESIC SITES IN OAK OR PINE WOODLAND. 425-2000M.	MEADOW AND STREAM. LOAM SOIL. FLAT SOUTHWARD SLOPE. FREQUENT IN FULL SUN AND DAMP SOIL.	Not Present

Scientific Name	Common Name	Federal Status	State Status	CDFG	CNPS	General Habitat	Micro Habitat	Ecological Community	Probability of Occurance
Sidalcea neomexicana	Salt Spring checkerbloom				2.2	ALKALI PLAYAS, BRACKISH MARSHES, CHAPARRAL, COASTAL SCRUB, LOWER MONTANE CONIFEROUS FOREST, MOJAVEAN DESERT SCRUB.	ALKALI SPRINGS AND MARSHES. 0-1500M.	SEMI-ALKALINE SWAMP WITH ANEMOPSIS AND SPERGULARIA MACROTHECA.	Not Present
Socalchemmis icenoglei	Icenogle's socalchemmis spider					KNOWN ONLY FROM THE TYPE LOCALITY IN THE VICINITY OF WINCHESTER, RIVERSIDE COUNTY.		HOLOTYPE TAKEN 3 NOV 1971 INSIDE A BUILDING; 1 FEMALE TAKEN IN A BUILDING 4 DEC 1967; 1 MALE TAKEN IN A PITFALL TRAP IN COASTAL SAGE SCRUB 1 DEC 1997.	Not Present
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest								Not Present
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest							MAPPED BY WIESLANDER SURVEY (1935) AS CLOSED CANOPY POPULUS FREMONTII.	Not Present
Southern Mixed Riparian Forest	Southern Mixed Riparian Forest							MAPPED BY WIESLANDER SURVEY (1935) AS CLOSED CANOPY QUERCUS AGRIFOLIA, POPULUS FREMONTII AND PLATANUS RACEMOSA.	Not Present
Southern Riparian Scrub	Southern Riparian Scrub							1980 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOGRAPHS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.	Not Present
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland							MAPPED BY WIESLANDER SURVEY AS CLOSED CANOPY ALNUS RHOMBIFOLIA AND PLATANUS RACEMOSA D/S AND QUERCUS CHRYSOLEPIS U/S.	Not Present
Southern Willow Scrub	Southern Willow Scrub							SOUTHERN WILLOW SCRUB DOMINATED BY SALIX GOODDINGII, S. LAEVIGATA, S. LASIOLEPSIS, BACHARRIS GLUTINOSA, B. EMORYI, B. PILULARIS, B. DOUGLASII.	Not Present
Spea hammondii	western spadefoot			SC		OCCURS PRIMARILY IN GRASSLAND HABITATS, BUT CAN BE FOUND IN VALLEY- FOOTHILL HARDWOOD WOODLANDS.	VERNAL POOLS ARE ESSENTIAL FOR BREEDING AND EGG-LAYING.		Not Present

Scientific Name	Common Name	Federal Status	State Status	CDFG	CNPS	General Habitat	Micro Habitat	Ecological Community	Probability of Occurance
Streptanthus bernardinus	Laguna Mountains jewel- flower				4.3	CHAPARRAL, LOWER MONTANE CONIFEROUS FOREST.	CLAY OR DECOMPOSED GRANITE SOILS; SOMETIMES IN DISTURBED AREAS SUCH AS STREAMSIDES OR ROADCUTS. 1440-2500M.	ON NORTH-FACING SLOPE IN GRANITIC GRAVEL AND SAND. ASSOCIATED WITH MIXED CONIFER FOREST SPECIES, INCLUDING ABIES CONCOLOR, CALOCEDRUS DECURRENS, PINUS JEFFREYI, AND QUERCUS KELLOGGII.	Not Present
Streptocephalus woottoni	Riverside fairy shrimp	Endangered				ENDEMIC TO W RIV, ORA & SDG COUNTIES IN AREAS OF TECTONIC SWALES/EARTH SLUMP BASINS IN GRASSLAND & COASTAL SAGE SCRUB.	INHABIT SEASONALLY ASTATIC POOLS FILLED BY WINTER/SPRING RAINS. HATCH IN WARM WATER LATER IN THE SEASON.	HABITAT CONSISTS OF A SEASONALLY ASTATIC SWALE POOL, DEEPENED SOMEWHAT BY EXCAVATION AND LOCATED IN A THIN STRIP OF DISTURBED COASTAL SAGE SCRUB AND GRASSLAND VEGETATION.	Not Present
Symphyotrichum defoliatum	San Bernardino aster				1B.2	MEADOWS AND SEEPS, MARSHES AND SWAMPS, COASTAL SCRUB, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST, GRASSLAND.	VERNALLY MESIC GRASSLAND OR NEAR DITCHES, STREAMS AND SPRINGS; DISTURBED AREAS. 2- 2040M.	GRASSY, OPEN AREA SURROUNDED BY OAK WOODLAND AND CHAPARRAL. FOUND WITH HELIOTROPIUM CURASSAVICUM, AMARANTHUS SP., CONYZA CANADENSIS, GNAPHALIUM LUTEO-ALBUM, BRASSICA GENICULATA, ROSA CALIFORNICA, ET AL.	Not Present
Taxidea taxus	American badger			SC		MOST ABUNDANT IN DRIER OPEN STAGES OF MOST SHRUB, FOREST, AND HERBACEOUS HABITATS, WITH FRIABLE SOILS.	NEEDS SUFFICIENT FOOD, FRIABLE SOILS & OPEN, UNCULTIVATED GROUND. PREYS ON BURROWING RODENTS. DIGS BURROWS.		Not Present
Texosporium sancti- jacobi	woven-spored lichen					CHAPARRAL.	OPEN SITES; IN CALIFORNIA W/ADENOSTOMA FAS., ERIOGONUM, SELAGINELLA. AT PINNACLES, ON SMALL MAMMAL PELLETS. 290-660M.	ON A GENTLY SLOPED TERRACE OCCUPIED BY OPEN COASTAL SAGE SCRUB. OPEN HABITAT SOILS, WHERE BIOTURBATION IS RESTRICTED. UNDERLYING BEDROCK IS DECOMPOSED GRANITIC ROCK THAT WEATHERS TO FORM CLAYEY SOILS.	Not Present
Thamnophis hammondii	two-striped garter snake			SC		COASTAL CALIFORNIA FROM VICINITY OF SALINAS TO NORTHWEST BAJA CALIFORNIA. FROM SEA TO ABOUT 7,000 FT ELEVATION.	HIGHLY AQUATIC, FOUND IN OR NEAR PERMANENT FRESH WATER. OFTEN ALONG STREAMS WITH ROCKY BEDS AND RIPARIAN GROWTH.	HABITAT CONSISTS OF SOUTHERN RIPARIAN SCRUB.	Not Present

Scientific Name	Common Name	Federal Status	State Status	CDFG	CNPS	General Habitat	Micro Habitat	Ecological Community	Probability of Occurance
Tortula californica	California screw moss				1B.2	CHENOPOD SCRUB, VALLEY AND FOOTHILL GRASSLAND.	MOSS GROWING ON SANDY SOIL. 10-1460M.	ADENOSTOMA FASCICULATUM SALVIA MELLIFERA PLANT COMMUNITY. ASSOCIATED WITH ERIOGONUM FASCICULATUM, RHUS OVATA, CEANOTHUS PERPLEXANS, BRYUM SPP., AND DIDYMODON VINEALIS. MICROHABITAT IS ON SOIL BENEATH LARGE BOULDERS. N ASPECT W/ 35% SLOPE.	Not Present
Toxostoma bendirei	Bendire's thrasher			SC		IN FLAT AREAS OF DESERT SUCCULENT SHRUB/JOSHUA	NESTS IN CHOLLA, YUCCA, PALOVERDE, THORNY SHRUB, OR SMALL TREE, USUALLY 0.5 TO 20 FEET ABOVE GROUND.	HABITAT CONSISTS OF RIVERSIDEAN DESERT SCRUB.	Not Present
Trichocoronis wrightii var. wrightii	Wright's trichocoronis				2.1	RIPARIAN FOREST, MEADOWS	MUD FLATS OF VERNAL LAKES, DRYING RIVER BEDS, ALKALI MEADOWS. 5-435 M.	GROWING IN MUD FLAT OF VERNAL LAKE.	Not Present
Vireo bellii pusillus	least Bell's vireo	Endangered	Endangered			SOUTHERN CALIFORNIA IN LOW RIPARIAN IN VICINITY OF WATER OR IN DRY RIVER	NESTS PLACED ALONG MARGINS OF BUSHES OR ON TWIGS PROJECTING INTO PATHWAYS, USUALLY WILLOW, BACCHARIS, MESQUITE.		Not Present

## **APPENDIX B SPECIES OBSERVED ON-SITE**

Lake Street Basin Observed Species List July 30, 2013

#### FLORA

Adoxaceae Mexican elderberry Sambucus mexicana Anacardiaceae pepper tree\*\* Schinus sp. Asteraceae Telegraph weed Heterothca grandiflora Ragweed Ambrosia psilostachya Stephanomeria pauciflora Wire lettuce Brassicaceae Mustard\*\* Sisymbrium altissimum Boraginaceae Yerba santa Eriodictyon sp. Chenopodiaceae Russian thistle\*\* Salsola tragus Euphorbiaceae Dove weed *Croton setigerus* <u>Solanaceae</u> Nicotiana glauca Tree tobacco\*\* Jimson weed\*\* Datura stramonium FAUNA BIRDS

<u>Vultures</u> Turkey vulture

<u>Hawks</u> Red tail hawk

<u>Quail</u>

Cathartidae Cathartes aura

Accipitridae Buteo jamaicensis

<u>Odontophoridae</u>

California quail

Callipepla californica

MAMMALS <u>Dogs</u> Domestic dog (tracks)

<u>Canidae</u> Canis familiarus

\*\* denotes non-native species

# **APPENDIX C SITE PHOTOS**

## Lake Street Basin Representative Site Photos



Lake Street Basin looking diagonally across the basin (southeast).



View of the basin bottom looking east.



## Lake Street Basin Representative Site Photos



Basin inlet at the southeast corner of the basin.



Basin outlet to Lake street at the northwest corner of the basin.

