

SOUTHERN CALIFORNIA LOGISTICS AIRPORT SPECIFIC PLAN AMENDMENT

City of Victorville,
San Bernardino County, California

BIOLOGICAL RESOURCES REPORT

Prepared For:

Stirling Development
27422 Portola Parkway, Suite 300
Foothill Ranch, California 92610
Contact: Jason Huber
Phone: (949) 462-0909

Prepared By:

Michael Baker International
5 Hutton Centre Drive, Suite 500
Santa Ana, CA 92707
Contact: Stephen Anderson
Phone: (949) 330-4176

November 2018
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SOUTHERN CALIFORNIA LOGISTICS AIRPORT SPECIFIC PLAN AMENDMENT

CITY OF VICTORVILLE,
SAN BERNARDINO COUNTY, CALIFORNIA

Biological Resources Report

The undersigned certify that this report is a complete and accurate account of the findings and conclusions of a biological resources assessment for the above-referenced project.

Stephen Anderson
Biologist
Natural Resources/Regulatory Permitting

Dan Rosie
Ecologist
Natural Resources/Regulatory Permitting

November 2018

Executive Summary

On behalf of Stirling Development, Michael Baker International (Michael Baker) has prepared this Biological Resources Report for the for the proposed Southern California Logistics Airport (SCLA) Specific Plan (survey area), located in City of Victorville (City), San Bernardino County, California. The SCLA Specific Plan development will result in a combination of business, industrial, and airport uses. This development will accommodate aviation and aviation-related facilities, and compatible industrial, commercial, and limited public recreational uses.

This report was prepared to document all biological resources identified within the survey area during a general biological resources survey, which includes a floral and faunal inventory, vegetation/land use mapping, and habitat suitability assessments to determine the potential for special-status plant and wildlife species and vegetation communities to occur within the survey area, and an evaluation of jurisdictional aquatic/hydrological features. Details of the delineation are provided under a separate cover.

The survey area, located in the Mojave Desert, consists of disturbed areas (i.e., previously graded and developed lots, but structures have been removed) with scattered, primarily non-native vegetation marginally suitable to support a limited variety of plant and wildlife species, and large patches of native Mojave creosote bush scrub located within the eastern portion of the survey area consisting primarily of creosote bush (*Larrea tridentata*) and rubber rabbitbrush (*Ericameria nauseosa*). No special-status plant or wildlife species or vegetation communities were observed within or surrounding the survey area during the survey. In addition, based on 9-quadrangle database record searches, Michael Baker determined that the eleven (11) special-status plants species and thirty-two (32) special-status wildlife species known to occur within the vicinity of the survey area are either not expected or have a low potential to occur within or surrounding the survey area.

Further, bird nesting opportunities and wildlife movement are limited and relatively restricted throughout most of the survey area, respectively, due to a lack of vegetative cover on-site, and development and infrastructure within and surrounding the survey area. However, the eastern portion of the survey area contains native Mojave creosote bush scrub habitat that ultimately abuts the Mojave River east of the survey area, providing opportunities for bird nesting and wildlife movement. Several jurisdictional aquatic features and several individuals of Joshua tree (*Yucca brevifolia*) protected by the City ordinance were observed within the survey area. However, no U.S. Fish and Wildlife Service-designated critical habitat was observed within the survey area.

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- Appendix A: Site Photographs
- Appendix B: Plant and Wildlife Species Observed List
- Appendix C: Special-Status Species Table

LIST OF ACRONYMS

AFB	Air Force Base
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
City	City of Victorville
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
FEMA	Federal Emergency Management Agency
FT	Federally Threatened
MBTA	Migratory Bird Treaty Act
Michael Baker	Michael Baker International
NRCS	Natural Resources Conservation Service
SCLA	Southern California Logistics Airport
SSC	Species of Special Concern
ST	State Threatened
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WL	Watch List
WoUS	Waters of the United States

Section 1 Introduction

On behalf of Stirling Development, Michael Baker International (Michael Baker) has prepared this Biological Resources Report for the proposed Southern California Logistics Airport (SCLA) Specific Plan (survey area). This report describes the biological resources record searches and literature review, survey methodologies, and results of the biological resources survey conducted within the survey area to determine the presence or potential occurrence of State-listed and/or Federally-listed rare, threatened, or endangered species, and other special-status plants, animals, and natural communities.

1.1 PROJECT LOCATION

The SCLA Specific Plan area is located in the southwestern portion of the Mojave Desert, approximately 5 miles west of Interstate 15, one mile east of U.S. Highway 395, and directly north of Air Expressway, in the northern portion of the City of Victorville (City), San Bernardino County, California (Figure 1, *Regional Vicinity*). Specifically, the survey area is depicted within Sections 22, 23, 24, 25, 26, and 27, Township 6 North, Range 5 West, of the U.S. Geological Survey *Adelanto* and *Victorville, California* 7.5-minute topographic quadrangle maps (Figure 2, *Site Vicinity*).

The survey area includes a commercial air facility and related uses for approximately 5,870 acres, previously known as George Air Force Base (AFB). George AFB was formerly the Victorville Army Airfield. SCLA is centrally located 60 minutes northeast of Los Angeles alongside major trucking corridors with direct access to the Burlington Northern Santa Fe freight railway and Union Pacific transcontinental railway and a two-runway airport (Figure 3, *Survey Area*). The survey area is bounded by the City of Adelanto to the west, the existing SCLA airstrips to the north, undeveloped lands and scattered industrial facilities to the south, and undeveloped slopes to the east leading to the Mojave River.

1.2 PROJECT BACKGROUND AND DESCRIPTION

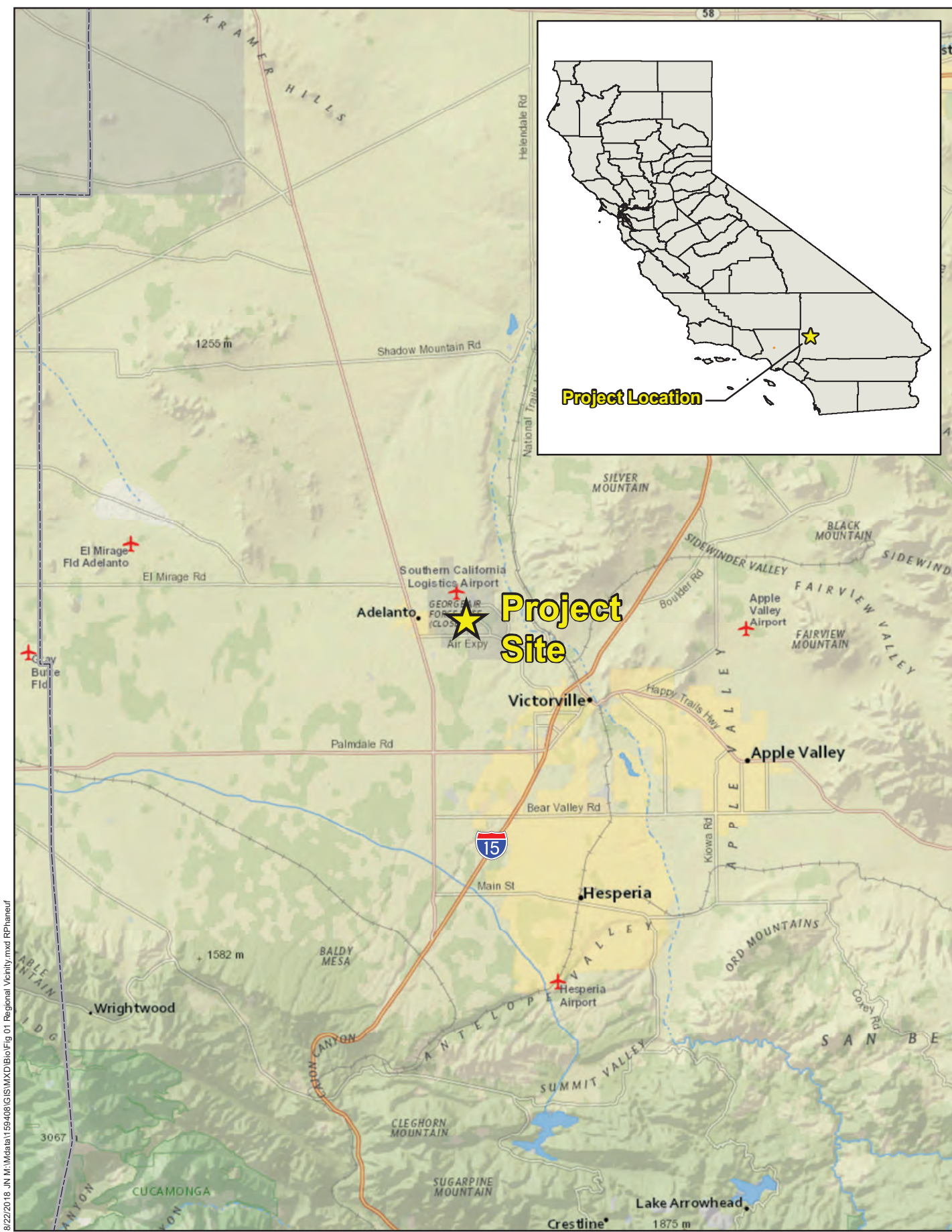
The Southern California Logistics Airport (SCLA) Specific Plan covers approximately 8,611 acres in the City of Victorville. A large portion of the SCLA Specific Plan area, approximately 5,350 acres, was formerly the George Air Force Base (AFB), which was also formerly known as the Victorville Army Airfield. George AFB was officially deactivated on December 15, 1992. After closure of George AFB, the facility was annexed into the City of Victorville, and the SCLA Specific Plan became effective in March 1993. The SCLA Specific Plan provides a description of the proposed land uses, infrastructure, and specific implementation requirements for development.

The most recent major amendment to the Specific Plan occurred in April 2004. The City of Victorville proposes to once again amend the SCLA Specific Plan to adapt more appropriately to current development conditions and market demands. As part of the Specific Plan Amendment,

an approximately 2,100-acre “priority area” has been identified where development is expected to occur in the reasonably foreseeable future (approximately 20-30 years). This “priority area” is the subject of the analysis provided within this report.

1.3 PURPOSE OF DOCUMENT

This report documents all biological resources identified within the survey area during a general biological resources survey. It includes an analysis of the potential for the various on-site biological resources to support special-status plant and wildlife species and special-status vegetation communities known to occur within the vicinity of the survey area that are subject to provisions of the Federal Endangered Species Act of 1973, Migratory Bird Treaty Act (MBTA), California Endangered Species Act, California Environmental Quality Act (CEQA), California Fish and Game Code (CFGF), California Native Plant Protection Act, Bald and Golden Eagle Protection Act, and other local policies and ordinances protecting biological resources. Further, this report summarizes a review of jurisdictional aquatic features, if present.



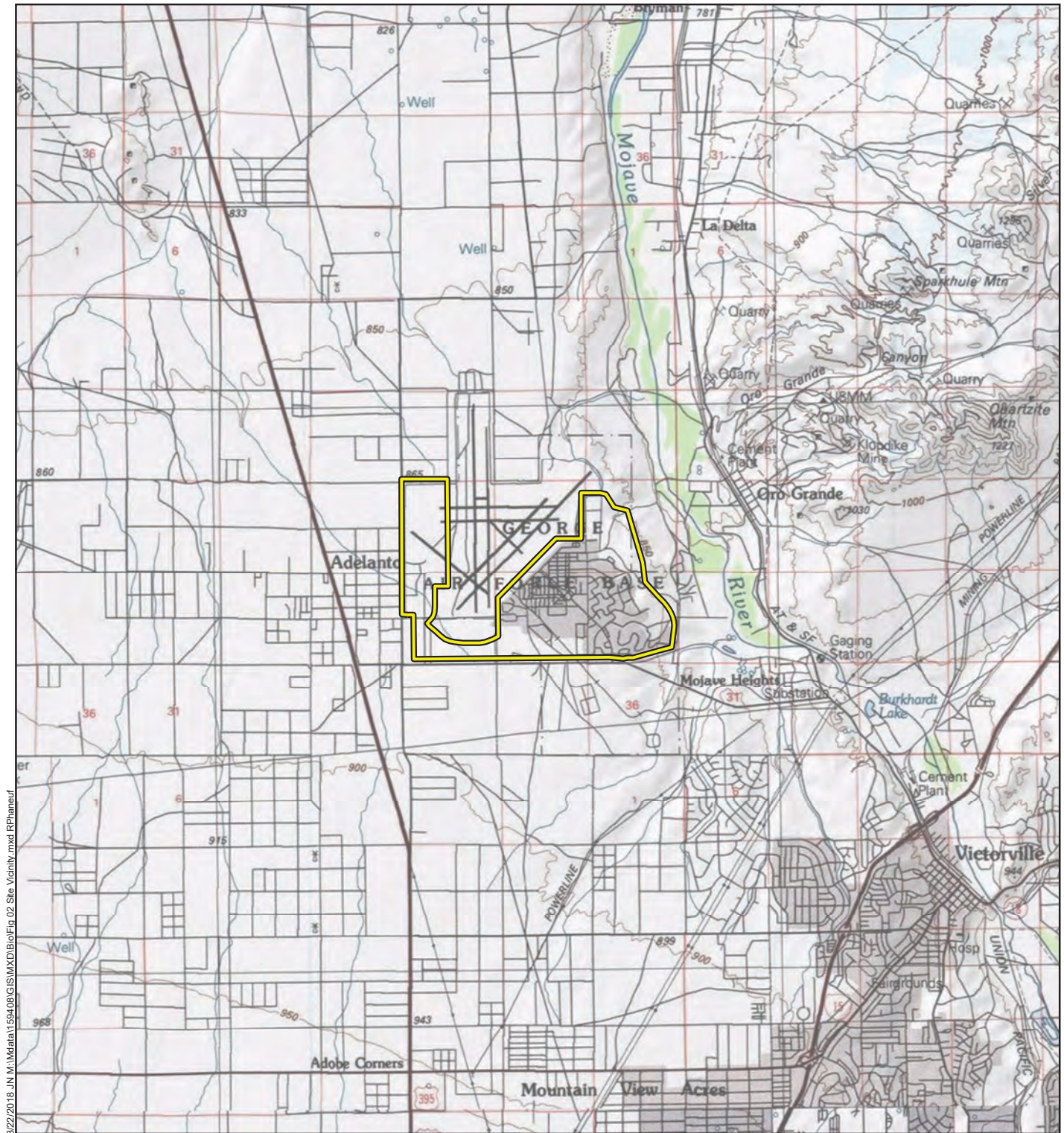
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Regional Vicinity

Figure 1

Source: ArcGIS Online



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Legend

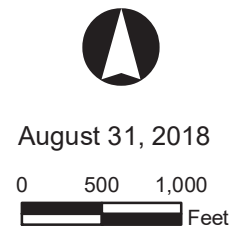
 Survey Area

USGS 7.5 Minute topographic quadrangle: Adelanto, California (1993) & Victorville, California (1993)





- Legend**
- Survey Area
 - Photo Location and Direction
 - Reference Point



Source: Eagle Aerial - 2014

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Survey Area Location

Figure 3

Section 2 Methodology

2.1 LITERATURE REVIEW AND DATABASE SEARCHES

Prior to conducting the field surveys, Michael Baker conducted a 9-quadrangle (Adelanto, Apple Valley North, Apple Valley South, Baldy Mesa, Helendale, Hesperia, Turtle Valley, Victorville, and Victorville NW) search of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) RareFind 5 (CDFW, Biogeographic Data Branch 2018) and the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants (CNPS 2018), and generated a Species and Resources List queried from the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Conservation online system (USFWS 2018a). This helped to identify special-status plant and wildlife species, vegetation communities, and other biological resources that have been previously documented within, near, and/or have the potential to occur within the survey area. The *Special Animals List* (CDFW 2018a), *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2018b), and CNPS California Rare Plant Ranking System (CRPR) were reviewed for the current status of rare and endangered plant and wildlife species. Other resources reviewed include the USFWS Critical Habitat for Threatened & Endangered Species mapper (USFWS [ArcGIS Online] 2018); recent aerial photography (Google Earth Pro 2018); the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA, NRCS 2018); National Wetland Inventory (USFWS 2018b), and Federal Emergency Management Agency (FEMA) – 100 Year Flood Zones (FEMA [ArcGIS Online] 2018).

2.2 GENERAL BIOLOGICAL RESOURCES SURVEYS

Following the database searches, on August 13 and 14, 2018, Michael Baker biologists Stephen Anderson and Linda Nguyen conducted a general biological resources assessment of the entire survey area on both days between the hours of 0600 and 1500, with weather conditions consisting of temperatures ranging from approximately 68 to 97 degrees Fahrenheit (°F), winds approximately 1 to 5 miles per hour, and clear skies. The survey was conducted to document existing site conditions, including an inventory of plant and wildlife species and mapping of vegetation communities/land uses, to determine the potential for various special-status plant and wildlife resources known to occur within the vicinity of the survey area, and to identify jurisdictional aquatic features, if present. Representative photographs of the survey area are provided at the end of this report in Appendix A, *Site Photographs*. Refer to Figure 3 for the location and direction from which each photograph was taken.

2.2.1 Vegetation/Land Use Mapping and Plant Species Inventory

Classification of the on-site vegetation communities and other land uses is based on the descriptions of terrestrial vegetation classification systems described in *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). Plant species nomenclature

and taxonomy follow *The Jepson Manual: Vascular Plants of California, second edition* (Baldwin *et al.* 2012). All plant species encountered were noted and identified at minimum to the lowest possible taxonomic level necessary to determine rarity. Refer to Appendix B for a complete list of plant species observed on-site.

2.2.2 General Wildlife Observations

Wildlife identification and nomenclature followed standard reference texts, including The American Ornithologists' Union *Checklist of North and Middle American Birds* (The American Ornithologists' Union 2013), the *Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, With Comments Regarding Confidence in Our Understanding* (Crother 2012), and *Mammals of North America, Second Edition* (Kays and Wilson 2009). All wildlife species observed and/or otherwise detected through sign (e.g., tracks, scat) were recorded. Other wildlife species may occupy the site but are not easily detectable during the day (i.e., nocturnal) and without extensive survey efforts during the appropriate season, in addition to several species being transient and potentially occupying the site other times of the year. Refer to Appendix B for a complete list of wildlife species observed or otherwise detected on-site.

2.3 SURVEY LIMITATIONS

This Biological Resources Report has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. Biological surveys for the presence or absence of certain taxa have been conducted as part of this assessment but were not necessarily performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided.

The findings and opinions conveyed in this report are based on findings derived from site reconnaissance and a review of the CNDDDB and CNPS Online Inventory, and other resources. Standard data sources relied upon during the completion of this report, such as the CNDDDB, may vary with regard to accuracy and completeness. In particular, the CNDDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Michael Baker believes the data sources are reasonably reliable, Michael Baker cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources

reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

Section 3 Existing Conditions

The following is a summarization of the results of the database review and general biological resources survey performed by Michael Baker. Discussions regarding the general environmental setting, vegetation communities and other land uses present, and plant and wildlife species observed are presented below. Representative photographs of the survey area are provided in Appendix A, and a complete list of all the plant and wildlife species observed on-site during the field surveys is provided in Appendix B.

3.1 ENVIRONMENTAL SETTING

The survey area is located within the Mojave Desert Region of the Desert Province and is primarily dominated by Mojave creosote bush scrub, with saltbush scrub characteristic of alkaline basins. Specifically, the survey area consists entirely of previously graded, formerly developed lots (structures and foundations removed), developed lots with active infrastructure, and native Mojave creosote bush scrub habitat located within a portion of the survey area. The survey area consists entirely of Mojave creosote bush scrub, bare ground, and disturbed habitat with widely scattered non-native grasses, forbs, and a few ornamental tree recruits.

3.1.1 Climate

The survey area, located in the high desert - southwest portion of the Mojave Desert, has an arid climate characterized cool winters and hot summers. With an average annual temperature typically of approximately 62 °F, highs in the summer average 96 °F and lows in the winter averaging 33 °F, and low humidity throughout the year. Average annual precipitation for the Victorville, California, area is approximately 6 inches (U.S. Climate Data 2018).

3.1.2 Hydrology

The survey area is located within the Mojave Hydrologic Unit (Hydrologic Unit Code 18090208) and Upper Mojave Hydrologic Area. Located in the south Lahontan Basin, the Mojave River Watershed encompasses approximately 4,500 square miles. Within this watershed, the SCLA site is tributary to two major watercourses: Fremont Wash on the North; and the Mojave River on the north and east sides. Fremont Wash is an ephemeral tributary to the Mojave River.

The majority of the survey area drains towards the Mojave River, while the west side of the survey area drains to the Fremont Wash. The Mojave River drains the mountainous region located to the south, is approximately 125 miles long, and has a gradient of about 15 feet per mile in a south to north direction. The City is located on top of a gently sloping alluvial fan situated to the northeast of the San Bernardino Mountains. The headwaters of the Mojave River are in the San Bernardino Mountains, which annually receives greater than 40 inches of precipitation at its highest elevations. Much of the winter precipitation in the San Bernardino Mountains falls in the form of

snow that provides spring recharge to the Mojave River system. Historically, the annual recharge from the headwaters is approximately 75,000 acre-feet. The Mojave River, through both surface and subsurface flow, transects the watershed for a lineal distance of approximately 120 miles, providing muted hydrologic influence on Silver Lakes (two man-made navigable lakes in the unincorporated community of Helendale) and eventually terminating within playas to the east of Baker in the central Mojave Desert. Aside from intense storm events, the Mojave River channel is typically dry downstream of the Mojave Forks Dam except in select locations where ground water is forced to the surface by geologic structures.

Michael Baker searched the FEMA – 100 Year Flood Zones for flood data within the survey area (ArcGIS 2017). According to FEMA, the lower southwest portion of the survey area is located within Zone X or areas subject to 0.2 percent annual chance of flood hazard.

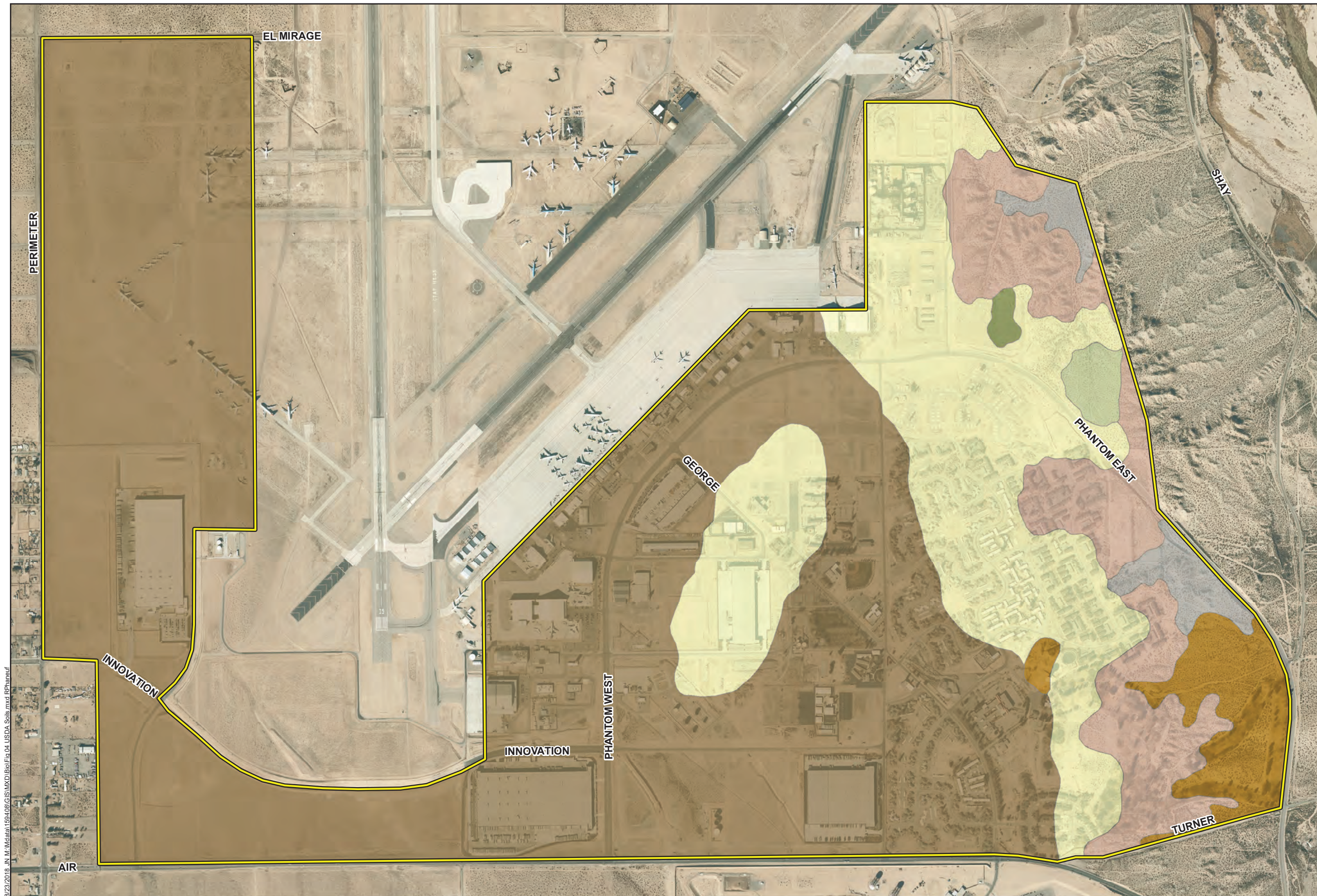
3.2 TOPOGRAPHY AND SOILS

The SCLA Specific Plan area is situated in Victor Valley, a geographic sub-region of the Mojave Desert. The region is also known as the “High Desert”, due to its approximate elevation of 2,800 feet above mean sea level. Much of the SCLA Specific Plan area is relatively flat, providing a suitable area for aircraft runways and other industrial/commercial facilities. The eastern portion of the SCLA Specific Plan area generally slopes toward the Mojave River, with topography ranging from gentle, well-rounded hills to locally steep, moderately rugged slopes. Surface elevations within the survey area vary between approximately 2,915 feet amsl along the southern boundary to approximately 2,735 feet amsl in the southeast corner.

On-site and adjoining soils were reviewed prior to the field survey using the Web Soil Survey (USDA, NRCS 2018). Mapped soils within the survey area include the following (refer to Figure 4, *USDA Soils*):

- Bryman loamy fine sand, 0 to 2 percent slopes (Map Unit Symbol: 105)
- Cajon sand, 2 to 9 percent slopes (113)
- Cajon sand, 9 to 15 percent slopes (114)
- Haplargids-Calciorthids Complex, 15 to 50 percent slopes (130)
- Helendale loamy sand, 0 to 2 percent slopes (131)
- Mohave variant loamy sand, 0 to 2 percent slopes (150)
- PITS (155)

Michael Baker then reviewed the National Hydric Soils List (USDA, NRCS 2018) to identify soils mapped within the survey area that are considered to be hydric. According to the soils list, there are no hydric soils mapped within the survey area. Soil textures identified on-site were generally consistent with those mapped by the Web Soil Survey.



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Legend

Survey Area

Soil Type

105 Bryman Loamy Fine Sand, 0 to 2 percent slopes

113 Cajon Sand, 2 to 9 percent slopes

114 Cajon Sand, 9 to 15 percent slopes

130 Haplargids-Calciorthids Complex, 15 to 50 percent slopes

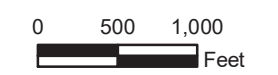
131 Helendale Loamy Sand, 0 to 2 percent slopes

150 Mohave Variant Loamy Sand, 0 to 2 percent slopes

155 PITS



August 31, 2018



Source: Eagle Aerial - 2014

3.3 VEGETATION COMMUNITIES AND OTHER LAND USES

Two (2) terrestrial vegetation communities were identified on-site during the field survey. Vegetation classification was based on Holland (1986); modifications were made based on Oberbauer (2008) as necessary. A complete list of plant species observed during the field surveys is provided in Appendix B. A map that illustrates the extent of the terrestrial vegetation communities and other land uses observed within the survey area is presented as Figure 5, *Vegetation Communities and Land Uses*. Table 1, below, provides the acreages of each vegetation community/land use on-site, followed by each discussed in detail.

Table 1. Vegetation Communities and Land Uses within the Survey Area

Vegetation Communities and Land Uses	Acreage
Mojave Creosote Bush Scrub (34100)	269.79
Disturbed Habitat (11300)	686.58
Urban/Developed (12000)	1,039.27
Bare Ground	107.85
TOTAL*	2103.49

* Total may not equal to sum due to rounding.

Mojave Creosote Bush Scrub (Holland Code: 34100)

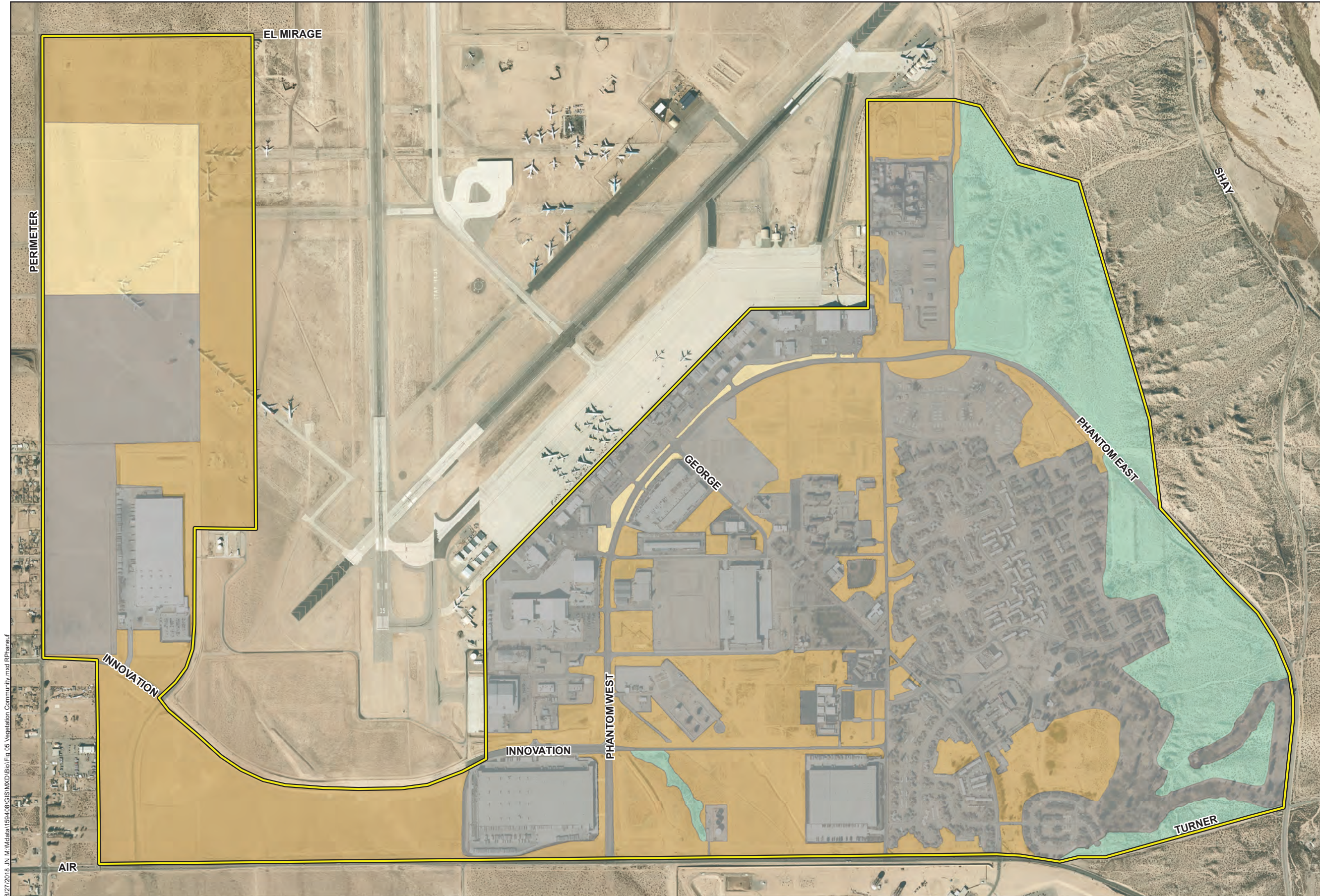
Mojave creosote bush scrub on-site consists of areas along the slopes of the eastern end of the survey area, along with a small area along the southern end of the survey area. These areas have been relatively undisturbed by development and non-native vegetation. Dominant species within this habitat primarily include creosote bush (*Larrea tridentata*) and rubber rabbitbrush (*Ericameria nauseosa*).

Disturbed Habitat (11300)


Disturbed habitat on-site consists of areas that have undergone substantial disturbance, and either are frequently and repeatedly disturbed through vegetation clearing, grading, or compaction and/or are dominated by non-native, annual, opportunistic weed species that preclude the re-establishment of native vegetation communities. Dominant species within the disturbed habitat, albeit widely scattered, include common Mediterranean grass (*Schismus barbatus*), Russian thistle (*Salsola tragus*), foxtail chess (*Bromus rubens*), and cheat grass (*B. tectorum*).

Urban/Developed (12000)

Developed portions of the survey area include paved roads and other infrastructure associated with the SCLA along with old infrastructure associated with the former George AFB.



- Legend**
- Survey Area
- Vegetation/Land Uses**
- Mojave Creosote Bush Scrub (269.79 acres)
 - Disturbed (686.58 acres)
 - Bare Ground (107.85 acres)
 - Developed (1039.27 acres)


 August 31, 2018
 0 500 1,000
 Feet

Source: Eagle Aerial - 2014

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Bare Ground

Bare ground mapped on-site includes unpaved pathways associated with site maintenance activities (i.e., fire abatement) and existing overhead electrical distribution power lines, which appear to be maintained devoid of vegetation.

3.4 GENERAL WILDLIFE OBSERVATIONS

The projects site contains areas of minimal vegetation or friable soils necessary to support various wildlife species, along with areas densely vegetated with native vegetation. Species common to disturbed areas were observed during the general survey. Some common species observed include common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), California quail (*Callipepla californica*), killdeer (*Charadrius vociferus*), rock pigeon (*Columba livia*), American crow (*Corvus brachyrhynchos*), horned lark (*Eremophila alpestris*), Say's phoebe (*Sayornis saya*), and Allen's hummingbird (*Selasphorus sasin*). A barn owl (*Tyto alba*) was observed occupying an abandoned plane along the western end of the survey area. In addition, several nest mounds of red harvester ant (*Pogonomyrmex barbatus*) were observed throughout the survey area. Refer to Appendix B for a complete list of wildlife species observed during the field survey.

Section 4 Special-Status Biological Resources

The following discusses the potential for special-status plant and wildlife species and special-status vegetation communities to occur within the survey area. “Potential to occur” determinations were based on the presence or absence of suitable habitat for each special-status species evaluated, as well as the general ecological requirements for each species and known occurrences on and/or within the vicinity of the survey area. All CNDDDB occurrences documentation of special-status species and vegetation communities and USFWS-designated critical habitats within a 5-mile radius of the survey area are shown in Figure 6, *Special-Status Biological Resources Documented Within a 5-mile Radius*. An evaluation of the potential for each species identified in the database records search to occur on-site is presented in Appendix C.

4.1 SPECIAL-STATUS SPECIES

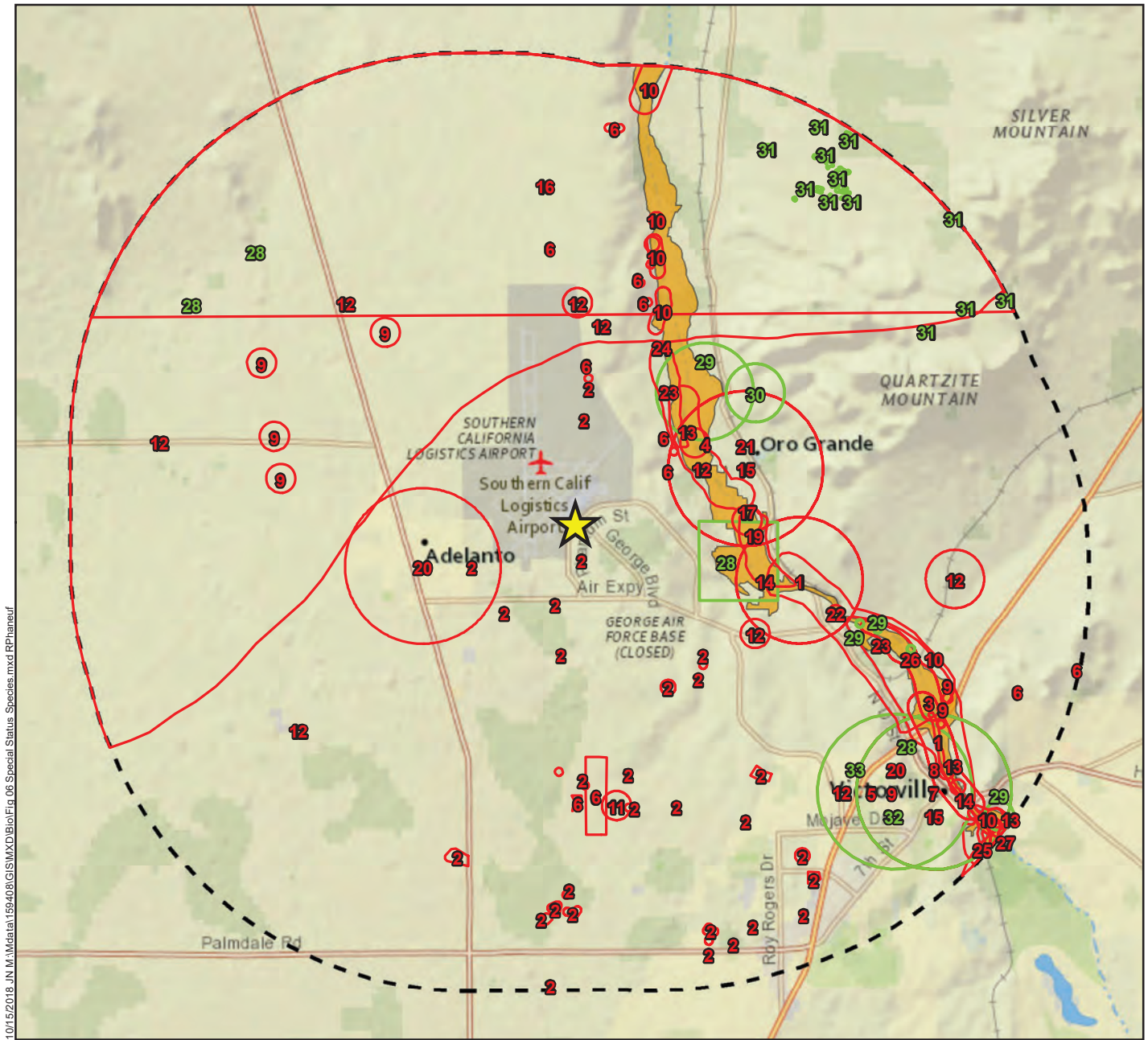
The results of the 9-quadrangle database record searches revealed documented occurrences for a total of eighteen (18) special-status plants species and thirty-two (32) special-status wildlife species. Species determined to have a “Moderate” or “High” potential for occurring warrant a discussion. However, all of the special-status species with documented occurrences were evaluated by Michael Baker as having a “Low” or “Not Expected” potential for occurrence and are therefore not discussed further.

No special-status plant or wildlife species were observed during the field survey. Based on the literature review and database searches and on-site habitat suitability assessment, Michael Baker determined that the survey area contains suitable habitat for three (3) special-status plant species and eight (8) special-status wildlife species.

4.1.1 Special-Status Plant Species

No special-status plant species were observed during the field survey. However, Michael Baker determined that the following special-status plant species have a moderate or high potential for occurring within the survey area: Mojave monkeyflower (*Diplacus mohavensis*, CRPR 1B.2), crowned muilla (*Muilla coronata*, CRPR 4.2), and Beaver Dam breadroot (*Pediomelum castoreum*, CRPR 1B.2).

Mojave monkeyflower – This species is an annual herb that typically blooms April through June. It is often found on dry, sandy or rock washes along the Mojave River, in Joshua tree woodland, and Mojavean desert scrub. Dry, sandy washes in Mojavean desert scrub are marginally present within the survey area; however, the nearest occurrence is less than 2 miles to the east from 1998. Therefore, it was determined that Mojave monkeyflower has a moderate potential to occur within the survey area, and therefore there is a potential for impacts to this species if project activities are implemented within suitable habitat.



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Legend

Site Location

5-mile Radius Buffer

Special-Status Resources

Animal

Plant

Critical Habitat

Southwestern Willow Flycatcher

ID	Animal	ID	Animal	ID	Animal	ID	Animal	ID	Plant
1	arroyo toad	8	hoary bat	15	pallid San Diego pocket mouse	22	tricolored blackbird	28	Beaver Dam breadroot
2	burrowing owl	9	Le Conte's thrasher	16	prairie falcon	23	Victorville shoulderband	29	Booth's evening-primrose
3	California red-legged frog	10	least Bell's vireo	17	San Emigdio blue butterfly	24	western pond turtle	30	Mojave monkeyflower
4	coast horned lizard	11	loggerhead shrike	18	southwestern willow flycatcher	25	western yellow-billed cuckoo	32	southern mountains skullcap
5	Cooper's hawk	12	Mohave ground squirrel	19	summer tanager	26	yellow warbler	33	white pygmy-poppy
6	desert tortoise	13	Mohave river vole	20	Swainson's hawk	27	yellow-breasted chat		
7	golden eagle	14	Mohave tui chub	21	Townsend's big-eared bat				

SOUTHERN CALIFORNIA LOGISTICS AIRPORT SPECIFIC PLAN AMENDMENT
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**Special-Status Biological Resources and Critical
 Habitat Documented within a 5-mile Radius**



Source: NearMap - 07/26/2017

Figure 6

Crowned muilla – This perennial herb typically blooms March through May. It is often found on sandy soils or coarse, granitic loams, in chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon-juniper woodland. Sandy soils in desert scrub is present within the survey area; further, the nearest occurrence is approximately 2 miles to the south from 2001. Therefore, it was determined that crowned muilla has a high potential to occur within the survey area, and therefore there is a potential for impacts to this species if project activities are implemented within suitable habitat.

Beaver Dam breadroot – This perennial herb typically blooms April through May. It is often found on sandy soils of desert washes and road cuts in Joshua tree woodland and Mojavean desert scrub. Sandy soils of desert washes and road cuts is present within the survey area; further, the nearest occurrence is approximately 0.25 miles to the east from 2008. Therefore, it was determined that beaver dam breadroot has a high potential to occur within the survey area, and therefore there is a potential for impacts to this species if project activities are implemented within suitable habitat.

A rare plant survey following CDFW and/or CNPS guidelines during the appropriate blooming periods for these species would be needed to determine if present within the survey area, including avoidance, minimization, or mitigation measures necessary to reduce impacts to a less than significant level.

4.1.2 Special-Status Wildlife Species

No special-status wildlife species were observed during the survey. However, Michael Baker determined that the following special-status wildlife species have a moderate or high potential for occurring within the survey area: desert tortoise (*Gopherus agassizii*, Federally Threatened [FT]/ State Threatened [ST]), coast horned lizard (*Phrynosoma blainvillii*, Species of Special Concern [SSC]), burrowing owl (*Athene cunicularia*, SSC), loggerhead shrike (*Lanius ludovicianus*, SSC), Le Conte's thrasher (*Toxostoma lecontei*, SSC), pallid bat (*Antrozous pallidus*, SSC), Townsend's big-eared bat (*Corynorhinus townsendii*, SSC), and Mohave ground squirrel (*Xerospermophilus mohavensis*, ST).

Desert tortoise – This species is found primarily in desert scrub, desert wash, and Joshua tree habitats. Friable soils are required for burrow and nest construction. Friable soils in desert scrub is present within the survey area; further, there are multiple occurrences of this species within the survey area. Therefore, it was determined that desert tortoise has a moderate potential to occur within the survey area, and therefore there is a potential for impacts to this species if project activities are implemented within suitable habitat.

Coast horned lizard – This species is found in a wide variety of habitats, including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland, and coniferous forest, along with sandy washes with scattered low bushes. Sandy washes with scattered low bushes

are present within the survey area; further, the nearest occurrence is less than 1 mile to the southeast. Therefore, it was determined that coast horned lizard has a moderate potential to occur within the survey area, and therefore there is a potential for impacts to this species if project activities are implemented within suitable habitat.

Burrowing owl – This species is primarily found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation, but it persists and even thrives in some landscapes highly altered by human activity, such as earthen canals, berms, rock piles, and pipes. It is most often dependent upon burrowing mammals, most notably, the California ground squirrel (*Otospermophilus beecheyi*). Open scrublands are present within the survey area, along with California ground squirrel burrows. Therefore, it was determined that burrowing owl has a moderate potential to occur within the survey area, and therefore there is a potential for impacts to this species if project activities are implemented within suitable habitat.

Loggerhead shrike – This species is found in broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, along with desert oases, scrub, and washes. It prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting. Desert scrub is present within the survey area; further, the nearest occurrence is less than 3 miles to the south from 2005. Therefore, it was determined that loggerhead shrike has a moderate potential to occur within the survey area, and therefore there is a potential for impacts to this species if project activities are implemented within suitable habitat.

Le Conte's thrasher – This species is primarily found in open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. It commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat. Desert scrub is present within the survey area, as well as suitable nesting habitat (dense, spiny shrubs – *Cylindropuntia* spp.); further, there are several occurrences within a few miles of the survey area, with one from 2017. Therefore, it was determined that Le Conte's thrasher has a moderate potential to occur within the survey area, and therefore there is a potential for impacts to this species if project activities are implemented within suitable habitat.

Pallid bat – This species is primarily found in deserts, grasslands, shrublands, woodlands, and forests. It is most common in open, dry habitats with rocky areas for roosting. It is very sensitive to disturbance of hibernation roost sites, which must protect bats from high temperatures, including buildings, caves, or cracks in rocks. Desert shrubland is present within the survey area, as well as roosting habitat (abandoned buildings) present within the survey area. Therefore, it was determined that pallid has a moderate potential to occur within the survey area, and therefore there is a potential for impacts to this species if project activities are implemented within suitable habitat.

Townsend's big-eared bat – This species occurs throughout California in a wide variety of habitats; most common in mesic sites. It roosts in the open, hanging from walls and ceilings, and

is extremely sensitive to human disturbance. Suitable roosting habitat (abandoned buildings) are present within the survey area. Therefore, it was determined that Townsend's big-eared bat has a moderate potential to occur within the survey area, and therefore there is a potential for impacts to this species if project activities are implemented within suitable habitat.

Mohave ground squirrel – This species is found in open desert scrub, alkali scrub, and Joshua tree woodland, and also feeds in annual grasslands. Restricted to the Mojave Desert, this species prefers sandy to gravelly soils and avoids rocky areas. This species uses burrows at the base of shrubs for cover and nesting. Sandy soils in open desert scrub are present within the survey area; further, several occurrences, all presumed extant, are within a few miles in many directions of the survey area. Therefore, it was determined that Mojave ground squirrel has a moderate potential to occur within the survey area, and therefore there is a potential for impacts to this species if project activities are implemented within suitable habitat.

4.2 SPECIAL-STATUS VEGETATION COMMUNITIES

No special-status vegetation communities were observed within (or in proximity to) the survey area. According to the CNDDDB records search, no special-status habitats/vegetation communities have been documented within the vicinity of the survey area.

4.3 JURISDICTIONAL AQUATIC FEATURES

The aquatic/hydrological features within the survey area consist of one (1) detention basin and forty-three (43) tributaries. These tributaries consist of desert dry wash/ephemeral streambeds (all non-wetland), with some braided channels, that are characterized by deep alluvial sediment comprised mainly of sand and gravel deposits. The active channels mapped during this delineation exhibited clear evidence of significant hydrology such as sediment deposition, scour along the banks, and matted vegetation. Generally, these active channels exhibited a very flat (i.e. plane) bed topography. These unnamed ephemeral features appear to be tributary to the Mojave River, with Drainage 1 and Basin A being tributary to Fremont Wash, an eventual tributary to the Mojave River.

The western portion of the survey area contained low flow channels primarily used to drain waters from the SCLA maintenance roads. The eastern portion of the survey area contained channels characterized by braided systems and low flow channels. Some areas contained discontinuous channels, evidence of erosional features, as well as segmented swales.

Approximately 1.72 acres of Corps/Regional Board non-wetland waters and approximately 2.98 acres of CDFW streambed/riparian is located within the survey area. For details regarding the results of the jurisdictional delineation and total areas on-site subject to jurisdiction of each regulatory agency, refer to the *Jurisdictional Delineation Report* (Michael Baker 2018a).

4.4 NESTING BIRDS AND WILDLIFE MOVEMENT

The survey area provides suitable nesting habitat for a limited number of ground-nesting bird species. In addition, ornamental trees associated with the active and inactive developments may provide suitable nesting habitat for other avian species. Conversely, ground-moving wildlife (e.g., mammals and reptiles) can utilize the survey area to migrate and forage but are limited in breeding and dispersal as the site is almost entirely developments and infrastructure known to restrict movement and subject wildlife to mortality.

4.5 CRITICAL HABITAT

Currently, no USFWS-designated critical habitats (proposed or final) have been mapped within the survey area. The nearest critical habitat is located approximately 0.25 mile to the east for southwestern willow flycatcher (*Empidonax traillii extimus*), and approximately 7 miles to the north for desert tortoise (refer to Figure 6).

4.6 LOCAL POLICIES AND ORDINANCES

Joshua trees (*Yucca brevifolia*) occurring on undeveloped lands are protected by Title 13, Chapter 13.33 of the City's Municipal Code (Ordinance No. 1224). Thirty (30) Joshua trees were observed during the field survey. Further analysis based on specific projects proposed within the SCLA Specific Plan will be necessary to determine which trees qualify for protection under the City's ordinance at the time of those specific projects that propose the removal of such individuals.

There are no other biological resources-related local policies or ordinances within the City or the County of San Bernardino known to be applicable to the survey area.

Section 5 Recommendations

The following sections discuss the possible adverse impacts to biological resources that may occur from implementation of the proposed project and suggest appropriate mitigation measures that would reduce those impacts to less than significant levels.

5.1 SPECIAL-STATUS SPECIES

No special-status plant or wildlife species were observed within or surrounding the survey area by Michael Baker biologists during the field survey. Further, Michael Baker determined that the survey area does contain suitable habitat for three (3) special-status plants species and eight (8) special-status wildlife species documented within the vicinity of the survey area.

5.1.1 Special-Status Plant Species

Due to the abundance of suitable habitat throughout the survey area, a focused rare plant survey during the appropriate blooming periods would be necessary prior to design development and construction to determine presence or absence of the three (3) special-status plant species with a moderate or high potential to occur throughout the survey area; however, focused surveys could be limited to areas proposed for disturbance.

Proposed impacts to special-status species with a CRPR 1 or 2 would require CEQA disclosure; although they warrant no legal protection, a lead agency may require mitigation in the form of off-site preservation or translocation, for example. Impacts to CRPR 3 and 4 species are not considered significant under CEQA and warrant no legal protection but may simply require CEQA disclosure.

The following avoidance and minimization measures are recommended to reduce impacts to special-status plant species:

Suggested Mitigation Measures

BIO-1: Prior to construction, and during the appropriate blooming periods for special-status plant species with the potential to occur within the project site, a qualified botanist shall conduct a focused rare plant survey in areas with suitable habitat to determine presence or absence. The surveys shall be floristic in nature (i.e., identifying all plant species to the taxonomic level necessary to determine rarity), and shall be inclusive of, at a minimum, areas proposed for disturbance. Any proposed work in areas with no suitable habitat shall not require a focused rare plant survey.

The results of the survey shall be documented in a letter report that will be included in the environmental document. If individual or populations of special-status plant

species are found within the areas proposed for disturbance, measures to avoid and minimize impacts shall be recommended. The surveys and reporting shall follow 2009 CDFW and/or 2001 CNPS guidelines.

If State- and/or Federally-listed plant species are present, and avoidance is infeasible, Incidental Take Permit(s) from the CDFW and/or USFWS shall be obtained prior to the commencement of project activities.

5.1.2 Special-Status Wildlife Species

There is habitat with moderate or high potential to support eight (8) special-status wildlife species throughout the survey area. Focused surveys for reptiles, invertebrates, mammals, nesting birds, and roosting bats during the optimal/active periods for detection may be required by CDFW prior to any proposed impacts that may affect suitable habitat. If the target species are detected within proposed impact areas where project activities could result in “take¹”, mitigation measures including avoidance, minimization, and/or compensatory mitigation may be required, such as allowing wildlife to move out of harm’s way and establishing avoidance areas around active bird nests and roosting bats.

The following avoidance and minimization measures are recommended to reduce impacts to special-status wildlife species:

Suggested Mitigation Measures

BIO-2: Prior to construction, a qualified biologist shall conduct a burrowing owl protocol survey in areas with suitable habitat to ensure that burrowing owls remain absent from the project site and impacts to any occupied burrows do not occur. A complete burrowing owl survey in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012), consists of four site visits. Surveys should be conducted during the burrowing owl nesting season, which can begin as early as February 1 and continues through August 31. Further, two pre-construction clearance surveys shall be conducted 14-30 days and 24 hours prior to any vegetation removal or ground disturbing activities. If no burrowing owls or occupied burrows are detected, construction may begin. If an occupied burrow is found within the development footprint during pre-construction clearance surveys, a burrowing owl exclusion plan will need to be prepared and submitted to CDFW for approval prior to initiating project activities. Any proposed work in areas with no suitable habitat shall not require a burrowing owl protocol survey.

BIO-3: Prior to construction, a qualified biologist shall conduct a protocol survey to determine the presence/absence of the Federally- and State-listed as threatened

¹ The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

desert tortoise in areas with suitable habitat. In accordance with survey guidelines established by the USFWS, the qualified biologist shall survey each proposed project within the Specific Plan that would include all areas of suitable habitat located on and within 500 feet of the project site during the tortoise's most active periods (September through October) when air temperatures are below 95 °F. Survey transects will be oriented north to south and spaced at approximately 10-meter (33 feet) intervals throughout all areas containing suitable habitat to provide 100 percent visual coverage and increase the likelihood of detecting desert tortoise and/or sign. Following completion of the presence/absence survey, the biologist will prepare a letter report with supporting Geographic Information Systems (GIS) figures to document the methods and results of the presence/absence survey, as well as identify any additional surveys, mitigation measures, and/or permitting requirements that may be required prior to implementation of a proposed project. Any proposed work in areas with no suitable habitat shall not require a desert tortoise protocol survey.

BIO-4: Prior to construction, a qualified biologist shall conduct a protocol survey to determine the presence/absence within potential habitat for the Mohave ground squirrel in areas with suitable habitat. Studies that include trapping for the Mohave ground squirrel shall be authorized by a Memorandum of Understanding (MOU) or Letter Permit issued by the Wildlife Branch of the CDFW, or by another permit as determined by the CDFW, and shall be undertaken by a qualified biologist. Visual surveys to determine Mohave ground squirrel activity and habitat quality shall be undertaken during the period of 15 March through 15 April. Any proposed work in areas with no suitable habitat shall not require a Mohave ground squirrel protocol survey.

BIO-5: Prior to implementation of the proposed Project, a qualified bat biologist shall survey all suitable structures and vegetation for bat roosts within 30 days prior to the start of construction activities. If bats roosts are found within the project impact area, the qualified bat biologist shall identify the bats to the species level and evaluate the colony to determine its size and significance. If any structures house an active maternity colony of bats, construction activities shall not occur during the recognized bat breeding season (March 1 to October 1). Any proposed work in areas with no suitable habitat shall not require a bat survey.

If a bat roost is present within the vicinity of a proposed project impact area that does not need to be removed, a qualified bat biologist shall establish a no-disturbance buffer (typically 100 feet) that must be maintained throughout the duration of the project. If a maternity roost is identified, a no-disturbance buffer

shall be established and maintained until a qualified bat biologist determines that the roost is no longer active.

If project activities must occur during non-daylight hours or during the bat breeding season (March 1 to October 1), a qualified bat biologist shall establish monitoring measures, including frequency and duration, based on species, individual behavior, and type of construction activities. Night lighting should be used only within the portion of the project actively being worked on and focused directly on the work area. This measure would minimize visual disturbance and allow bats to continue to utilize the remainder of the area for foraging and night roosting. If bats are showing signs of distress, work activities shall be modified to prevent bats from abandoning their roost or altering their feeding behavior. At any time, the qualified biologist shall have the authority to halt work if there are any signs of distress or disturbance that may lead to roost abandonment. Work shall not resume until corrective measures have been taken or it is determined that continued activity would not adversely affect roost success.

5.2 SPECIAL-STATUS VEGETATION COMMUNITIES

No special-status vegetation communities were observed within the survey area. Therefore, no impacts to special-status vegetation communities are expected to occur as a result of the proposed project.

5.3 JURISDICTIONAL AQUATIC FEATURES

According to the Jurisdictional Delineation Report (Michael Baker, 2018), approximately 1.72 acres of Corps/Regional Board non-wetland waters and approximately 2.98 acres of CDFW streambed/riparian is located within the survey area.

No impacts to potentially jurisdictional aquatic features are currently proposed. Therefore, no actions are currently recommended. If impacts are proposed within areas determined jurisdictional by the regulatory agencies, the following avoidance and minimization measures are recommended:

Suggested Mitigation Measures

- BIO-6:** Prior to the commencement of construction, mitigation to offset impacts must be agreed upon, and the appropriate permits/authorization must be procured, which includes the following:
- Corps CWA Section 404 Nationwide Permit for impacts associated with dredge and fill material to non-wetland Waters of the United States (WoUS) not

exceeding 0.5 acre, whereas impacts exceeding 0.5 acre will require a Standard Individual Permit, which includes an Alternatives Analysis;

- Regional Board CWA Section 401 Water Quality Certification for impacts associated with dredge and fill material to WoUS; and
- CDFW CFGC Section 1602 Lake or Streambed Alteration Agreement (or other approval such as an Operation by Law letter or Letter of Non-Substantial Impact) for impacts/alteration to streambed/banks and associated riparian vegetation.

BIO-7: Following the completion of project activities, areas disturbed during construction shall be restored to natural conditions or better. Restoration of jurisdictional area affected by proposed activities shall include re-contouring slopes to pre-project grade and the installation of the appropriate seed mix, cuttings, and/or container stock according to specifications, including maintenance, monitoring, and success criteria, detailed in an agency-approved Habitat Mitigation and Monitoring Plan (HMMP) as required by CDFW.

5.4 NESTING BIRDS AND WILDIFE MOVEMENT

The following avoidance and minimization measures are recommended to reduce impacts to nesting birds to a less than significant level:

Suggested Mitigation Measures

BIO-8: Proposed project activities should avoid the bird breeding season (typically January through July for raptors and February through August for other avian species), if feasible. If breeding season avoidance is not feasible, a qualified biologist shall conduct a pre-construction nesting bird survey for avian species to determine the presence/absence, location, and status of any active nests on or adjacent to the area proposed project site. The extent of the survey buffer area surrounding the nest should be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the MBTA and the CFGC, nesting bird surveys shall be performed twice per week during the three weeks prior to the scheduled project activities.

In the event that active nests are discovered, a suitable buffer (distance to be determined by the biologist or overriding agencies) shall be established around such active nests, and no construction within the buffer allowed, until the biologist has determined that the nest(s) is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest).

Nesting bird surveys are typically not required for construction activities occurring September through December; however, hummingbirds (Family Trochilidae), for example, are known to nest year-round; therefore, a pre-construction nesting bird survey for activities outside of the breeding season shall be conducted within 24 hours of construction to ensure full compliance with the regulations.

5.5 CRITICAL HABITAT

Currently, no USFWS-designated critical habitat has been mapped within the survey area. Therefore, no impacts are expected to occur as a result of the proposed project.

5.6 LOCAL POLICIES AND ORDINANCES

There are thirty (30) Joshua trees within the survey area. It had been determined by the city council that proper and necessary steps be taken in order to protect and preserve, to the greatest extent possible, Joshua trees in all areas of the City so as to preserve the unique natural desert environment throughout the City and for the health, safety and welfare of the community. It is unlawful for any person to cut, damage, destroy, dig up, or harvest any Joshua tree without the prior written consent of the director of parks and recreation or his designee.

Suggested Mitigation Measures

BIO-9: Based on Title 13, Chapter 13.33 of the City's Municipal Code (Ordinance No. 1224), it is determined by the city council that proper and necessary steps be taken in order to protect and preserve, to the greatest extent possible, Joshua trees in all areas of the city so as to preserve the unique natural desert environment throughout the City and for the health, safety, and welfare of the community. The provisions of this chapter apply to all property within the corporate limits of the city, but do not apply to any existing lot in a subdivision already cleared and graded with improvements installed as required by the conditions of the original subdivision, or any occupied residential properties. It is unlawful for any person to cut, damage, destroy, dig up, or harvest any Joshua tree without the prior written consent of the director of parks and recreation or his designee. A violation of this section is a misdemeanor punishable by up to six months in jail and/or a five-hundred-dollar fine.

Section 6 References

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Photograph 1 – View of disturbed area with some Joshua trees within the northwest portion of the project site, facing north.



Photograph 2 – View of disturbed area in southwest portion of project site along Air Base Road, facing east.



Photograph 3 – View of bare ground and developed land in the middle of the project site, facing northwest.



Photograph 4 – View of Mojave creosote bush scrub near the southern end of the project site adjacent to Air Base Road, facing south.



Photograph 5 – View of developed golf course within the southeast portion of the project site, facing southeast.



Photograph 6 – View of the ephemeral drainage within the Mojave creosote bush scrub at southeast end of the project site, facing southwest.



Photograph 7 – View of the large area of Mojave creosote bush scrub within the northeast portion of the project site, facing northeast.



Photograph 8 – View of a small mammal burrow at the base of a creosote bush, located adjacent to the golf course near the southeast end of the project site, facing south.

Scientific Name*	Common Name	Cal-IPC Rating**
Plants		
<i>Ailanthus altissima</i> *	tree of heaven	Moderate
<i>Ambrosia acanthicarpa</i>	annual bursage	
<i>Ambrosia dumosa</i>	burro weed	
<i>Ambrosia salsola</i>	cheese bush	
<i>Aristida purpurea</i>	purple threeawn	
<i>Atriplex canescens</i>	hoary saltbush	
<i>Bromus rubens</i> *	foxtail chess	High
<i>Bromus tectorum</i> *	cheat grass	High
<i>Chilopsis linearis</i>	desert willow	
<i>Cucurbita foetidissima</i>	calabazilla	
<i>Cucurbita palmata</i>	coyote gourd	
<i>Cylindropuntia echinocarpa</i>	silver cholla	
<i>Cylindropuntia ramosissima</i>	branched pencil cholla	
<i>Cynodon dactylon</i> *	Bermuda grass	Moderate
<i>Datura wrightii</i>	jimson weed	
<i>Ephedra nevadensis</i>	Nevada mormon tea	
<i>Ericameria nauseosa</i>	rubber rabbitbrush	
<i>Eriogonum deflexum</i>	flatcrown buckwheat	
<i>Eriogonum fasciculatum</i>	California buckwheat	
<i>Eriogonum inflatum</i>	desert trumpet	
<i>Erodium cicutarium</i> *	redstem filaree	Limited
<i>Euphorbia micromera</i>	Sonoran sandmat	
<i>Heterotheca grandiflora</i>	telegraph weed	
<i>Hirschfeldia incana</i> *	short pod mustard	Moderate
<i>Hordeum murinum</i> *	foxtail barley	Moderate
<i>Lactuca serriola</i> *	prickly lettuce	
<i>Larrea tridentata</i>	creosote bush	
<i>Malva parviflora</i> *	cheeseweed	
<i>Muhlenbergia rigens</i>	deergass	
<i>Nerium oleander</i> *	oleander	
<i>Opuntia basilaris</i>	beavertail cactus	
<i>Parkinsonia aculeata</i> *	Mexican palo verde	
<i>Robinia pseudoacacia</i> *	black locust	Limited
<i>Salsola tragus</i> *	Russian thistle	Limited
<i>Schismus barbatus</i> *	common Mediterranean grass	Limited
<i>Sisymbrium altissimum</i> *	tumble mustard	
<i>Sisymbrium irio</i> *	London rocket	Limited
<i>Stephanomeria exigua</i>	small wirelettuce	
<i>Tamarix ramosissima</i> *	saltcedar	High

Scientific Name*	Common Name	Cal-IPC Rating**
<i>Washingtonia robusta</i> *	Mexican fan palm	Moderate
<i>Yucca brevifolia</i>	Joshua tree	
Reptiles		
<i>Aspidoscelis tigris</i> ssp. <i>tigris</i>	Great Basin whiptail	
Birds		
<i>Callipepla californica</i>	California quail	
<i>Charadrius vociferus</i>	killdeer	
<i>Columba livia</i>	rock pigeon	
<i>Corvus brachyrhynchos</i>	American crow	
<i>Corvus corax</i>	common raven	
<i>Eremophila alpestris</i>	horned lark	
<i>Haemorhous mexicanus</i>	house finch	
<i>Sayornis saya</i>	Say's phoebe	
<i>Selasphorus sasin</i>	Allen's hummingbird	
<i>Tyto alba</i>	barn owl	
Mammals		
<i>Ammospermophilus leucurus</i>	white-tailed antelope squirrel	
<i>Canis latrans</i>	coyote	
<i>Lepus californicus</i>	black-tailed jackrabbit	
<i>Otospermophilus beecheyi</i>	California ground squirrel	
<i>Sylvilagus audubonii</i>	desert cottontail	

* Non-native plant species

** **California Invasive Plant Council (Cal-IPC) Ratings**

- High These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.
- Moderate These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.
- Limited These species are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

Appendix C: Special-Status Species Table

<i>Scientific Name</i> Common Name	Status* Federal / State CRPR or G-Rank / S-Rank	Habitat Preferences and Distribution Affinities	Potential for Occurrence
PLANTS			
<i>Boechera dispar</i> pinyon rockcress	-- / -- 2B.3	Perennial herb. Blooms March through June. Found on granitic, gravelly slopes and mesas (often under desert shrubs which support it as it grows) in Joshua tree woodland, pinyon-juniper woodland, and Mojavean desert scrub. Known elevations range 3,180 to 9,250 feet above mean sea level (amsl).	Not Expected. Although suitable habitat (granitic, gravelly slopes and mesas within desert scrub) is present within the survey area, the survey area is outside of the known elevation range for this species.
<i>Canbya candida</i> white pygmy-poppy	-- / -- 4.2	Annual herb. Blooms March through June. Occurs in sandy places in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland. Known elevations range from 2,280 to 5,280 feet amsl.	Low. Suitable habitat (sandy places in desert scrub) is marginally present within the survey area. Further, the nearest occurrence is less than 1 mile to the west, but is from 1938.
<i>Castilleja plagiotoma</i> Mojave paintbrush	-- / -- 4.3	Perennial herb. Blooms April through June. Occurs in alluvial fans in Great Basin scrub, pinyon and juniper woodland, Joshua tree woodland, and lower montane coniferous forest. Known elevations range from 1,475 to 5,970 feet amsl.	Not Expected. Suitable habitat (Great Basin scrub and woodlands/forests) is not present within the survey area.
<i>Chorizanthe spinosa</i> Mojave spineflower	-- / -- 4.2	Annual herb. Blooms March through July. Occurs in chenopod scrub, Mojavean desert scrub, Joshua tree woodland, and playas. Known elevations range from 2,735, to 2,915 feet amsl.	Not Expected. Suitable habitat (desert scrub) is present within the survey area. However, the nearest occurrence, albeit less than 1 mile to the west, is from 1927.
<i>Cymopterus deserticola</i> desert cymopterus	-- / -- 1B.2	Perennial herb. Blooms March through May. Found on fine to coarse, loose, sandy soils of flats in old dune areas with well-drained sand in Joshua tree woodland and Mojavean desert scrub. Known elevations range from 2,065 to 4,920 feet amsl.	Low. Suitable habitat (loose, sandy soils in desert scrub) is marginally present within the survey area. However, the nearest occurrence is over 7 miles to the southeast and from 1941.

Scientific Name Common Name	Status* Federal / State CRPR or G-Rank / S-Rank	Habitat Preferences and Distribution Affinities	Potential for Occurrence
<i>Diplacus mohavensis</i> Mojave monkeyflower	-- / -- 1B.2	Annual herb. Blooms April through June. Found on dry, sandy or rocky washes along the Mojave River, in Joshua tree woodland and Mojavean desert scrub. Known elevations range from 1,965 to 5,740 feet amsl.	Moderate. Suitable habitat (dry, sandy washes in desert scrub) is marginally present within the survey area. The nearest occurrence is less than 2 miles to the east from 1998.
<i>Dudleya abramsii</i> ssp. <i>affinis</i> San Bernardino Mountains dudleya	-- / -- 1B.2	Perennial herb. Blooms April through June. Found on granite or quartzite outcrops, rarely limestone, in pebble (pavement) plain, upper montane coniferous forest, and pinyon and juniper woodland. Known elevations range from 4,100 to 8,530 feet amsl.	Not Expected. The survey area, is outside of the known elevation range for this species.
<i>Eremothera boothii</i> ssp. <i>boothii</i> Booth's evening-primrose	-- / -- 2B.3	Annual herb. Blooms June through August. Found in Joshua tree woodland and pinyon and juniper woodland. Known elevations range from 950 to 7,905 feet amsl.	Not Expected. Although the nearest occurrence is less than 1 mile to the west, it is from 1981 and suitable habitat (Joshua tree woodland and pinyon and juniper woodland) is not present within the survey area.
<i>Johnstonella costata</i> ribbed cryptantha	-- / -- 4.3	Annual herb. Bloom February through May. Occurs on sandy and gravelly areas in Sonoran desert scrub, Mojave desert scrub, and desert dunes. Known elevations range from -150 to 1,500 feet amsl.	Not Expected. The survey area is outside of the known elevation range for this species.
<i>Loeflingia squarrosa</i> var. <i>artemisiarum</i> sagebrush loeflingia	-- / -- 2B.2	Annual herb. Blooms April through May. Occurs on sandy flats and dunes and sandy areas around clay slicks with greasewood (<i>Sarcobatus baileyi</i>), saltbush (<i>Atriplex</i> ssp.), and horsebrush (<i>Tetradymia</i> ssp.) in Great Basin scrub, Sonoran desert scrub, and desert dunes. Known elevations range from 2,260 to 4,005 feet amsl.	Not Expected. Suitable habitat (Great Basin scrub, Sonoran desert scrub, and desert dunes) is not present within the survey area.

Scientific Name Common Name	Status* Federal / State CRPR or G-Rank / S-Rank	Habitat Preferences and Distribution Affinities	Potential for Occurrence
<i>Lycium torreyi</i> Torrey's box-thorn	-- / -- 4.2	Shrub. Blooms March through May. Occurs on sandy, rocky washes, streambanks, and desert valleys in Mojavean desert scrub and Sonoran desert scrub. Known elevations range from -150 to 3,600 feet amsl.	Low. Suitable habitat (sandy washes in desert scrub) is present within the survey area. However, the nearest occurrence is over 5 miles to the south from 1955 and this perennial shrub species was not observed during the survey.
<i>Muilla coronata</i> crowned muilla	-- / -- 4.2	Perennial herb. Blooms March through April. Occurs on barren flats and ridges in sandy, granitic soils in Joshua tree woodland, pinyon and juniper woodland, Mojavean desert scrub, and chenopod scrub. Known elevations range from 2,200 to 6,430 feet amsl.	High. Suitable habitat (sandy soils in desert scrub) is present within the survey area. Further, the nearest occurrence is approximately 2 miles to the south from 2001.
<i>Opuntia basilaris</i> var. <i>brachyclada</i> short-joint beavertail	-- / -- 1B.2	Shrub (stem succulent). Blooms April through June. Occurs on sandy soils or coarse, granitic loams, in chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon-juniper woodland. Known elevations range from 1,390 to 6,235 feet amsl.	Not Expected. Suitable habitat (sandy soils in desert scrub) is present within the survey area. However, the survey area is well outside (over 15 miles) outside of the known range for this species.
<i>Pediomelum</i> <i>castoreum</i> Beaver Dam breadroot	-- / -- 1B.2	Perennial herb. Blooms April through May. Found on sandy soils of desert washes and road cuts in Joshua tree woodland and Mojavean desert scrub. Known elevations range from 1,965 to 3,495 feet amsl.	High. Suitable habitat (sandy soils of desert washes and road cuts) is present within the survey area. Further, the nearest occurrence is approximately 0.25-miles to the east from 2008.
<i>Quercus turbinella</i> shrub live oak	-- / -- 4.3	Shrub. Blooms April through June. Occurs in chaparral, cismontane woodland, lower montane coniferous forest, and pinyon and juniper woodland. Known elevations range from 2,460 to 5,740 feet amsl.	Not Expected. Suitable habitat (chaparral, woodlands, and forests) is not present within the survey area.

Scientific Name Common Name	Status* Federal / State CRPR or G-Rank / S-Rank	Habitat Preferences and Distribution Affinities	Potential for Occurrence
<i>Sclerocactus polyancistrus</i> Mojave fish-hook cactus	-- / -- 4.2	Shrub (stem succulent). Blooms April through July. Occurs on well-drained soils, on rocky gravelly mesas, slopes and outcrops, and sometimes on limestone in Joshua tree woodland, Mojavean desert scrub, and Great Basin scrub. Known elevations range from 2,725 to 6,595 feet amsl.	Low. Suitable habitat (well-drained soils in desert scrub) is present within the survey area and the nearest recent (2007) occurrence is less than 1.5 miles to the east. However, this perennial stem succulent was not observed during the survey.
<i>Scutellaria bolanderi</i> ssp. <i>austromontana</i> southern mountains skullcap	-- / -- 1B.2	Perennial herb (rhizomatous). Blooms June through August. Occurs in gravelly soils on streambanks or in mesic sites in oak or pine woodland, chaparral, cismontane woodland, and lower montane coniferous forest. Known elevations range from 1,390 to 7,840 feet amsl.	Not Expected. Suitable habitat (gravelly soils on streambanks or in mesic sites) is not present within the survey area.
<i>Symphotrichum defoliatum</i> San Bernardino aster	-- / -- 1B.2	Perennial herb (rhizomatous). Blooms July through November. Found in vernal mesic grasslands or near ditches, streams, and springs, and disturbed areas in meadows and seeps, cismontane woodlands, coastal scrub, lower montane coniferous forests, marshes and swamps, and valley and foothill grasslands. Known elevations range from 5 to 6,695 feet amsl.	Low. Suitable habitat (ditches and disturbed areas) is marginally present within the survey area. However, the nearest occurrence is over 8 miles to the southeast from 1924.
INVERTEBRATES			
<i>Bombus crotchii</i> Crotch bumble bee	-- / -- G3G4 / S1S2	Found from coastal California east to the Sierra-Cascade crest and south into Mexico. Nectar plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Low. Suitable habitat (nectar plants of the genus <i>Eriogonum</i>) is marginally present within the survey area. However, the nearest occurrence is over 8 miles to the east and from 1944.

Scientific Name Common Name	Status* Federal / State CRPR or G-Rank / S-Rank	Habitat Preferences and Distribution Affinities	Potential for Occurrence
<i>Helminthoglypta mohaveana</i> Victorville shoulderband	-- / -- G1 / S1	Known only from along the Mojave River in San Bernardino County. Found among granite boulders and at the base of rocky cliffs near Great Basin flowing waters.	Not Expected. Suitable habitat (granite boulders and rocky cliffs) is not present within the survey area.
<i>Plebulina emigdionis</i> San Emigdio blue butterfly	-- / -- G1G2 / S1S2	Found in desert canyons and along riverbeds in Inyo, Kern, Los Angeles and San Bernardino Counties. Host plant is <i>Atriplex canescens</i> ; maybe <i>Acmispon americanus</i> also.	Not Expected. Suitable habitat (desert canyons, riverbeds) is not present within the survey area.
FISH			
<i>Siphateles bicolor mohavensis</i> Mohave tui chub	FE / SE, FP G4T1 / S1	Endemic to the Mojave River basin; adapted to alkaline, mineralized waters. Needs deep pools, ponds, or slough-like areas. Needs vegetation for spawning.	Not Expected. Suitable habitat (alkaline, mineralized waters of the Mojave River basin) is not present within the survey area.
AMPHIBIANS			
<i>Anaxyrus californicus</i> arroyo toad	FE / SSC G2G3 / S2S3	Inhabits washes, arroyos, sandy riverbanks, and riparian areas with willows, sycamores, oaks, and cottonwoods. Has extremely specialized habitat needs, which include exposed sandy streambanks with stable terraces for burrowing with scattered vegetation for shelter, and areas of quiet water or pools free of predatory fishes with sandy or gravel bottoms without silt for breeding.	Not Expected. Suitable habitat (washes, arroyos, sandy riverbanks, and riparian areas) is not present within the survey area.
<i>Rana draytonii</i> California red-legged frog	FT / SSC G2G3 / S2S3	Found in lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development; must have access to estivation habitat.	Not Expected. Suitable habitat (permanent sources of deep water and riparian vegetation) is not present within the survey area.

Scientific Name Common Name	Status* Federal / State CRPR or G-Rank / S-Rank	Habitat Preferences and Distribution Affinities	Potential for Occurrence
REPTILES			
<p><i>Emys marmorata</i> western pond turtle</p>	<p>-- / SSC G3G4 / S3</p>	<p>A thoroughly aquatic turtle of ponds, lakes, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6,000 feet amsl. Needs basking sites (logs, rocks, cattail mats, and exposed banks) and suitable upland habitat (sandy banks or grassy open fields) up to 0.5 kilometer from water for egg-laying.</p>	<p>Not Expected. Suitable habitat (ponds, lakes, marshes, rivers, streams, and irrigation ditches) is not present within the survey area.</p>
<p><i>Gopherus agassizii</i> desert tortoise</p>	<p>FT / ST G3 / S2S3</p>	<p>Most commonly occurs in desert scrub, desert wash, and Joshua tree habitats (i.e., almost every desert habitat). Requires friable soils for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms is preferred.</p>	<p>Moderate. Suitable habitat (friable soils in desert scrub) is present within the survey area. and there are multiple occurrences near the survey area. However, no suitable burrows were observed during the survey and much of the site is developed and/or with barriers.</p>
<p><i>Phrynosoma blainvillii</i> coast horned lizard</p>	<p>-- / SSC G3G4 / S3S4</p>	<p>Frequents a wide variety of habitats, including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland, and coniferous forest, along with sandy washes with scattered low bushes. Prefers open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants and other insects.</p>	<p>Moderate. Although this species was not observed during the survey, suitable habitat (sandy washes with scattered low bushes) is present within the survey area. Further, the nearest occurrence is less than 1 mile to the southeast and active ant nest mounds were observed on the western portion of the survey area.</p>

Scientific Name	Status* Federal / State CRPR or G-Rank / S-Rank	Habitat Preferences and Distribution Affinities	Potential for Occurrence
Common Name			
BIRDS			
<i>Accipiter cooperii</i> (Nesting) Cooper's hawk	-- / WL G5 / S4	Generally found in forested areas up to 3,000 feet in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.	Low. Suitable nesting habitat (suburban areas where there are tall trees) is marginally present within the survey area. However, the nearest occurrence is approximately 4 miles to the southeast, but from 1921.
<i>Agelaius tricolor</i> (Nesting colony) tricolored blackbird	-- / SCT G2G3 / S1S2	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	Not Expected. Suitable habitat (open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony) is not present within the survey area.
<i>Aquila chrysaetos</i> (Nesting & wintering) golden eagle	-- / FP G5 / S3	Inhabits rolling foothills, mountain areas, sage-juniper flats, and deserts. Preferred habits include broadleaved upland forest, cismontane woodland, coastal prairie, and Great Basin grassland. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Not Expected. Suitable foraging habitat (deserts) is marginally present within the survey area. However, suitable nesting habitat (cliff-walled canyons) is not present within the survey area and the nearest occurrence is approximately 4 miles to the southeast from 1927.
<i>Asio otus</i> (Nesting) long-eared owl	-- / SSC G5 / S3?	Occurs in riparian bottomlands grown to tall willows and cottonwoods; also, belts of coast live oak (<i>Quercus agrifolia</i>) paralleling stream courses. Requires adjacent open grasslands productive of mice for night hunting and the presence of old nests of crows, hawks, or magpies for breeding.	Not Expected. Suitable habitat (riparian bottomlands and belts of riparian coast live oak) is not present within the survey area.

Scientific Name Common Name	Status* Federal / State CRPR or G-Rank / S-Rank	Habitat Preferences and Distribution Affinities	Potential for Occurrence
<p><i>Athene cunicularia</i> (Burrow sites and some wintering sites) burrowing owl</p>	<p>-- / SSC G4 / S3</p>	<p>Primarily found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation, but it persists and even thrives in some landscapes highly altered by human activity, such as earthen canals, berms, rock piles, and pipes. Subterranean nester, most often dependent upon burrowing mammals, most notably, the California ground squirrel (<i>Otospermophilus beecheyi</i>).</p>	<p>Moderate. Suitable habitat (open grasslands and scrublands, California ground squirrel burrows) is present within the survey area. However, the nearest occurrence is approximately 4 miles to the southeast from 1921.</p>
<p><i>Buteo swainsoni</i> (Nesting) Swainson's hawk</p>	<p>-- / ST G5 / S3</p>	<p>Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.</p>	<p>Not Expected. Suitable foraging habitat (disturbed areas with scattered trees) is marginally present within the survey area. However, suitable nesting habitat (isolated trees and utility poles away from development) is not. Further, the nearest occurrence is approximately 0.5 mile to the west from 1939, but possibly extirpated, and the nearest occurrence presumed extant over 8 miles to the east.</p>
<p><i>Coccyzus americanus occidentalis</i> (Nesting) western yellow-billed cuckoo</p>	<p>FT / SE G5T2T3 / S1</p>	<p>Obligate cottonwood-willow riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian stands of willow (<i>Salix</i> spp.), often mixed with cottonwoods (<i>Populus</i> spp.), with the lower story dominated by blackberry (<i>Rubus</i> spp.), nettles (<i>Urtica</i> spp.), and/or wild grape (<i>Vitis</i> spp.).</p>	<p>Not Expected. Suitable habitat (cottonwood-willow riparian forest) is not present within the survey area.</p>

Scientific Name Common Name	Status* Federal / State CRPR or G-Rank / S-Rank	Habitat Preferences and Distribution Affinities	Potential for Occurrence
<i>Empidonax traillii extimus</i> (Nesting) southwestern willow flycatcher	FE / SE G5T2 / S1	Occurs in broad riparian woodlands in southern California. Typically requires large areas of willow thickets in broad valleys and canyon bottoms, or around ponds and lakes. These areas typically have standing or running water, or are at least moist.	Not Expected. Suitable habitat (broad riparian woodlands) is not present within the survey area.
<i>Falco mexicanus</i> (Nesting) prairie falcon	-- / WL G5 / S4	Inhabits dry, open terrain, either level or hilly, in Great Basin grasslands, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, and valley and foothill grasslands. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	Not Expected. Suitable foraging habitat (desert scrub) is present within the survey area and occurrences (locations suppressed) are from 1980, but presumed extant. However, suitable nesting habitat (cliffs) is not.
<i>Icteria virens</i> (Nesting) yellow-breasted chat	-- / SSC G5 / S3	Summer resident that inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, and wild grape. Breeding habitat must be dense to provide shade and concealment. Forages and nests within 10 feet of ground.	Not Expected. Suitable habitat (riparian thickets near watercourses) is not present within the survey area.
<i>Lanius ludovicianus</i> loggerhead shrike	-- / SSC G4 / S4	Found in broken woodlands, savannah, pinyon-juniper, Joshua tree, riparian woodlands, desert oases, scrub, and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Moderate. Suitable habitat (desert scrub) is present within the survey area. The nearest occurrence is less than 3 miles to the south from 2005.

Scientific Name Common Name	Status* Federal / State CRPR or G-Rank / S-Rank	Habitat Preferences and Distribution Affinities	Potential for Occurrence
<i>Piranga rubra</i> (Nesting) summer tanager	-- / SSC G5 / S1	Summer resident of desert riparian corridors along lower Colorado River, and locally elsewhere in California deserts. Requires cottonwood-willow riparian forests for nesting and foraging; prefers older, dense stands along streams.	Not Expected. Suitable habitat (cottonwood-willow riparian forest) is not present within the survey area.
<i>Setophaga petechia</i> (Nesting) yellow warbler	-- / SSC G5 / S3S4	Nests in riparian scrub, woodland, and forest in close proximity to water. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants, including cottonwoods, California sycamores (<i>Platanus racemosa</i>), ash (<i>Fraxinus</i> spp.), and alders (<i>Alnus</i> spp.). May use oaks (<i>Quercus</i> spp.), conifers, and urban areas near streams courses. Also nests in mature chaparral and in montane shrubbery in open conifer forests in Cascades and Sierra Nevada.	Not Expected. Suitable habitat (riparian scrub, woodlands, and forests) is not present within the survey area.
<i>Toxostoma lecontei</i> Le Conte's thrasher	-- / SSC G4 / S3	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2 to 8 feet above ground.	Moderate. Suitable habitat (desert scrub) is present within the survey area. Suitable nesting habitat (dense, spiny shrubs – <i>Cylindropuntia</i> spp.), is marginally present. Further, there are several occurrences within a few miles of the survey area, with one from 2017.

Scientific Name Common Name	Status* Federal / State CRPR or G-Rank / S-Rank	Habitat Preferences and Distribution Affinities	Potential for Occurrence
<i>Vireo bellii pusillus</i> (Nesting) least Bell's vireo	FE / SE G5T2 / S2	Summer resident of Southern California. Occurs below 2,000 feet amsl in riparian scrub, woodland, and forest habitats, preferably with a developed, wetland understory, often in the vicinity of water. Nests are stitched onto horizontal twig branches, typically of willow, mule fat (<i>Baccharis salicifolia</i>), and tamarisk (<i>Tamarix</i> spp.) a few feet above ground.	Not Expected. Suitable habitat (riparian scrub, woodlands, and forests) is not present within the survey area.
<i>Vireo vicinior</i> (Nesting) gray vireo	-- / SSC G4 / S2	Inhabits dry chaparral; west of the desert, in chamise-dominated habitat; mountains of Mojave Desert, associated with California juniper (<i>Juniperus californica</i>) and big sagebrush (<i>Artemisia tridentata</i>). Forages, nests, and sings in areas formed by a continuous growth of twigs, 1 to 5 feet above ground.	Not Expected. Suitable habitat (chaparral in the mountains of Mojave Desert) is not present within the survey area.
MAMMALS			
<i>Antrozous pallidus</i> pallid bat	-- / SSC G5 / S3	Inhabits deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Very sensitive to disturbance of hibernation roost sites, which must protect bats from high temperatures, including buildings, caves, or cracks in rocks.	Moderate. Suitable foraging habitat (desert shrublands) is present within the survey area. There is also roosting habitat (abandoned buildings) present within the survey area. However, the nearest occurrence is over 8 miles to the southeast.
<i>Chaetodipus fallax pallidus</i> pallid San Diego pocket mouse	-- / SSC G5T34 / S3S4	Inhabits desert border areas in eastern San Diego County in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc. Prefers sandy herbaceous areas, usually in association with rocks or coarse gravel.	Low. Suitable habitat (sandy herbaceous areas in desert scrub) is marginally present within the survey area. Further, the nearest occurrence is approximately 1 mile to the east from 1920.

Scientific Name Common Name	Status* Federal / State CRPR or G-Rank / S-Rank	Habitat Preferences and Distribution Affinities	Potential for Occurrence
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	-- / SSC G3G4 / S2	Occurs throughout California in a wide variety of habitats; most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites are limiting, thereby extremely sensitive to human disturbance.	Moderate. Suitable foraging habitat (mesic sites) is not present within the survey area. However, there is suitable roosting habitat (abandoned buildings) within the survey area. The nearest occurrence is approximately 1 mile to the east from 1930.
<i>Lasionycteris noctivagans</i> silver-haired bat	-- / -- G5 / S3S4	Primarily a coastal and montane forest dweller feeding over streams, ponds, and open brushy areas in lower montane coniferous, old growth, and riparian forests. Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. Needs drinking water.	Not Expected. Suitable foraging habitat (streams, ponds, forests) is not present within the survey area and the nearest occurrence is over 10 miles to the north from 1995. However, there is suitable roosting habitat (snags in the abandoned lots) marginally present within the survey area. .
<i>Lasiurus cinereus</i> hoary bat	-- / -- G5 / S4	Prefers open habitats or habitat mosaics of forests and woodlands, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Not Expected. Suitable foraging habitat (open habitats, with trees for cover) and suitable roosting habitat (dense foliage) is marginally present within the survey area. Further, the nearest occurrence is approximately 4 miles to the southeast from 1984.
<i>Microtus californicus mohavensis</i> Mohave river vole	-- / SSC G5T1 / S1	Occurs only in weedy herbaceous growth in wet areas and riparian scrub along the Mojave River. May be found in some irrigated pastures. Burrows into soft soil. Feeds on leafy parts of grasses, sedges and herbs. Clips grasses to form runways from burrow.	Not Expected. Suitable habitat (wet areas and riparian scrub along the Mojave River, and irrigated pastures) is not present within the survey area.
<i>Xerospermophilus mohavensis</i> Mohave ground squirrel	-- / ST G2G3 / S2S3	Inhabits open desert scrub, alkali scrub, and Joshua tree woodland. Also feeds in annual grasslands. Restricted to Mojave Desert. Prefers sandy to gravelly soils; avoids rocky areas. Uses burrows at base of shrubs for cover. Nests are in burrows.	Moderate. Suitable habitat (sandy soils in open desert scrub) is present within the survey area. Further, several occurrences, all presumed extant, are within a few miles in many directions around the survey area.

*

FESA Classifications

FE Federally Endangered
 FT Federally Threatened

CESA Classifications

SE State Endangered
 ST State Threatened
 SCT State Candidate for Listing as Threatened
 SSC California Species of Special Concern
 FP Fully Protected
 WL Watch List

California Rare Plant Rank (CRPR)

1A Plants presumed extirpated in California and either rare or extinct elsewhere
 1B Plants rare, threatened, or endangered in California and elsewhere
 2A Plants presumed extirpated in California, but common elsewhere
 2B Plants rare, threatened, or endangered in California, but more common elsewhere
 3 Plants about which more information is needed - a Review List
 4 Plants of limited distribution - a Watch List

Threat Ranks

.1 Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
 .2 Moderately threatened in California (20 to 80 percent occurrences threatened/moderate degree and immediacy of threat)
 .3 Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

G-Rank / S-Rank

Global Rank and State Rank as per NatureServe and CDFW's CNDDDB RareFind5, ranging from critically imperiled (G1/S1) to demonstrably secure (G5/S5), with variations and qualifiers¹.

Intraspecific Taxon Conservation Status Ranks

Intraspecific taxa refer to subspecies, varieties, and other designations below the level of the species. Intraspecific taxon status (T-ranks) apply to plants and animals only; these T-ranks do not apply to ecological communities. The status of intraspecific taxa (subspecies or varieties) are indicated by a "T-rank" following the species' global rank. Rules for assigning T-ranks follow the same principles outlined above for global conservation status ranks.

¹ <http://explorer.natureserve.org/granks.htm>