

Appendix B General Biological Assessment

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Hernandez

Environmental
Services

**GENERAL BIOLOGICAL ASSESSMENT
FOR
ASSESSOR PARCEL NUMBERS
414-212-08 and 414-212-09**

**CITY OF HESPERIA
SAN BERNARDINO COUNTY,
CALIFORNIA**

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TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	PROJECT LOCATION.....	1
1.2	PROJECT DESCRIPTION.....	1
2.0	METHODOLOGY	2
2.1	LITERATURE REVIEW.....	2
2.2	FIELD SURVEY	2
3.0	RESULTS	2
3.1	ENVIRONMENTAL SETTING	2
3.2	SOILS	3
3.3	HABITAT COMMUNITIES	3
3.3.1	<i>Ephedra Nevadensis</i> Shrubland Alliance.....	3
3.3.2	Disturbed Habitat	3
3.4	THREATENED, ENDANGERED, AND SENSITIVE SPECIES	3
3.4.1	Threatened, Endangered, and Sensitive Plants.....	4
3.4.2	Threatened, Endangered, and Sensitive Wildlife	4
3.5	CRITICAL HABITATS.....	8
3.6	NESTING BIRDS	8
3.7	WILDLIFE MOVEMENT CORRIDORS	8
3.8	OTHER CITY, COUNTY, REGIONAL, STATE, OR FEDERAL CONSERVATION PLANS	9
3.8.1	Conflict with Local policies or Ordinances Protecting Biological Resources.....	8
3.9	STATE AND FEDERAL JURISDICTIONAL STREAMS.....	9
4.0	PROJECT IMPACTS.....	9
4.1	IMPACTS TO HABITAT TYPES.....	9
4.2	IMPACTS TO STATE OR FEDERALLY LISTED PLANT AND ANIMAL SPECIES OR CNPS LISTED PLANTS	10
4.2.1	Impacts to State or Federally Listed and CNPS Listed Plants	10
4.2.2	Impacts to State or Federally Listed and Sensitive Wildlife	10
4.3	IMPACTS TO CRITICAL HABITAT	11
4.4	IMPACTS TO NESTING BIRDS.....	11
4.5	IMPACTS TO STATE OR FEDERAL STREAMS	11
5.0	RECOMMENDATIONS	12
5.1	SENSITIVE PLANT SPECIES.....	12
5.2	SENSITIVE WILDLIFE	12
5.3	NESTING BIRDS	13
6.0	CERTIFICATION.....	14
7.0	REFERENCES.....	15

FIGURES

Figure 1 – Location Map

Figure 2 – Vicinity Map

Figure 3 – Project Plans

Figure 4 – Habitat Map

Figure 5 – Impact Map

APPENDICES

Appendix A – Species List

Appendix B – Presence/Absence List

Appendix C – Site Photographs

Appendix D – Soils Map

1.0 INTRODUCTION

Hernandez Environmental Services (HES) was retained by Placeworks to perform a General Biological Assessment (GBA) on a 26-acre site comprised of Assessor Parcel Numbers (APNs) 414-212-08 and 414-212-09. The purpose of the GBA is to document the presence/absence of sensitive resources that may be present on the site, to document existing habitats, and generally address biological questions that may be needed for project approval. This GBA will present the results obtained from the October 27, 2021 field survey and will provide recommendations that may be needed to mitigate potential biological impacts from project activities.

1.1 PROJECT LOCATION

The proposed Project site is located on the east side of the Interstate 15, west of Hesperia Road, south of Mojave Street, and directly east of Third Avenue, in the City of Hesperia, San Bernardino County, California (Figures 1 and 2). Specifically, the project site is located within Section 16, Township 4 North, Range 4 West, San Bernardino Base Meridian (SBBM), on the *Hesperia* United States Geological Survey (USGS) 7.5-minute topographic quadrangles. The Project site center point latitude and longitude are 34°26'05.2014" North and 117°18'02.7994" West.

1.2 PROJECT DESCRIPTION

The proposed project consists of the construction of a new campus for Pathways to College Charter School (Figure 3). The proposed campus will consist of a 21,400 square foot (SF) main building, 130 parking spaces, a playground, and recreational areas. Outside of the project boundary, roadside improvements and a proposed water and sewer line will be developed, impacting Third Avenue and Mojave Street. Approximately 14.11 total acres are expected to be impacted by development.

The new school campus would encompass the majority of the northern half of the approximately 26-acre project site (25.75 gross acres; 21.51 net acres after dedication of 4.24 acres of right-of-way to the City for street improvements that would be implemented by the project applicant along Mojave Street and 3rd Avenue). Specifically, the new campus would occupy approximately 10.03 acres of the project site. Additionally, a shallow infiltration basin required to serve the Project's drainage needs would be developed in an area of the project site that encompasses approximately 2.10 acres, just east of and abutting the school campus (Figure 3). Combined, the school campus area and the area set aside for the infiltration basin would disturb approximately 12.13 acres (disturbed area) of the overall 26-acre project site and 14.11 acres of total impacts with the addition of 1.98 acres of offsite street improvements. The remainder of the

project site would remain undeveloped desert land.

2.0 METHODOLOGY

2.1 LITERATURE REVIEW

HES conducted a literature review and reviewed aerial photographs and topographic maps of the project location and surrounding areas. The following USGS quads were used to query the California Natural Diversity Database (CNDDDB): *Victorville, Adelanto, Apple Valley North, Hesperia, Apple Valley South, Cajon, Silverwood Lake, Baldy Mesa and Lake Arrowhead*. The United States Fish and Wildlife Service (USFWS) County Endangered Species Lists, and CNPS's rare plant lists were reviewed to obtain species information for the project area.

2.2 FIELD SURVEY

On October 27, 2021, HES conducted a field survey of the approximate 26-acre project site. Ambient temperature at 9:15 AM was 54° Fahrenheit, sunny, with winds ranging from 0 to 3 miles per hour from the northeast. The purpose of the field survey was to document the existing habitat conditions, obtain plant and animal species information, view the surrounding uses, assess the potential for state and federal waters, assess the potential for wildlife movement corridors, and assess for the presence of critical habitat constituent elements.

The entire 26-acre project site was surveyed. Linear transects approximately 50 feet apart were walked for 100 percent coverage. All species observed were recorded and Global Positioning System (GPS) way points were taken to delineate specific habitat types, species locations, state or federal waters, or any other information that would be useful for the assessment of the project site. A comprehensive list of all plant and wildlife species that were detected during the field survey within the project site is included in Appendix A. Sensitive plant and wildlife species with the potential to occur within the project area are listed in Appendix B. Representative site photographs were taken and are included within Appendix C.

3.0 RESULTS

3.1 ENVIRONMENTAL SETTING

The project site consists of native vegetation and disturbed ruderal areas. The project site is bordered by various developments including residential areas west, and south, a private organization to the north and railroad tracks to the east. The project site is relatively flat with elevations on the project site ranging from 3149 feet above mean sea level (amsl) to 3175 feet amsl.

3.2 SOILS

According to the USDA Web Soil Survey, soils at the project site are classified as Bryman loamy fine sand (105), 0 to 2 percent slopes, Bryman loamy fine sand (106) 2 to 5 percent slopes, and Cajon sand (112), 0 to 2 percent slopes (Appendix D).

3.3 HABITAT COMMUNITIES

Two habitat types were observed within the approximately 21.5-acre (net) project site including approximately 19.5 acres of *Ephedra nevadensis* shrubland alliance habitat and 2 acres of disturbed habitat (Figure 4).

3.3.1 *Ephedra nevadensis* Shrubland Alliance

Approximately 19.5 acres of Nevada joint fir scrub habitat occur within the project site. This habitat type is characterized by Nevada ephedra (*Ephedra nevadensis*). Other species associated with this habitat type include big sagebrush (*Artemisia tridentata*), shadscale (*Atriplex confertifolia*), blackbrush (*Coleogyne ramosissima*), Cooper's goldenbush (*Ericameria cooperi*), California buckwheat (*Eriogonum fasciculatum*), spiny hop sage (*Grayia spinosa*), Anderson's desert thorn (*Lycium andersonii*), spiny menodora (*Menodora spinescens*), Mexican bladdersage (*Salazaria Mexicana*), and Mojave yucca (*Yucca schidigera*). Joshua trees (*Yucca brevifolia*) may be present.

3.3.2 Disturbed Areas

Approximately 2 acres of disturbed areas occur within the project site. These areas primarily consist of unvegetated roadways and some areas with little to no vegetation. If vegetation is present, the dominant species are downy chess (*Bromus tectorum*), and tumbleweed (*Salsola tragus*).

3.4 THREATENED, ENDANGERED, AND SENSITIVE SPECIES

A total of 27 sensitive species of plants and 49 sensitive species of animals has the potential to occur on or within the vicinity of the project location. These include those species listed or candidates for listing by the U. S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW) and California Native Plant Society (CNPS) and Bureau of Land Management (BLM). All habitats utilized by these species was evaluated during the site visit and a determination has been made for the presence or probability of presence in this report. This section will address those species listed as Candidate, Rare, Threatened, or Endangered under the state and federal Endangered Species laws or directed to be evaluated under other state, county, or municipal regulations. Other special status species will be reported in Appendix B.

3.4.1 Threatened, Endangered, and Sensitive Plants

One plant species is listed as state and/or federal Threatened, Endangered, Candidate, or 1B.1 listed plants on the CNPS Rare Plant Inventory. One other species has a potential to exist on the project site. The following is a description of these species:

Parish's daisy

Parish's daisy (*Erigeron parishii*) is ranked 1B.1 in the CNPS rare plant inventory. This species is generally found in Mojavean Desert scrub, and pinon and juniper woodlands; it is often associated with drainages. Its habitat includes carbonate, limestone mountain slopes, and sometimes on granite. There is no suitable habitat present on the project site. **This species is not present.**

Beaver Dam breadroot

Beaver Dam breadroot (*Pediomelum castoreum*) is ranked 1B.2 in the CNPS Rare Plant Inventory. This species is generally found in Joshua tree woodland and Mojavean Desert scrub. Its habitat includes sandy soils, washes and roadcuts. Suitable habitat is present on the project site. This species was not found during focused rare plant surveys performed on site in the year 2022. **This species is not present.**

Western Joshua tree

Western Joshua tree (*Yucca brevifolia*) is listed as a Candidate Species under the California Endangered Species Act (CESA), which requires authorization under CESA for any take of the species (including removal of western Joshua tree or similar actions). This species is generally found at moderate elevations in the Mojave Desert between creosote bush scrub and pinyon-juniper woodlands. Suitable habitat is present on the project site. **This species is present.**

3.4.2 Threatened, Endangered, and Sensitive Wildlife

A total of 14 wildlife species are listed as state and/or federal Threatened, Endangered, or Candidate species. Sensitive species which have a potential to occur will also be discussed in this section. All sensitive species within a 5-mile radius of project area were reviewed and a complete list of those species are discussed in in Appendix B.

Tricolored blackbird

Tricolored blackbird (*Agelaius tricolor*) is a state listed Candidate Endangered species and listed by the CDFW as a Species of Special Concern. Its habitat includes freshwater marsh, marsh and swamp, and wetland. This species is largely endemic to California and is most numerous in and around the Central Valley. This species requires open accessible water, protected nesting

substrate, and foraging area with insect prey within a few kilometers of the colony. There is no habitat for this species on the project site. **This species is not present.**

Arroyo Toad

Arroyo Toad (*Anaxyrus californicus*) is a federally listed Endangered species and a CDFW Species of Special Concern. The most favorable breeding habitat for this species consists of slow-moving shallow pools, nearby sandbars, and adjacent stream terraces. Its habitat includes desert wash, riparian scrub, riparian woodland, south coast flowing waters, and south coast standing waters. There is no habitat for this species on the project site. **This species is not present.**

Coastal whiptail

The coastal whiptail (*Aspidoscelis tigris stejnegeri*) is a CDFW Species of Special Concern. It is typically found in hot, dry, flat open spaces in deserts or semi-arid areas. There is potential habitat for this species on the project site. **This species has the potential to be present.**

Burrowing owl

Burrowing owl (*Athene cunicularia*) is a CDFW Species of Special Concern. Its habitat includes coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, and valley and foothill grassland. This species is typically found in open and dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. It is a subterranean nester and is dependent upon burrowing mammals, most notably the California ground squirrel. Potential habitat for this species is present on the project site. Focused surveys for this species were conducted on the project site in 2022. Although suitable habitat occurs on the project site, this species was not observed during focused surveys. **This species is not present.**

Crotch bumble bee

Crotch bumble bee (*Bombus crotchii*) is a state Candidate Endangered species. It is found in coastal California east to the Sierra-Cascade crest and south into Mexico. This species food plant genera include *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*. There is no suitable habitat for this species present on the project site. **This species is not present.**

Swainson's hawk

Swainson's hawk (*Buteo swainsoni*) is a state listed Threatened species. This species favors open grasslands for foraging but also occurs in agricultural settings. It relies on scattered stands of trees near agricultural fields and grasslands for nesting sites. Its habitats include great basin grassland, riparian forest, riparian woodland, and valley and foothill grassland. The project site

does not contain suitable habitat for this species. **This species is not present.**

Southern rubber boa

Southern-rubber boa (*Charina umbratica*) is a state listed Threatened species. Its habitat includes meadow and seep, riparian forest, riparian woodland, upper montane coniferous forest, and wetland. This species is typically found near streams or wet meadows, and requires loose, moist soil for burrowing. It seeks cover in rotting logs, rock outcrops, and under surface litter. It is known to be found in the San Bernardino and San Jacinto mountains and has been reported to be found in other areas, but further research is required. The project site does not contain suitable habitat for this species. **This species is not present.**

Western yellow-billed cuckoo

Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) is a federally listed Threatened and state listed Endangered species. This species typically nests in riparian jungles of willows, often mixed with cottonwoods, with a lower story of blackberry, nettles, or wild grape. It is found in riparian forest habitat. The project site does not contain suitable habitat for this species. **This species is not present.**

Southwestern willow flycatcher

Southwestern willow flycatcher (*Empidonax traillii extimus*) is a federally and state listed Endangered species. It is found in riparian woodland habitat in southern California. The project site does not contain suitable habitat for this species. **This species is not present.**

Quino checkerspot butterfly

Quino checkerspot butterfly (*Euphydryas editha quino*) is a federally listed Endangered species. It is found in chaparral and coastal sage scrub. This species requires high densities of food plants, including *Plantago erecta*, *P. insularis*, and *Orthocarpus purpurescens*. The project site does not have suitable habitat for this species. **This species is not present.**

Desert tortoise

The desert tortoise (*Gopherus agassizii*) is a state and federal Threatened species. It is found in different types of desert habitats from sandy flats to rocky foothills. It prefers alluvial fans, washes, and canyons with friable soils. No tortoise or burrows suitable for tortoise were seen during the general survey and the project site is surrounded by commercial and residential use. There is no suitable habitat for this species present on the project site. **This species is not present.**

Bald eagle

Bald eagle (*Haliaeetus leucocephalus*) is a state listed Endangered and CDFW fully protected

species. This species is found in lower montane coniferous forest and old-growth forests. They nest in large old-growth or trees with open branches, especially ponderosa pine. The project site does not contain suitable habitat for this species. **This species is not present.**

Loggerhead shrike

Loggerhead shrike (*Lanius ludovicianus*) is a CDFW Species of Special Concern. This species prefers open country for hunting, with perches for scanning, and dense shrubs and brush for nesting. Its habitat includes broadleaved upland forest, desert wash, Joshua tree woodland, Mojavean desert scrub, pinon and juniper woodlands, riparian woodland, and Sonoran desert scrub. There is potential habitat for this species present on the project site. **This species has the potential to be present.**

Coast horned lizard

Coast horned lizard (*Phrynosoma blainvillii*) is a CDFW Species of Special Concern. This species is found in coastal sage scrub, coastal bluff scrub, chaparral, cismontane woodland, desert wash, pinon and juniper woodlands, riparian scrub, riparian woodland, and valley and foothill grassland. This species thrives in open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants and other insects. There is potential habitat for this species to be present on the project site. **This species has the potential to be present.**

California red-legged frog

California red-legged frog (*Rana draytonii*) is a federally listed Threatened species and a CDFW Species of Special Concern. Its habitat includes aquatic, artificial flowing waters, artificial standing waters, freshwater marsh, marsh and swamp, riparian forest, riparian scrub, riparian woodland, Sacramento and San Joaquin flowing and standing waters, and south coast. It requires 11 to 20 weeks for larval development and must have access to estivation habitat. It is most commonly found in lowlands and foothills, in or near permanent sources of deep water, with dense, shrubby, or emergent riparian vegetation. The project site does not contain suitable habitat for this species. **This species is not present.**

Southern mountain yellow-legged frog

Southern mountain yellow-legged frog (*Rana muscosa*) is a federally and state listed Endangered species. It is found in aquatic habitat. This species is always encountered within a few feet of water. Tadpoles may require two to four years to complete their aquatic development. The project site does not contain suitable habitat for this species. **This species is not present.**

Mohave Tui Chub

The Mohave tui chub (*Siphateles bicolor mohavensis*) is a federal and state listed Endangered species. It is found in aquatic, and artificial standing and flowing waters. This species is endemic

to the Mojave River basin, adapted to alkaline mineralized water. It needs deep pools, ponds, or slough-like areas and vegetation for spawning. There is no habitat for this species on the project site. **This species is not present.**

Least Bell's vireo

Least Bell's vireo (*Vireo bellii pusillus*) is a federal and state listed Endangered species. This species is found in riparian forest, riparian scrub, and riparian woodland. Nesting habitat of this species is restricted to willow and/or mulefat dominated riparian scrub along permanent or nearly permanent streams. The project site does not contain suitable habitat for this species. **This species is not present.**

Mohave ground squirrel

The Mohave ground squirrel (*Xerospermophilus mohavensis*) is a state Threatened species. It is found in chenopod scrub, Joshua tree woodland and Mojavean Desert scrub. It prefers sandy to gravelly soils, avoids rocky areas, and uses burrows at the base of shrubs for cover. Its nests are found in burrows. During the general biological survey one inactive burrow was found on site and the project site is surrounded by commercial and residential use and the closest occurrence was about 0.5 mile away. **This species is not present.**

3.5 CRITICAL HABITATS

The proposed project site is not located within any designated federal critical habitat.

3.6 NESTING BIRDS

Migratory non-game native bird species are protected under the federal Migratory Bird Treaty Act. Additionally, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests. The entire 26-acre project site has trees and shrubs that can be used by nesting songbirds during the nesting bird season of February 1 to September 15.

3.7 WILDLIFE MOVEMENT CORRIDORS

Wildlife movement corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbances. The project site was evaluated for its function as a wildlife corridor that species would use to move between wildlife habitat zones. Usually, mountain canyons or riparian corridors are used by wildlife as corridors. The project site is relatively flat and does not contain mountain canyons or riparian corridors nearby. Furthermore, the site is blocked off on the east end by railroad tracks and a residential area to the west. No wildlife movement corridors were found to be present on the project site.

3.8 OTHER CITY, COUNTY, REGIONAL, STATE, OR FEDERAL CONSERVATION PLANS

The project site is within the Desert Renewable Energy Conservation Plan, but it is not within any major land allocations for conservation of a specific species or resource. The project would be required to comply with the State Desert Plants Act and the City of Hesperia Protected Plant Policy. Impacts to Joshua trees on site require prior authorization through a 2081 state incidental take permit from the CDFW.

3.8.1 Conflict with Local policies or Ordinances Protecting Biological Resources

The project would be required to comply with the State Desert Plants Act and the City of Hesperia Protected Plant Policy. Any impacts to Joshua trees on site require prior authorization through a 2081 state incidental take permit from the CDFW. Any impacts to other healthy, transplantable plants shall be relocated on-site or may be placed in an adoption program.

Pursuant to the City of Hesperia Municipal Code chapter 16.24, Protected Plants, all species of the *Agavaceae* family (*Yuccas*, *Nolinas*, *Century Plants*.), all species of cactus, including chollas (*Cylindropuntia* spp.), smoketree (*Dalea spinosa*), all species of the mesquites (*Prosopis*), creosote rings 10 feet or more in diameter, all Joshua trees, and all plants protected or regulated by the California Desert Native Plants Act (California Food and Agricultural Code 80001 *et. seq.*) shall not be removed except under a removal permit issued by the agricultural commissioner. Prior to ground disturbance, a protected Desert Native Plant Survey needs to be prepared. In addition to the Joshua trees on site, five silver chollas (*Cylindropuntia echinocarpa*) exist within the project impact area boundary. This cholla will be mitigated under the recommendations section.

3.9 STATE AND FEDERAL JURISDICTIONAL STREAMS

No federal or jurisdictional streams occur onsite. After observing aerial images and visiting the project site, it was determined that an underground stormwater feature exists near the east border of the project area (Figure 5). The feature carries water that flows from four culverts to the southeast of the project site from south to north. This feature does not qualify as state or federal jurisdictional waters.

4.0 PROJECT IMPACTS

4.1 IMPACTS TO HABITAT TYPES

The proposed project will impact 14.11 acres consisting of approximately 12.13 acres of

Ephedra nevadensis Shrubland Alliance onsite and 1.98 acres of disturbed/developed land onsite and offsite for roadside improvements (Figure 6).

4.2 IMPACTS TO STATE OR FEDERALLY LISTED PLANT AND ANIMAL SPECIES OR CNPS LISTED PLANTS

4.2.1 Impacts to State or Federally Listed and CNPS Listed Plants

The following state or federally listed plants or CNPS listed plants have the potential to be impacted by the project.

Beaver Dam breadroot

Beaver Dam breadroot is ranked 1B.2 in the CNPS rare plant inventory. The project site does contain potentially suitable habitat for this species. Therefore, implementation of the proposed project has the potential to impact this species if it is determined to be present on the project site. Focused surveys should be performed by a qualified biologist during the blooming period of April-May to determine the presence or absence of the species on the project site.

Western Joshua tree

Western Joshua tree is listed as a Candidate Species under the California Endangered Species Act (CESA). The project site does contain suitable habitat for this species. Therefore, implementation of the proposed project will impact this species on the project site. A take may be authorized by the CDFW under a 2081 incidental take permit.

4.2.2 Impacts to State or Federally Listed and Sensitive Wildlife

Coastal whiptail

The coastal whiptail is a CDFW Species of Special Concern the project site does contain potentially suitable habitat for this species. Therefore, implementation of proposed project has the potential to impact this species. Implementation of the measures identified in the Recommendations section of this report will ensure that potential impacts to this species are less than significant.

Burrowing Owl

Burrowing owl is a CDFW Species of Special Concern. The project site does contain potentially suitable habitat for this species and the last CNDDDB occurrence was May 14, 2008, within similar habitat of creosote scrub. Therefore, implementation of the proposed project has the potential to impact this species if it is determined to be present on the project site. Focused surveys for this species were conducted on the project site in 2022. Although suitable habitat occurs on the project site, this species was not observed during focused surveys. Further

recommendations in Section 5.2 will ensure no impacts will be made on this species.

Loggerhead shrike

Loggerhead shrike is a CDFW Species of Special Concern. The project area does contain potentially suitable habitat for this species. Therefore, implementation of proposed project has the potential to impact this species if it is determined to be present on the project site. Nesting bird surveys should be performed by a qualified biologist to determine the presence or absence of the species on the project site.

Coast horned lizard

Coast horned lizard is a CDFW Species of Special Concern. The project site does contain potentially suitable habitat for this species. Therefore, implementation of proposed project has the potential to impact this species. Implementation of the measures identified in the Recommendations section of this report will ensure that potential impacts to this species are less than significant.

4.3 IMPACTS TO CRITICAL HABITAT

The project site is not located within designated federal critical habitat. No impacts to critical habitat would occur.

4.4 IMPACTS TO NESTING BIRDS

Migratory nongame native bird species are protected under the federal Migratory Bird Treaty Act. Additionally, Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests. If vegetation removal and other ground disturbance activities can be conducted outside of the recognized nesting bird season (February 1 through September 15), impacts to nesting birds is not expected.

If work cannot be avoided during the nesting bird season, prior to initiation of project activities that would remove vegetation or otherwise disturb nesting activity (for instance, mobilization of heavy equipment), work associated with project activities have the potential to impact nesting birds.

4.5 IMPACTS TO STATE OR FEDERAL STREAMS

The approximately 14.11-acre impact area does not contain any state or federal streams. The stormwater feature exists underground and is not CDFW, USACE, or RWQCB jurisdictional. No impacts to jurisdictional waters would occur from project implementation.

5.0 RECOMMENDATIONS

Based upon the findings of this report, it is recommended that the following measures be implemented as part of the project to avoid, minimize, or compensate for the anticipated impacts from project activities:

5.1 SENSITIVE PLANT SPECIES

Focused surveys for rare plants including the beaver dam breadroot were conducted by an approved biologist during the appropriate blooming season to determine the presence or absence of the species on the project site and potential impacts resulting from implementation of the proposed project. No rare or sensitive plant species were found to occur on site. The proposed project is not expected to impact any sensitive plant species other than the Western Joshua tree.

Sensitive Plant Species	Blooming Period
Beaver Dam breadroot	April-May

Western Joshua tree

A focused survey for the western Joshua tree and additional desert native plants was conducted by an approved biologist on November 16, 2021, to determine the presence or absence of species on the project site and potential impacts resulting from implementation of the proposed project. The survey identified 17 Joshua trees within the impact area and 18 Joshua trees outside the impact area but within 186 feet of the project impact boundary. The survey also identified five silver chollas within the project area.

The western Joshua tree is listed as a Candidate Species and protected from unauthorized take under CESA Section 2081. The western Joshua tree has full protection under CESA and any take of the species (including removal of western Joshua tree or similar actions) will require authorization under CESA. A take may be authorized by the CDFW under a 2081 incidental take permit. CDFW also recommends contacting the city and county regarding any additional permits or approvals that may be required since city and county permit processes may be separate from permits that are needed from CDFW.

The silver cholla shall be mitigated in accordance with the City of Hesperia Protected Plant Policy (HMC 16.24). The five plants shall be relocated to the Nevada joint fir scrub habitat on-site but outside of the project impact area.

5.2 SENSITIVE WILDLIFE

Based on the presence of suitable habitat documented during the habitat assessment and focused burrowing owl surveys, a 30-day preconstruction survey will be conducted immediately prior to the initiation of construction to ensure the protection of this species.

Coast horned lizard and coastal whiptail shall be mitigated by having a qualified biological monitor present on the site during all ground disturbing activities to ensure no direct or indirect take of these species.

5.3 NESTING BIRDS

If ground disturbing and vegetation clearing activities cannot be avoided during the nesting bird season (February 1 through September 15), a qualified biologist should conduct a pre-construction nesting bird survey within all areas of breeding/nesting habitat within and adjacent to the project site prior to initiation of project activities that would remove vegetation or otherwise disturb nesting activity (for instance, mobilization of heavy equipment). Surveys should be conducted not more than 3 days prior to initiation of activities.

If nesting birds are encountered, a qualified biologist will establish an avoidance buffer zone around the nest (buffer zones vary according to species involved and shall be determined by the qualified biologist). No activities that would adversely affect the nest shall occur within the buffer zone until the qualified biologist has determined the nest is no longer active and the young are no longer dependent on the nest.

6.0 CERTIFICATION

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



Date 07-25-2022 Signed _____

PROJECT MANAGER

Fieldwork Performed By:

Juan Jose Hernandez
PRINCIPAL BIOLOGIST

7.0 REFERENCES

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FIGURE 1

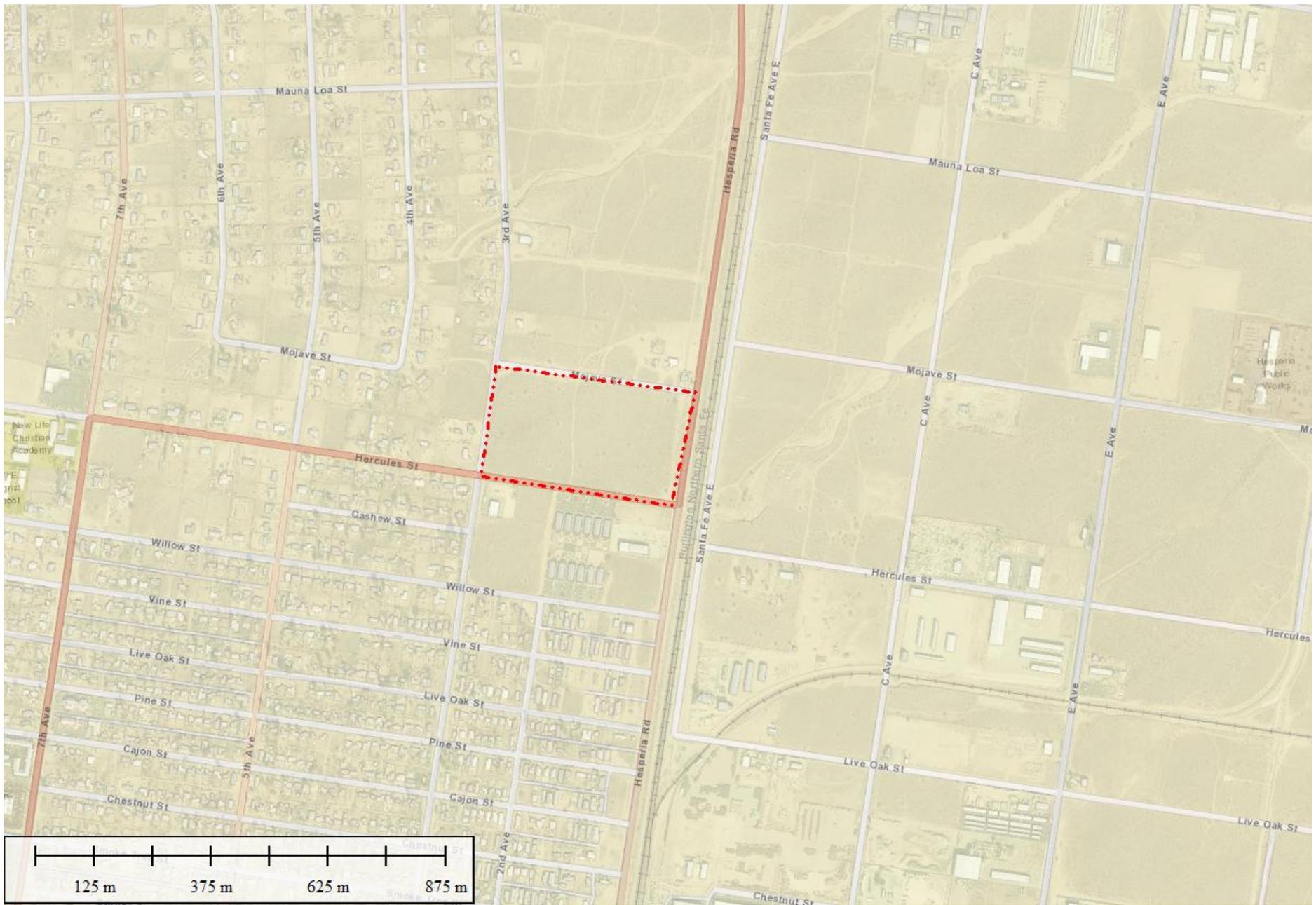


Figure 1
 Location Map
 Pathways to College
 San Bernardino County, California

Legend
 Project Site Boundary
 B-22



FIGURE 2

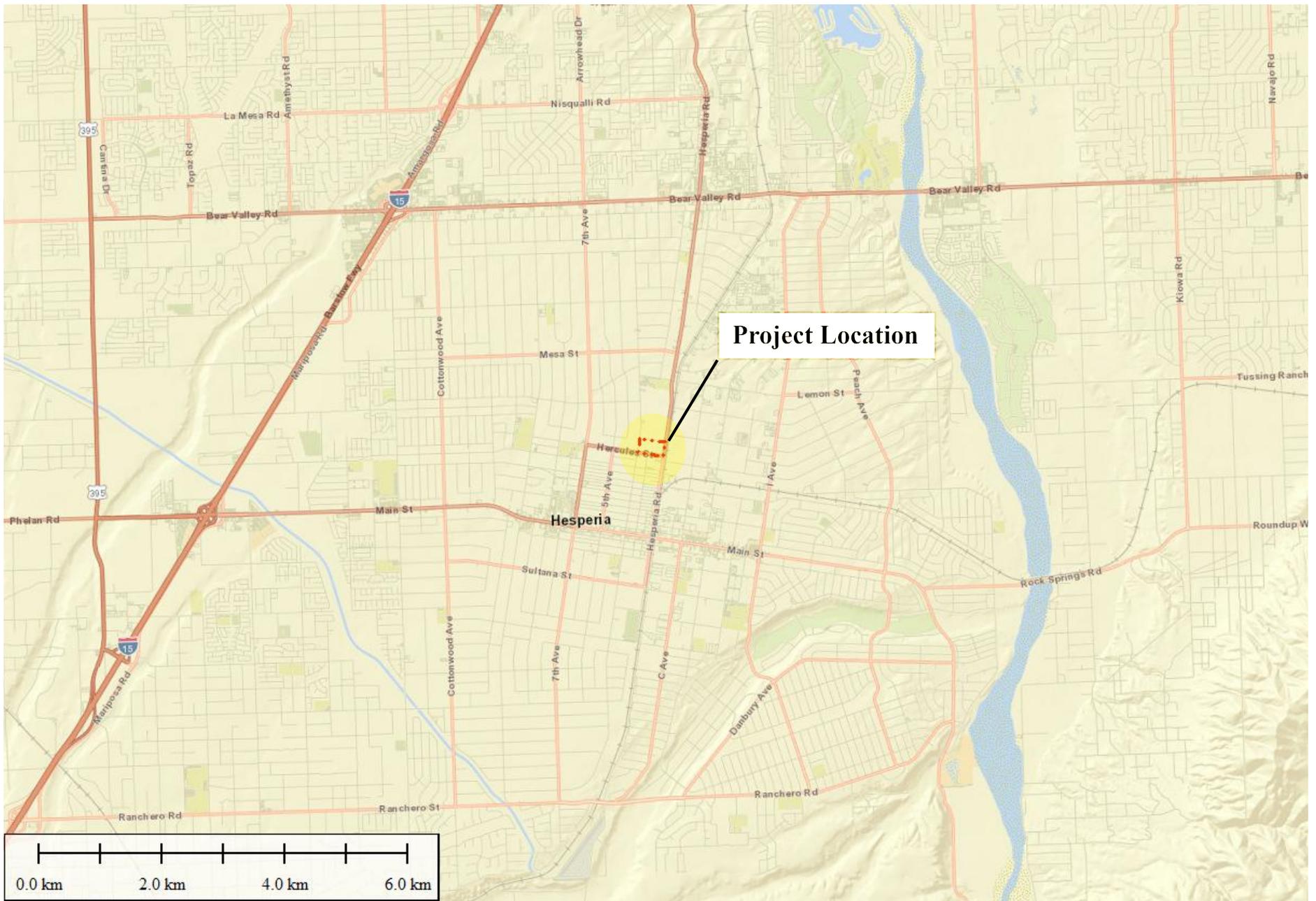


Figure 2
 Vicinity Map
 Pathways to College
 San Bernardino County, California

Legend

 Project Site Boundary
 B-24



FIGURE 3

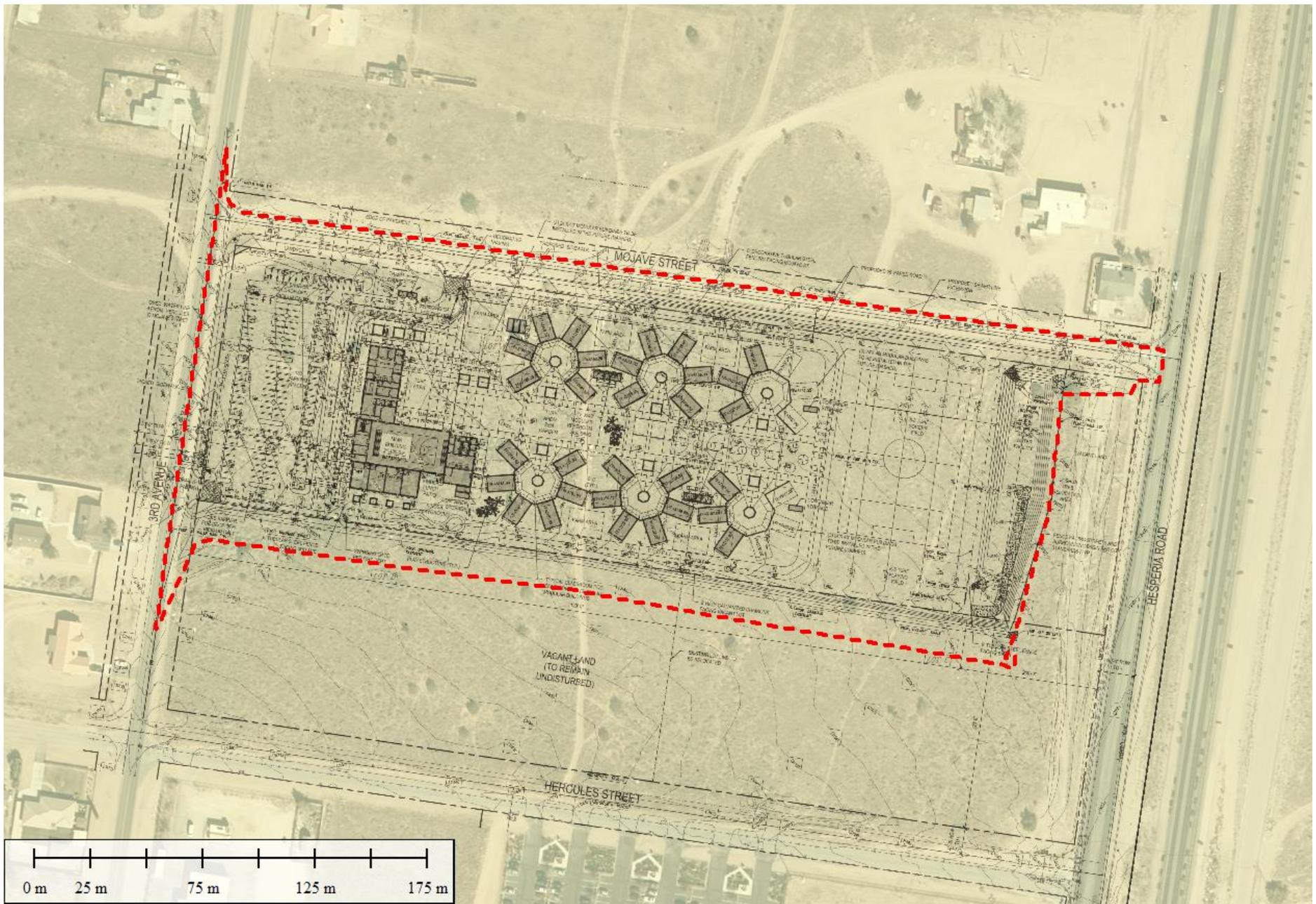


Figure 3
 Project Plans
 Pathways to College
 San Bernardino County, California

Legend

 Project Impact Area Boundary
 B-26



FIGURE 4

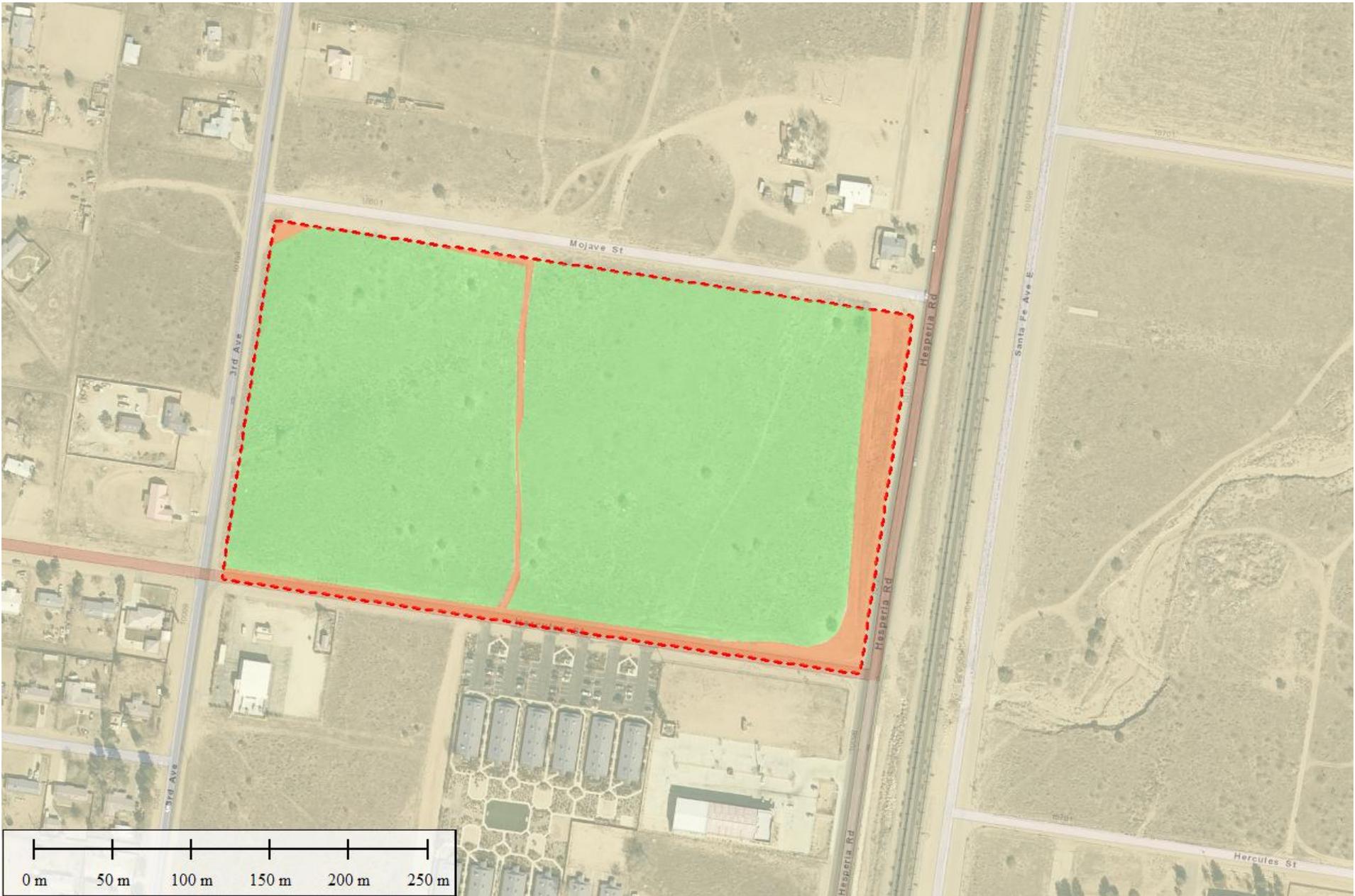


Figure 4
 Habitat Map
 Pathways to College
 San Bernardino County, California

- Legend**
- Project Site Boundary
 - Nevada joint fir scrub habitat (19.5 acres)
 - Disturbed Area (2 acres)



FIGURE 5

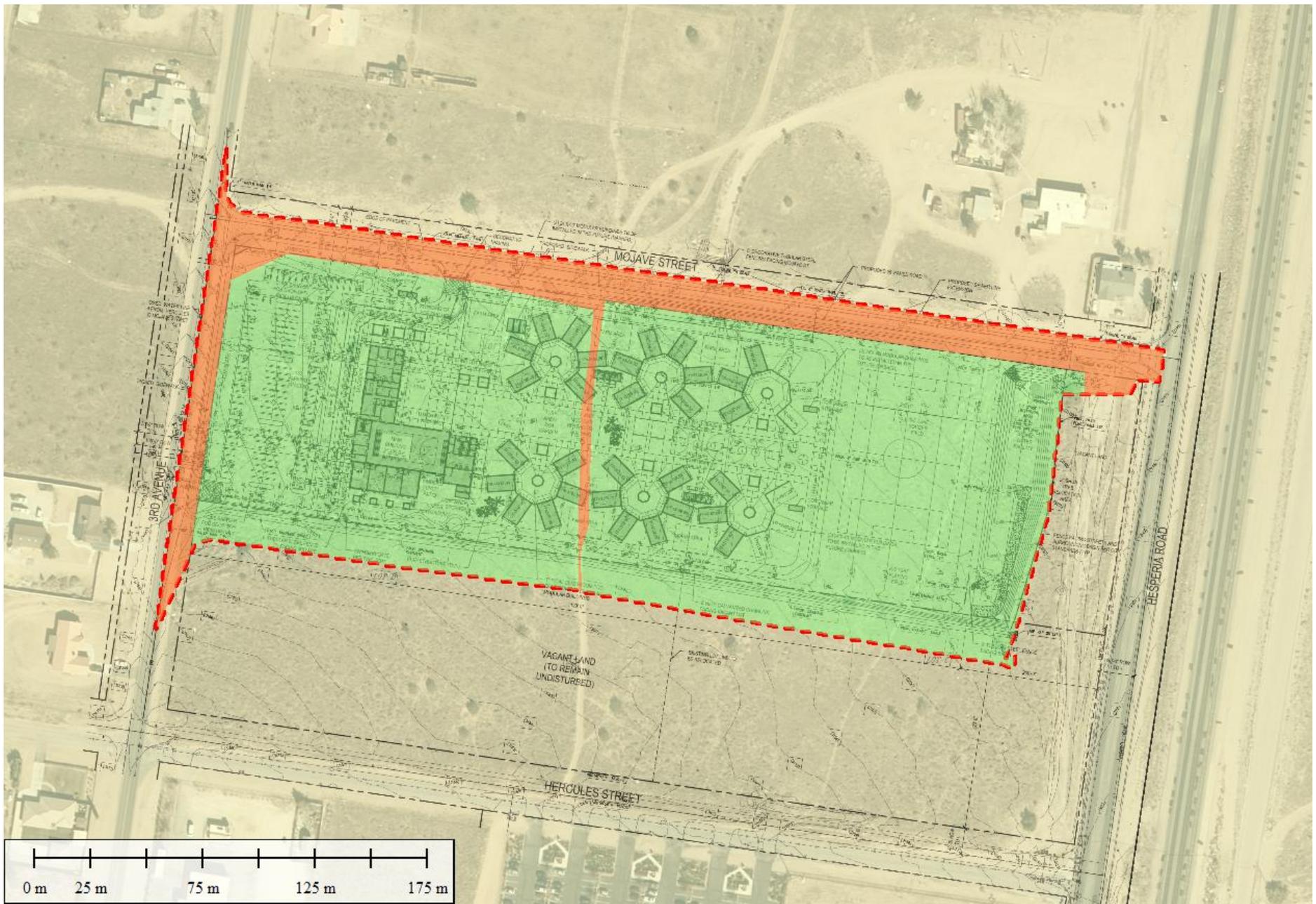


Figure 5

Impact Map
 Pathways to College
 San Bernardino County, California

Legend

-  Limits of Impact (14.11 acres)
-  Nevada juniper scrub habitat (11.86 acres)
-  Disturbed habitat (2.25 acres)



APPENDIX A

Species List

Plant List

<i>Ambrosia acanthicarpa</i>	Flat-spine bur ragweed
<i>Bromus tectorum</i>	Downy chess
<i>Cylindropuntia echinocarpa</i>	Golden cholla
<i>Ephedra nevadensis</i>	Nevada ephedra
<i>Ericameria nauseosa</i>	Rubber rabbitbrush
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>Juniperus californica</i>	California juniper
<i>Krascheninnikovia lanata</i>	Winter fat
<i>Lactuca serriola</i>	Prickly lettuce
<i>Larrea tridentata</i>	Creosote bush
<i>Lycium andersonii</i>	Anderson's desert thorn
<i>Salsola tragus</i>	Russian thistle
<i>Salazaria mexicana</i>	Mexican bladder sage
<i>Yucca brevifolia</i>	Joshua tree

Animal List

Canis lupus familiaris

Corvus corax

Mimus polyglottos

Lepus californicus

Zenaida macroura

Zonotrichia leucophrys

Domestic dog

Common raven

Northern mockingbird

Black-tailed jackrabbit

Mourning Dove

White-crowned sparrow

APPENDIX B

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/Absence
<i>Allium howellii</i> var. <i>clokeyi</i>	Mt. Pinos onion	Monocots	None	None	1B.3	Great Basin scrub Meadow & seep Pinon & juniper woodlands	Great Basin scrub, pinyon and juniper woodland, meadows and seeps (edges).	1385-1800 m.	No suitable habitat is present on site. This species is not present.
<i>Asclepias nyctaginifolia</i>	Mojave milkweed	Dicots	None	None	2B.1	Mojavean desert scrub Pinon & juniper woodlands	Mojavean desert scrub, pinyon and juniper woodland.	775-1605 m.	No suitable habitat is present on site. This species is not present.
<i>Boechera dispar</i>	pinyon rockcress	Dicots	None	None	2B.3	Joshua tree woodland Mojavean desert scrub Pinon & juniper woodlands	Joshua tree woodland, pinyon and juniper woodland, Mojavean desert scrub.	Granitic, gravelly slopes and mesas. Often under desert shrubs which support it as it grows. 1005-2805 m.	No suitable habitat is present on site. This species is not present.
<i>Calochortus palmeri</i> var. <i>palmeri</i>	Palmer's mariposa-lily	Monocots	None	None	1B.2	Chaparral Lower montane coniferous forest Meadow & seep	Meadows and seeps, chaparral, lower montane coniferous forest.	Vernally moist places in yellow-pine forest, chaparral. 195-2530 m.	No suitable habitat is present on site. This species is not present.

Calochortus plummerae	Plummer's mariposa-lily	Monocots	None	None	4.2	Chaparral Cismontane woodland Coastal scrub Lower montane coniferous forest Valley & foothill grassland	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. 60-2500 m.	No suitable habitat is present on site. This species is not present.
Canbya candida	white pygmy-poppy	Dicots	None	None	4.2	Joshua tree woodland Mojavean desert scrub Pinon & juniper woodlands	Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland.	Gravelly, sandy, granitic places. 600-1460 m.	No suitable habitat is present on site. This species is not present.
Castilleja lasiorhyncha	San Bernardino Mountains owl's-clover	Dicots	None	None	1B.2	Chaparral Meadow & seep Pavement plain Riparian woodland Upper montane coniferous forest Wetland	Meadows and seeps, pebble plain, upper montane coniferous forest, chaparral, riparian woodland.	Mesic to drying soils in open areas of stream and meadow margins or in vernal wet areas. 1140-2320 m.	No suitable habitat is present on site. This species is not present.

Chorizanthe xanti var. leucotheca	white-bracted spineflower	Dicots	None	None	1B.2	Coastal scrub Mojavean desert scrub Pinon & juniper woodlands	Mojavean desert scrub, pinyon and juniper woodland, coastal scrub (alluvial fans).	Sandy or gravelly places. 365-1830 m.	No suitable habitat is present on site. This species is not present.
Cymopterus deserticola	desert cymopterus	Dicots	None	None	1B.2	Joshua tree woodland Mojavean desert scrub	Joshua tree woodland, Mojavean desert scrub.	On fine to coarse, loose, sandy soil of flats in old dune areas with well-drained sand. 625-1220 m.	No suitable habitat is present on site. This species is not present.
Deinandra mohavensis	Mojave tarplant	Dicots	None	Endangered	1B.3	Chaparral Coastal scrub Riparian scrub	Riparian scrub, coastal scrub, chaparral.	Low sand bars in river bed; mostly in riparian areas or in ephemeral grassy areas. 640-1645 m.	No suitable habitat is present on site. This species is not present.
Diplacus mohavensis	Mojave monkeyflower	Dicots	None	None	1B.2	Desert wash Joshua tree woodland Mojavean desert scrub	Joshua tree woodland, Mojavean desert scrub.	Dry sandy or rocky washes along the Mojave River. 660-1270 m.	No suitable habitat is present on site. This species is not present.

Dudleya abramsii ssp. affinis	San Bernardino Mountains dudleya	Dicots	None	None	1B.2	Limestone Pavement plain Pinon & juniper woodlands Upper montane coniferous forest	Pebble (pavement) plain, upper montane coniferous forest, pinyon and juniper woodland.	Outcrops, granite or quartzite, rarely limestone. 1200-2425 m.	No suitable habitat is present on site. This species is not present.
Eremothera boothii ssp. boothii	Booth's evening-primrose	Dicots	None	None	2B.3	Joshua tree woodland Pinon & juniper woodlands	Joshua tree woodland, pinyon and juniper woodland.	285-2290 m.	No suitable habitat is present on site. This species is not present.
Erigeron parishii	Parish's daisy	Dicots	Threatened	None	1B.1	Limestone Mojavean desert scrub Pinon & juniper woodlands	Mojavean desert scrub, pinyon and juniper woodland.	Often on carbonate; limestone mountain slopes; often associated with drainages. Sometimes on granite. 1050-2245 m.	No suitable habitat is present on site. This species is not present.

Heuchera parishii	Parish's alumroot	Dicots	None	None	1B.3	Alpine boulder & rock field Limestone Lower montane coniferous forest Subalpine coniferous forest Upper montane coniferous forest	Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest, alpine boulder and rock field.	Rocky places. Sometimes on carbonate. 1340-3505 m.	No suitable habitat is present on site. This species is not present.
Ivesia argyrocoma var. argyrocoma	silver-haired ivesia	Dicots	None	None	1B.2	Meadow & seep Pavement plain Upper montane coniferous forest	Meadows and seeps, pebble plains, upper montane coniferous forest.	In pebble plains and meadows with other rare plants. 1490-2960 m.	No suitable habitat is present on site. This species is not present.
Lilium parryi	lemon lily	Monocots	None	None	1B.2	Lower montane coniferous forest Meadow & seep Riparian forest Upper montane coniferous forest Wetland	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest.	Wet, mountainous terrain; generally in forested areas; on shady edges of streams, in open boggy meadows and seeps. 625-2930 m.	No suitable habitat is present on site. This species is not present.

Loeflingia squarrosa var. artemisiarum	sagebrush loeflingia	Dicots	None	None	2B.2	Desert dunes Great Basin scrub Sonoran desert scrub	Great Basin scrub, Sonoran desert scrub, desert dunes.	Sandy flats and dunes. Sandy areas around clay slicks w/Sarcobatus, Atriplex, Tetradymia, etc. 700-1615 m.	No suitable habitat is present on site. This species is not present.
Lycium parishii	Parish's desert-thorn	Dicots	None	None	2B.3	Coastal scrub Sonoran desert scrub	Coastal scrub, Sonoran desert scrub.	-3-570 m.	No suitable habitat is present on site. This species is not present.
Opuntia basilaris var. brachyclada	short-joint beavertail	Dicots	None	None	1B.2	Chaparral Joshua tree woodland Mojavean desert scrub Pinon & juniper woodlands	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland.	Sandy soil or coarse, granitic loam. 425-2015 m.	No suitable habitat is present on site. This species is not present.
Pediomelum castoreum	Beaver Dam breadroot	Dicots	None	None	1B.2	Desert wash Joshua tree woodland Mojavean desert scrub	Joshua tree woodland, Mojavean desert scrub.	Sandy soils; washes and roadcuts. 605-1485 m.	Suitable habitat is present on site. This species has potential to be present.

Perideridia parishii ssp. parishii	Parish's yampah	Dicots	None	None	2B.2	Lower montane coniferous forest Meadow & seep Upper montane coniferous forest	Lower montane coniferous forest, meadows and seeps, upper montane coniferous forest.	Damp meadows or along streambeds- prefers an open pine canopy. 1470- 2530 m.	No suitable habitat is present on site. This species is not present.
Schoenus nigricans	black bog- rush	Monocots	None	None	2B.2	Marsh & swamp Wetland	Marshes and swamps.	Often in alkaline marshes. 120-1525 m.	No suitable habitat is present on site. This species is not present.
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	Dicots	None	None	1B.2	Chaparral Cismontane woodland Lower montane coniferous forest	Chaparral, cismontane woodland, lower montane coniferous forest.	In gravelly soils on streambanks or in mesic sites in oak or pine woodland. 425- 2000 m.	No suitable habitat is present on site. This species is not present.
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	Riparian	None	None		Riparian woodland			This is not present.

Symphyotrichum defoliatum	San Bernardino aster	Dicots	None	None	1B.2	Cismontane woodland Coastal scrub Lower montane coniferous forest Marsh & swamp Meadow & seep Valley & foothill grassland	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland.	Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 3- 2045 m.	No suitable habitat is present on site. This species is not present.
Symphyotrichum greatae	Greata's aster	Dicots	None	None	1B.3	Broadleaved upland forest Chaparral Cismontane woodland Lower montane coniferous forest Riparian woodland	Chaparral, cismontane woodland, broadleafed upland forest, lower montane coniferous forest, riparian woodland.	Mesic canyons. 335- 2015 m.	No suitable habitat is present on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presence/Absence
Accipiter cooperii	Cooper's hawk	Birds	None	None	CDFW_WL-Watch List IUCN_LC-Least Concern	Cismontane woodland Riparian forest Riparian woodland Upper montane coniferous forest	Woodland, chiefly of open, interrupted or marginal type.	Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river floodplains; also, live oaks.	No suitable habitat is present on site. This species is not present.
Agelaius tricolor	tricolored blackbird	Birds	None	Threatened	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	Freshwater marsh Marsh & swamp Swamp Wetland	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 km of the colony.	No suitable habitat is present on site. This species is not present.

Anaxyrus californicus	arroyo toad	Amphibians	Endangered	None	CDFW_SSC-Species of Special Concern IUCN_EN-Endangered	Desert wash Riparian scrub Riparian woodland South coast flowing waters South coast standing waters	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.	No suitable habitat is present on site. This species is not present.
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Anniella stebbinsi	Southern California legless lizard	Reptiles	None	None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	Broadleaved upland forest Chaparral Coastal dunes Coastal scrub	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County.	Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	No suitable habitat is present on site. This species is not present.
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Antrozous pallidus	pallid bat	Mammals	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	Chaparral Coastal scrub Desert wash Great Basin grassland Great Basin scrub Mojavean desert scrub Riparian woodland Sonoran desert scrub Upper montane coniferous forest Valley & foothill grassland	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	No suitable habitat is present on site. This species is not present.
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Aquila chrysaetos	golden eagle	Birds	None	None	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Broadleaved upland forest Cismontane woodland Coastal prairie Great Basin grassland Great Basin scrub Lower montane coniferous forest Pinon & juniper woodlands Upper montane coniferous forest Valley & foothill grassland	Rolling foothills, mountain areas, sage-juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	No suitable habitat is present on site. This species is not present.
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Artemisiospiza belli	Bell's sage sparrow	Birds	None	None	CDFW_WL-Watch List USFWS_BCC-Birds of Conservation Concern	Chaparral Coastal scrub	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	No suitable habitat is present on site. This species is not present.
Asio otus	long-eared owl	Birds	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Cismontane woodland Great Basin scrub Riparian forest Riparian woodland Upper montane coniferous forest	Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses.	Require adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	No suitable habitat is present on site. This species is not present.

Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	None	None	CDFW_SSC-Species of Special Concern		Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas.	Ground may be firm soil, sandy, or rocky.	Suitable habitat is present on site. This species has potential to be present.
Athene cunicularia	burrowing owl	Birds	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Coastal prairie Coastal scrub Great Basin grassland Great Basin scrub Mojavean desert scrub Sonoran desert scrub Valley & foothill grassland	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Suitable habitat is present on site. This species has potential to be present.

Bombus crotchii	Crotch bumble bee	Insects	None	None			Coastal California east to the Sierra-Cascade crest and south into Mexico.	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	No suitable habitat is present on site. This species is not present.
Bombus morrisoni	Morrison bumble bee	Insects	None	None	IUCN_VU-Vulnerable		From the Sierra-Cascade ranges eastward across the intermountain west.	Food plant genera include Cirsium, Cleome, Helianthus, Lupinus, Chrysothamnus, and Melilotus.	No suitable habitat is present on site. This species is not present.

Buteo swainsoni	Swainson's hawk	Birds	None	Threatened	BLM_S-Sensitive IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Great Basin grassland Riparian forest Riparian woodland Valley & foothill grassland	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.	No suitable habitat is present on site. This species is not present.
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	Mammals	None	None	CDFW_SSC-Species of Special Concern	Desert wash Pinon & juniper woodlands Sonoran desert scrub	Desert border areas in eastern San Diego County in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc.	Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	No suitable habitat is present on site. This species is not present.

Charina umbratica	southern rubber boa	Reptiles	None	Threatened	USFS_S-Sensitive	Meadow & seep Riparian forest Riparian woodland Upper montane coniferous forest Wetland	Known from the San Bernardino and San Jacinto mtns; found in a variety of montane forest habitats. Snakes resembling C. umbratica reported from Mt. Pinos and Tehachapi mtns group with C. bottae based on mtDNA. Further research needed.	Found in vicinity of streams or wet meadows; requires loose, moist soil for burrowing; seeks cover in rotting logs, rock outcrops, and under surface litter.	No suitable habitat is present on site. This species is not present.
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Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	Threatened	Endangered	BLM_S-Sensitive NABCI_RWL-Red Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	Riparian forest	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	No suitable habitat is present on site. This species is not present.
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Corynorhinus townsendii	Townsend's big-eared bat	Mammals	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	Broadleaved upland forest Chaparral Chenopod scrub Great Basin grassland Great Basin scrub Joshua tree woodland Lower montane coniferous forest Meadow & seep Mojavean desert scrub Riparian forest Riparian woodland Sonoran desert scrub Sonoran thorn woodland Upper montane coniferous	Throughout California in a wide variety of habitats. Most common in mesic sites.	Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	No suitable habitat is present on site. This species is not present.
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Diadophis punctatus modestus	San Bernardino ringneck snake	Reptiles	None	None	USFS_S-Sensitive		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.	No suitable habitat is present on site. This species is not present.
Empidonax traillii extimus	southwestern willow flycatcher	Birds	Endangered	Endangered	NABCI_RWL-Red Watch List	Riparian woodland	Riparian woodlands in Southern California.		No suitable habitat is present on site. This species is not present.

Emys marmorata	western pond turtle	Reptiles	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	Aquatic Artificial flowing waters Klamath/North coast flowing waters Klamath/North coast standing waters Marsh & swamp Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters South coast flowing waters South coast standing waters Wetland	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	No suitable habitat is present on site. This species is not present.
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Euchloe hyantis andrewsi	Andrew's marble butterfly	Insects	None	None		Lower montane coniferous forest	Inhabits yellow pine forest near Lake Arrowhead and Big Bear Lake, San Bernardino Mtns, San Bernardino Co, 5000- 6000 ft.	Hostplants are Streptanthus bernardinus and Arabis holboellii var pinetorum; larval foodplant is Descurainia richardsonii.	No suitable habitat is present on site. This species is not present.
Euphydryas editha quino	quino checkerspot butterfly	Insects	Endangered	None		Chaparral Coastal scrub	Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego counties.	Hills and mesas near the coast. Need high densities of food plants Plantago erecta, P. insularis, and Orthocarpus purpurescens.	No suitable habitat is present on site. This species is not present.

Falco mexicanus	prairie falcon	Birds	None	None	CDFW_WL-Watch List IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Great Basin grassland Great Basin scrub Mojavean desert scrub Sonoran desert scrub Valley & foothill grassland	Inhabits dry, open terrain, either level or hilly.	Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	No suitable habitat is present on site. This species is not present.
Glaucomys oregonensis californicus	San Bernardino flying squirrel	Mammals	None	None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	Broadleaved upland forest Lower montane coniferous forest	Known from black oak or white fir dominated woodlands between 5200 - 8500 ft in the San Bernardino and San Jacinto ranges. May be extirpated from San Jacinto range.	Needs cavities in trees/snags for nests and cover. Needs nearby water.	No suitable habitat is present on site. This species is not present.

Gopherus agassizii	desert tortoise	Reptiles	Threatened	Threatened	IUCN_VU-Vulnerable	Joshua tree woodland Mojavean desert scrub Sonoran desert scrub	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat.	Require friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred.	No suitable habitat is present on site. This species is not present.
Haliaeetus leucocephalus	bald eagle	Birds	Delisted	Endangered	BLM_S-Sensitive CDF_S-Sensitive CDFW_FP-Fully Protected IUCN_LC-Least Concern USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	Lower montane coniferous forest Oldgrowth	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water.	Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	No suitable habitat is present on site. This species is not present.

Helminthoglypta mohaveana	Victorville shoulderband	Mollusks	None	None	IUCN_NT-Near Threatened	Aquatic Great Basin flowing waters	Known only from along the Mojave River in San Bernardino County.	Found among granite boulders and at the base of rocky cliffs.	No suitable habitat is present on site. This species is not present.
Helminthoglypta taylori	westfork shoulderband	Mollusks	None	None		Riparian woodland	Vicinity of the Mojave River.	Under logs and leaves.	No suitable habitat is present on site. This species is not present.
Icteria virens	yellow-breasted chat	Birds	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Riparian forest Riparian scrub Riparian woodland	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses	Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	No suitable habitat is present on site. This species is not present.

Lanius ludovicianus	loggerhead shrike	Birds	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Broadleaved upland forest Desert wash Joshua tree woodland Mojavean desert scrub Pinon & juniper woodlands Riparian woodland Sonoran desert scrub	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes.	Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Suitable habitat is present on site. This species has potential to be present.
Lasiurus cinereus	hoary bat	Mammals	None	None	IUCN_LC-Least Concern WBWG_M-Medium Priority	Broadleaved upland forest Cismontane woodland Lower montane coniferous forest North coast coniferous forest	Prefers open habitats or habitat mosaics, 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.	No suitable habitat is present on site. This species is not present.

Microtus californicus mohavensis	Mohave river vole	Mammals	None	None	CDFW_SSC-Species of Special Concern	Riparian scrub	Occurs only in weedy herbaceous growth in wet areas 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.	No suitable habitat is present on site. This species is not present.
Neotamias speciosus speciosus	lodgpole chipmunk	Mammals	None	None		Chaparral Upper montane coniferous forest	Summits of isolated Piute, San Bernardino, and San Jacinto mountains. Usually found in open-canopy forests.	Habitat is usually lodgepole pine forests in the San Bernardino Mts and chinquapin slopes in the San Jacinto Mts.	No suitable habitat is present on site. This species is not present.
Palaeoxenus dohrni	Dohrn's elegant eucnemid beetle	Insects	None	None					No suitable habitat is present on site. This species is not present.

Pandion haliaetus	osprey	Birds	None	None	CDF_S-Sensitive CDFW_WL-Watch List IUCN_LC-Least Concern	Riparian forest	Ocean shore, bays, freshwater lakes, and larger streams.	Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	No suitable habitat is present on site. This species is not present.
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Chaparral Cismontane woodland Coastal bluff scrub Coastal scrub Desert wash Pinon & juniper woodlands Riparian scrub Riparian woodland Valley & foothill grassland	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Suitable habitat is present on site. This species has potential to be present.

Piranga rubra	summer tanager	Birds	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Riparian forest	Summer resident of desert riparian along lower Colorado River, and locally elsewhere in California deserts.	Requires cottonwood-willow riparian for nesting and foraging; prefers older, dense stands along streams.	No suitable habitat is present on site. This species is not present.
Plebulina emigdionis	San Emigdio blue butterfly	Insects	None	None	USFS_S-Sensitive		Found in desert canyons and along riverbeds in Inyo, Kern, Los Angeles, and San Bernardino counties.	Host plant is Atriplex canescens; maybe Lotus purshianus also.	No suitable habitat is present on site. This species is not present.

Rana draytonii	California red-legged frog	Amphibians	Threatened	None	CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable	Aquatic Artificial flowing waters Artificial standing waters Freshwater marsh Marsh & swamp Riparian forest Riparian scrub Riparian woodland Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters South coast flowing waters South coast standing waters Wetland	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	No suitable habitat is present on site. This species is not present.
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Rana muscosa	southern mountain yellow-legged frog	Amphibians	Endangered	Endangered	CDFW_WL-Watch List IUCN_EN-Endangered USFS_S-Sensitive	Aquatic	Federal listing refers to populations in the San Gabriel, San Jacinto and San Bernardino mountains (southern DPS). Northern DPS was determined to warrant listing as endangered, Apr 2014, effective Jun 30, 2014.	Always encountered within a few feet of water. Tadpoles may require 2 - 4 yrs to complete their aquatic development.	No suitable habitat is present on site. This species is not present.
Rhinichthys osculus ssp. 8	Santa Ana speckled dace	Fish	None	None	AFS_TH-Threatened CDFW_SSC-Species of Special Concern USFS_S-Sensitive	Aquatic South coast flowing waters	Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles River system.	Requires permanent flowing streams with summer water temps of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	No suitable habitat is present on site. This species is not present.

Setophaga petechia	yellow warbler	Birds	None	None	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	Riparian forest Riparian scrub Riparian woodland	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada.	Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	No suitable habitat is present on site. This species is not present.
Siphateles bicolor mohavensis	Mohave tui chub	Fish	Endangered	Endangered	AFS_EN-Endangered CDFW_FP-Fully Protected	Aquatic Artificial flowing waters Artificial standing waters	Endemic to the Mojave River basin, adapted to alkaline, mineralized waters.	Needs deep pools, ponds, or slough-like areas. Needs vegetation for spawning.	No suitable habitat is present on site. This species is not present.

Taxidea taxus	American badger	Mammals	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Alkali marsh Alkali playa Alpine Alpine dwarf scrub Bog & fen Brackish marsh Broadleaved upland forest Chaparral Chenopod scrub Cismontane woodland Closed-cone coniferous forest Coastal bluff scrub Coastal dunes Coastal prairie Coastal scrub Desert dunes Desert wash Freshwater marsh Great Basin grassland Great Basin	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	No suitable habitat is present on site. This species is not present.
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Thamnophis hammondii	two-striped gartersnake	Reptiles	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	Marsh & swamp Riparian scrub Riparian woodland Wetland	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.	No suitable habitat is present on site. This species is not present.
Toxostoma lecontei	Le Conte's thrasher	Birds	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	Desert wash Mojavean desert scrub Sonoran desert scrub	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 2-8 feet above ground.	No suitable habitat is present on site. This species is not present.

Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered	IUCN_NT-Near Threatened NABCI_YWL-Yellow Watch List	Riparian forest Riparian scrub Riparian woodland	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	No suitable habitat is present on site. This species is not present.
Vireo vicinior	gray vireo	Birds	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern NABCI_YWL-Yellow Watch List USFS_S-Sensitive USFWS_BCC-Birds of Conservation Concern	Chaparral	Dry chaparral; west of desert, in chamise-dominated habitat; mountains of Mojave Desert, associated with juniper and Artemisia.	Forage, nest, and sing in areas formed by a continuous growth of twigs, 1-5 ft above ground.	No suitable habitat is present on site. This species is not present.

Xerospermop hilus mohavensis	Mohave ground squirrel	Mammals	None	Threatened	BLM_S-Sensitive IUCN_VU- Vulnerable	Chenopod scrub Joshua tree woodland Mojavean desert scrub	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.	No suitable habitat is present on site. This species is not present.
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APPENDIX C



Nevada joint fir scrub onsite. View looking northwest.



Disturbed habitat on site with no vegetation. View looking south.



Disturbed habitat on site followed by joint fir scrub habitat. Neighboring railroad tracks in the distance. View looking east.



Nevada joint fir scrub habitat on site. Residential area in the distance. View looking west.



Creosote bushes on site where impacts will occur. View looking northeast.



Joint fir scrub habitat on site. Nevada ephedra (*Ephedra nevadensis*) and rubber rabbitbrush (*Ericameria nauseosa*). View looking northeast.

APPENDIX D

Soil Map—San Bernardino County, California, Mojave River Area



Map Scale: 1:2,560 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County, California, Mojave River Area
 Survey Area Data: Version 13, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 27, 2021—May 24, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
105	BRYMAN LOAMY FINE SAND, 0 TO 2 PERCENT SLOPES	18.7	79.3%
106	BRYMAN LOAMY FINE SAND, 2 TO 5 PERCENT SLOPES	4.8	20.3%
112	CAJON SAND, 0 TO 2 PERCENT SLOPES	0.1	0.3%
Totals for Area of Interest		23.5	100.0%