



**GENERAL BIOLOGICAL ASSESSMENT
FOR THE
PEPPER INDUSTRIAL BUILDING**

**Accessor's Parcel Numbers
0264-201-05, 0264-201-06, and 0264-201-26**

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

Prepared for:

**EPD Solutions, Inc.
2 Park Plaza Suite 1120
Irvine, CA 92614**

Prepared by:

**Hernandez Environmental Services
17037 Lakeshore Drive
Lake Elsinore, CA 92530**

AUGUST 2021

TABLE OF CONTENTS

1.0	Introduction.....	3
1.1	Project Site Location	3
1.2	Project Description	3
2.0	Methodology.....	3
2.1	Literature Review	3
2.2	Field Survey	3
3.0	Existing Conditions and Results	4
3.1	Environmental Setting.....	4
3.2	Soils.....	4
3.3	Plant and Habitat Communities	4
3.4	Wildlife.....	5
3.5	Regional Connectivity/Wildlife Movement	5
3.6	Sensitive Biological Resources	5
3.6.1	Sensitive Plant Resources	6
3.6.2	Sensitive Animal Resources.....	8
3.7	Nesting Birds.....	13
3.8	Jurisdictional Waters	13
4.0	Project Impacts.....	13
4.1	Impacts to Habitats.....	13
4.2	Impacts to Sensitive Species	13
4.3	Impacts to Nesting Birds.....	13
4.4	Impacts to Critical Habitat	13
4.5	Impacts to Wildlife Movement Corridors	13
4.6	Conflict with Local Policies or Ordinances Protecting Biological Resources.....	14
4.7	Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Local, Regional, or State Habitat Conservation Plan	14
4.8	State and Federal Drainages	14
5.0	Recommendations.....	14
6.0	Certification	15

7.0 References..... 16

FIGURES

Figure 1 – Location Map

Figure 2 – Vicinity Map

Figure 3 – Project plans

Figure 4 – Habitat Map

APPENDICES

Appendix A – Species Observed

Appendix B – Species Presence/Absence List

Appendix C – Site Photographs

Appendix D – Soils

Appendix E – Botanical Survey

Appendix F – Focused Burrowing Owl Survey Report

1.0 Introduction

Hernandez Environmental Services (HES) was contracted to prepare a general biological assessment (GBA) for the Pepper Industrial Building Project site. The approximate 24.6-acre project site consists of Assessor's Parcel Numbers (APNs) 0264-201-05, 0264-201-06, and 0264-201-26. The project site is located south of the Interstate 210 and east of North Pepper Avenue in the City of Rialto, San Bernardino County, California.

1.1 Project Site Location

The project site is located south of the Interstate 210 and east of North Pepper Avenue in the city of Rialto. The project site consists of San Bernardino County APNs 0264-201-05, 0264-201-06, and 0264-201-26. Specifically, the project site is located within the Muscupiabe land grant in the *San Bernardino North* United States Geological Survey (USGS) 7.5' topographic quadrangle. The center point latitude and longitude for the project site are 34.13153802° North and 117.35110039 West (Figures 1 and 2).

1.2 Project Description

The project proposes the development of an approximate 432,000 SF industrial building in the Pepper Avenue Specific Plan area. In addition, the proposed project includes associated site access improvements, parking, trailer parking stalls, landscaping, and related infrastructure and utilities. Refer to Figure 3. The proposed project will impact the entire 24.6-acre project site.

2.0 Methodology

2.1 Literature Review

HES conducted a literature review and reviewed aerial photographs and topographic maps of the project site and surrounding areas. HES conducted a literature review and reviewed aerial photographs and topographic maps of the project site and surrounding areas. The *San Bernardino North 7.5'* USGS topographic quadrangle and eight surrounding quadrangles were used to identify sensitive species with the California Natural Diversity Data Base (CNDDB), the U.S. Fish and Wildlife Service (USFWS) Endangered Species Lists, and the California Native Plant Society (CNPS) rare plant lists to obtain species information for the project area. The CNDDB and USFWS critical habitat databases were utilized, together with Geographic Information System (GIS) software, to locate the previously recorded locations of sensitive plant and wildlife occurrences and designated critical habitat and determine the distance from the project site.

2.2 Field Survey

On April 5, 2021, HES conducted a field survey of the project site. The ambient temperature at 7:15 a.m. was 52 degrees Fahrenheit, sunny, with winds ranging from zero to four 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 land uses, assess the potential for state and federal waters, assess the potential for wildlife movement corridors, and assess the presence of constituent elements for critical habitat, if present.

Linear transects spaced approximately 50 to 100 feet apart were walked across the project site for 100 percent coverage. All species observed were recorded. Global Positioning System (GPS) waypoints were taken to delineate specific habitat types, species locations, state or federal waters, and 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 Existing Conditions and Results

3.1 Environmental Setting

The project site is located within the City of Rialto, San Bernardino County, California. The project site consists of disturbed land historically used for agricultural use. The site appears to be continually disturbed for weed abatement purposes. The site is bordered by vacant lands and Interstate 210 to the north, North Pepper Avenue to the west, vacant land and railroad tracks to the east, and ruderal habitat to the south. The site is relatively flat with onsite elevations ranging from 1,256 feet above mean sea-level (AMSL) to 1,287 feet AMSL.

3.2 Soils

According to the USDA Web Soil Survey, soils at the project site are classified as Grangeville fine sandy loam (Gr), warm MAAT, MLRA 19 and Tujunga loamy sand (TuB), 0 to 5 percent slopes (Appendix D).

3.3 Plant and Habitat Communities

The project site contains approximately 24.6 acres of ruderal habitat. The onsite ruderal habitat is heavily disturbed areas. This habitat type is dominated by non-native plant species with very few native species. Portions of these areas appear to have been reseeded with native annual flowers. Plant species observed within this habitat type include slender oats (*Avena barbata*), wild oats (*Avena fatua*), horehound weed (*Marrubium vulgare*), short pod mustard (*Hirschfeldia incana*), rip gut brome (*Bromus diandrus*), red-stemmed filaree (*Erodium cicutarium*), foxtail barley (*Hordeum jubatum*), wall barley (*Hordeum murinum*), yellow starthistle (*Centaurea melitensis*), common fiddleneck (*Amsinckia intermedia*), and London rocket (*Sisymbrium irio*).

3.4 Wildlife

General wildlife species documented on the project site or within the vicinity of the site include Savannah sparrow (*Passerculus sandwichensis*), red-tailed hawk (*Buteo jamaicensis*), desert cottontail (*Sylvilagus audubonii*), pocket gopher (*Thomomys talpoides*), ground squirrel (*Otospermophilus beecheyi*), house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), white crowned sparrow (*Zonotrichia leucophrys*), and Anna's hummingbird (*Calypte anna*). The complete list of species observed is included in Appendix A.

3.5 Regional Connectivity/Wildlife Movement

Wildlife movement corridors can be local or regional in scale; their functions may vary temporally and spatially based on conditions and species present. Wildlife corridors represent areas where wildlife movement is concentrated due to natural or anthropogenic constraints. Local corridors provide access to resources such as food, water, and shelter. Animals use these corridors, which are often hillsides or riparian areas, to move between different habitats. Regional corridors provide these functions and link two or more large habitat areas. They provide avenues for wildlife dispersal, migration, and contact between otherwise distinct populations.

The project site is not located within a designated wildlife corridor or linkage. The project area was evaluated for its function as a wildlife corridor that species use to move between wildlife habitat zones. The project site consists of flat, disturbed land characterized by ruderal areas historically utilized for agricultural use. Further, the project site is surrounded by residential uses to the north, water facilities to the south, Interstate 210 to the north, the railroad to the east, and Pepper Avenue to the east. No wildlife movement corridors were found to be present on the project site.

3.6 Sensitive Biological Resources

According to the CNDDDB, a total of 59 sensitive species of plants and 66 sensitive species of animals have the potential to occur on or within the vicinity of the project area. 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). All habitats with the potential to be used by sensitive species were evaluated during the site visit and a determination has been made for the presence or probability of presence within this report. This section will address those species listed as Candidate, Rare, Threatened, or Endangered under the state and federal endangered species laws. Sensitive species which have a potential to occur will also be discussed in this section. Other special status species are addressed within Appendix B.

3.6.1 Sensitive Plant Resources

A total of 13 plant species are listed as state and/or federal Threatened, Endangered, or Candidate species; are 1B.1 listed plants on the CNPS Rare Plant Inventory; or have been found to have a potential to exist on the project site. Below are descriptions of these species:

Marsh sandwort

Marsh sandwort (*Arenaria paludicola*) is a federally and state listed Endangered species and is ranked 1B.1 in the CNPS Rare Plant Inventory. It is found in freshwater marsh, wetland, and marsh and swamp habitats. The project site consists of ruderal habitat, ornamental vegetation, and disturbed areas. No freshwater marsh, wetland, or marsh and swamp habitats occur on the site. No habitat for this species is present on the project site. **This species is not present.**

Horn's milk-vetch

Horn's milk-vetch is ranked 1B.1 in the CNPS Rare Plant inventory. Its habitats include alkali playa meadows, seeps, and wetlands. The project site consists of ruderal habitat, ornamental vegetation, and disturbed areas. No alkali playa meadows, seeps, or wetlands occur on the site. No habitat for this species is present on the project site. **This species is not present.**

Nevin's barberry

Nevin's barberry (*Berberis nevinii*) is a federally and state Endangered species and is ranked 1B.1 in the CNPS Rare Plant inventory. It is typically found on steep, north facing slopes or in low grade sandy washes. Its habitat includes chaparral, cismontane woodland, coastal scrub, and riparian scrub. The project site consists of ruderal habitat, ornamental vegetation, and disturbed areas. No chaparral, cismontane woodland, coastal scrub, or riparian scrub occur on the site. No habitat for this species is present on the project site. **This species is not present.**

Thread-leaved brodiaea

The thread-leaved brodiaea (*brodiaea filifolia*) is a federally Threatened, state Endangered and is ranked 1B.1 in the CNPS Rare Plant inventory. It is found in chaparral, cismontane woodlands, coastal sage scrub, valley and foothill grasslands, vernal pools and wetland. The project site consists of ruderal habitat, ornamental vegetation, and disturbed areas. No chaparral, cismontane woodland, coastal scrub, valley and foothill grasslands, vernal pools or wetlands occur on the site. No habitat for this species is present on the project site. **This species is not present.**

Smooth tarplant

Smooth tarplant (*Centromadia pungens ssp. laevis*) is ranked 1B.1 in the CNPS Rare Plant inventory. The species occurs in habitats that include alkali playa, chenopod scrub, meadows and seeps, riparian woodlands, wetlands, and valley and foothill grasslands. The project site consists of ruderal habitat, ornamental vegetation, and disturbed areas. No alkali playa, chenopod scrub, meadows and seeps, riparian woodlands, wetlands, or valley and foothill

grasslands occur on the site. Although suitable habitat occurs on the project site, this species was not observed during focused surveys (Appendix E). **This species is not present.**

Salt marsh bird's-beak

Salt marsh bird's beak (*Chloropyron maritimum ssp. maritimum*) is a federally and state listed Endangered species and is ranked 1B.2 in the CNPS Rare Plant inventory. This species is limited to the higher zones of salt marsh habitat at elevations of less than ten meters. Its habitat includes coastal dunes, marsh and swamp, salt marsh, and wetland. The project site consists of ruderal habitat, ornamental vegetation, and disturbed areas. No coastal dunes, marsh and swamp, salt marsh, or wetlands occur on the site. No habitat for this species is present on the project site. Focused surveys found that this species is absent from the project site (Appendix E). **This species is not present.**

Parry's spineflower

Parry's spineflower (*Chorizanthe parryi var. parryi*) is ranked 1B.1 in the CNPS Rare Plant inventory. The species occurs in dry, sandy soils on dry slopes and flats, sometimes at the interface of two vegetations types, such as chaparral and oak woodland. Its habitat includes coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. Although suitable habitat occurs on the project site, this species was not observed during focused surveys (Appendix E). **This species is not present.**

Mojave tarplant

Mojave tarplant (*Deinandra mohavensis*) is a state listed Endangered species and is ranked 1B.3 in the CNPS Rare Plant inventory. This species is typically found in low sand bars in river beds and most commonly in riparian or ephemeral grassy areas. Its habitat includes chaparral, coastal scrub, and riparian scrub. No habitat for this species is present on the project site. **This species is not present.**

Slender-horned spineflower

Slender - horned spineflower (*Dodecahema leptoceras*) is a federally and state listed Endangered species and is ranked 1B.1 in the CNPS Rare Plant inventory. Its habitat includes chaparral, cismontane woodland, and coastal scrub (alluvial fan sage scrub). The project site consists of ruderal habitat, ornamental vegetation, and disturbed areas. No chaparral, cismontane woodland, or coastal scrub occur on the site. No habitat for this species exists on the project site. Further, focused surveys found that this species is absent from the project site (Appendix E). **This species is not present.**

Santa Ana River woollystar

Santa Ana River woollystar (*Eriastrum densifolium ssp. sanctorum*) is a federally and state listed Endangered species and is ranked 1B.1 in the CNPS Rare Plant inventory. It is typically found

in sandy soils on river floodplains or terraced fluvial deposits. Its habitat includes chaparral and coastal scrub. The project site consists of ruderal habitat, ornamental vegetation, and disturbed areas. No chaparral or coastal scrub occur on the site. No habitat for this species is present on the project site. Further, focused surveys found that this species is absent from the project site (Appendix E). **This species is not present.**

Parish's daisy

Parish's daisy (*Erigeron parishii*) is a federally Threatened species and is ranked 1B.1 in the CNPS Rare Plant Inventory. This species is typically found on carbonate; limestone mountain slopes; often associated with drainages and sometimes on granite. Its habitat includes Mojavean desert scrub, pinyon and juniper woodland. No habitat for this species exists on the project site. **This species is not present.**

Mesa horkelia

Mesa horkelia (*Horkelia cuneate var. puberula*) is ranked 1B.1 in the CNPS Rare Plant inventory. It is typically found in sandy or gravelly sites. Its habitat includes chaparral, cismontane woodland, and coastal scrub. The project site consists of ruderal habitat, ornamental vegetation, and disturbed areas. No chaparral, cismontane woodland, or coastal scrub occur on the site. No habitat for this species is present on the project site. Further, focused surveys found that this species is absent from the project site (Appendix E). **This species is not present.**

Gambel's water cress

Gambel's water cress (*Nasturtium gambelii*) is federally listed endangered species, a state listed threatened species, and is ranked 1B.1 in the CNPS Rare Plant inventory. It is found in freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. Its habitat includes brackish marsh, freshwater marsh, marsh and swamp, and wetland. The project site consists of ruderal habitat, ornamental vegetation, and disturbed areas. No brackish marsh, freshwater marsh, marsh and swamp, or wetlands occur on the site. No habitat for this species is present on the project site. **This species is not present.**

3.6.2 Sensitive Animal Resources

A total of 21 animal species are listed as state and/or federal Threatened, Endangered, Candidate will be reviewed in this section. 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 within Appendix B. Below are descriptions of these species:

Tricolored blackbird

Tricolored blackbird (*Agelaius tricolor*) is state listed as candidate Endangered and listed by the CDFW as a species of special concern. The species occupies freshwater marshes with canopies of willows and other riparian trees. This species requires open accessible water and suitable foraging space. There is no habitat for this species on the project site. **The 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.**

Crotch bumble bee

Crotch bumble bee (*Bombus crotchii*) is a state listed candidate Endangered species. This species typically lives in coastal California east to the Sierra Cascade crest and south into Mexico. Its food plant includes *Antirrhinum sp.*, *Clarkia sp.*, *Dendromecon sp.*, *Eschscholzia sp.*, and *Erigonum sp.* No habitat for this species is 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.**

Santa Ana sucker

Santa Ana sucker (*Catostomus santaanae*) is a federally listed Threatened species. Its habitat includes aquatic and south coast flowing waters. This species prefers sand-rubble-boulder bottoms, cool and clear water, and algae. It is endemic to Los Angeles Basin south coastal streams. 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. 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 federally listed Threatened, and state listed endangered species. This species typically nests in riparian jungles of willows, often mixed with cottonwoods, with 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.**

San Bernardino kangaroo rat

San Bernardino kangaroo rat (*Dipodomys merriami parvus*) is a federally listed Endangered species and a candidate state listed Endangered species. It is found in coastal scrub habitat. This species is found in alluvial scrub vegetation on sandy loam substrates, characteristic of alluvial fans and flood plains. It needs early to intermediate seral stages. The project site is located within federally designated critical habitat for this species. Further, this species has been observed within the wash area to the west of Pepper Avenue.

The site is heavily disturbed and dominated by non-native plant species. San Bernardino kangaroo rat prefers sparse scrub habitats such as alluvial scrub and coastal sage scrub habitats on gravelly and sandy soils adjoining river and stream terraces and on alluvial fans. No native scrub habitats are present on the site. Furthermore, busy roads and disturbed lands separate the project site from suitable habitat. The project site does not contain suitable habitat for this species. **This species is not present.**

Stephen's kangaroo rat

Stephens' kangaroo rat (*Dipodomys stephensi*) is a federally listed Endangered and state listed Threatened species. This species is found in coastal sage scrub with sparse vegetation cover, and in valley and foothill grasslands. This species prefers buckwheat, chamise, brome grass, and filaree and will burrow into firm soil. 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 on both the federal and state Endangered list. It is commonly found in riparian woodland habitats 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 contain suitable habitat for this species. **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. They nest in large old-growth or tress with open branches, especially ponderosa pine. The project site does not contain suitable habitat for this species. **This species is not present.**

California black rail

California black rail (*Laterallus jamaicensis coturniculus*) is a state listed Threatened species and is a CDFW Fully Protected Species. It inhabits freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays. This species needs water depths of about one inch that do not fluctuate throughout the year and dense vegetation for nesting habitat. Its habitat includes brackish marsh, freshwater marsh, marsh and swamp, salt marsh, and wetland. The project site does not have suitable habitat for this species. **This species is not present.**

Steelhead-southern California DPS

Steelhead-southern California DPS (*Oncorhynchus mykiss irideus pop. 10*) is a federally listed Endangered species. This species is likely to have greater physiological tolerances to warmer water and more variable conditions. Its habitats include aquatic and south coast flowing waters. The project site does not have suitable habitat for this species. **This species is not present.**

Coastal California gnatcatcher

Coastal California gnatcatcher (*Polioptila californica californica*) is a federally listed Threatened species and CDFW Species of Special Concern. This species is found in coastal bluff scrub and coastal scrub habitat. This species is typically found in low, coastal sage scrub in arid washes, on mesas and slopes. The project site does not contain suitable habitat for this species. **This species is not 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 Juaquin 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.**

Delhi Sands flower-loving fly

Delhi Sands flower-loving fly (*Rhaphiomidas terminates abdominalis*) is a federally listed Endangered species. It requires fine, sandy soils, often with wholly or partly consolidated dunes and sparse vegetation. It is found only in areas of the Delhi Sands formation in southwestern San Bernardino and northwestern Riverside counties. This species is found in interior dune habitat. The project site does not have 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 alkline 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. No suitable habitat for this species is present on the project site. **This species is not 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. Therefore, focused surveys for this species were conducted (Appendix F). Although suitable habitat occurs on the project site, this species was not observed during focused surveys. **This species is not present.**

3.7 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 project site contains trees and shrubs that can be utilized by nesting birds and raptors during the nesting bird season of February 1 through September 15.

3.8 Jurisdictional Waters

The project site does not contain any drainage, riparian, or riverine features. There are no CDFW, United States Army Corps of Engineers (USACE), or Regional Water Quality Control Board (RWQCB) jurisdictional waters within the project site boundaries.

4.0 Project Impacts

4.1 Impacts to Habitats

The project proposes the development of an approximate 432,000 SF industrial building, associated site access improvements, parking, trailer parking stalls, landscaping, and related infrastructure and utilities. Implementation of the proposed project will impact the entire 24.6-acre site comprised of ruderal habitat.

4.2 Impacts to Sensitive Species

No sensitive species have the potential to occur on the project site. No impacts to sensitive species are expected.

4.3 Impacts to Nesting Birds

Potential impacts to nesting birds may occur if ground disturbing activities or vegetation removal occur during the bird nesting season of February 1 through September 15. Implementation of the measures identified in the Recommendations section of this report will ensure that potential impacts to nesting birds are less than significant.

4.4 Impacts to Critical Habitat

The project site is located within designated federal critical habitat for San Bernardino kangaroo rat. No suitable habitat for this species occurs on the project site. Therefore, impacts to San Bernardino kangaroo rat critical habitat are not anticipated to be significant.

4.5 Impacts to Wildlife Movement Corridors

No wildlife movement corridors were found to be present on the project site. No impacts are expected.

4.6 Conflict with Local Policies or Ordinances Protecting Biological Resources

Should the proposed project result in the removal of trees, it will be required to comply with the County of San Bernardino's Plant Protection and Management Ordinances.

4.7 Conflict with the Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or Other Approved Local, Regional, or State Habitat Conservation Plan

The Project would not be anticipated to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.8 State and Federal Drainages

The project site does not contain any state or federal drainages, therefore no impacts to any jurisdictional drainages are expected.

5.0 Recommendations

Based upon the findings of this report, it is recommended that the following studies or surveys be performed as part of the project.

Nesting Birds

- It is recommended that vegetation removal be conducted outside of the nesting season for migratory birds to avoid direct impacts.
- If vegetation removal will occur during the migratory bird nesting season, between February 1 and September 15, pre-construction nesting bird surveys shall be performed within three days prior to vegetation removal.
- If active nests are found during nesting bird surveys, they shall be flagged. A 250-foot buffer shall be fenced around song bird nests and a 500-foot buffer shall be fenced around raptor nests.

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 08/19/2021

Signed _____

PROJECT MANAGER

Fieldwork Performed By:

Elizabeth Gonzalez

Associate Biologist

7.0 References

Burt, W. H., 1986. *A Field Guide to the Mammals in North American North of Mexico*. Houghton Mifflin Company, Boston, Massachusetts.

California Department of Fish and Wildlife (CDFW), Natural Diversity Database (CNDDDB). Accessed August 2021 California Department of Fish and Wildlife, Sacramento, California.

Garrett, K. and J. Dunn, 1981. *Birds of Southern California*. Los Angeles Audubon Society. The Artisan Press, Los Angeles, California.

Grenfell, W. E., M. D. Parisi, and D. McGriff, 2003. *A Check-list of the Amphibians, Reptiles, Birds and Mammals of California*. California Wildlife Habitat Relationship System, California Department of Fish and Game, Sacramento, California.

Grinnell, J., 1933. *Review of the Recent Mammal Fauna of California*. University of California Publications in Zoology, 40:71-234.

Hall, E. R., 1981. *The Mammals of North America, Volumes I and II*. John Wiley and Sons, New York, New York.

Hickman, J. C., ed. 1993. *The Jepson Manual: Higher Plants of California*. University of California Press.

Ingles, L. G., 1965. *Mammals of the Pacific States*. Stanford University Press, Stanford, California.

Jameson, jr., E. W. and H. J. Peters. *California Mammals*. University of California Press, Berkeley, Los Angeles, London. 403 pp.

List of Vegetation Alliances and Associations. *Vegetation Classification and Mapping Program*, California Department of Fish and Game. Sacramento, CA. September 2010.

Meserve, P. 1976. Food relationships of a rodent fauna in a California coastal sage scrub community. *Journal of Mammalogy*, 57: 300-319.

Munz, P.A., 1974. *A Flora of Southern California*. University of California Press, Berkeley, California.

Peterson, R. 1990 *A Field Guide to Western Birds*. Houghton Mifflin Company, Boston, MA.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens 2009 *A Manual of California Vegetation, 2nd edition*. California Native Plant Society Press, Sacramento, CA.

U.S. Fish and Wildlife Service, 1998b. Endangered and Threatened Wildlife and Plants; Final Rule to List the San Bernardino Kangaroo Rat as Endangered, Vol. 63, No. 185, pp. 51005 – 51017.

U.S. Fish and Wildlife Service, 2014. Endangered and Threatened Wildlife and Plants. <https://www.fws.gov/endangered/species/us-species.html>. Accessed August 2021.

USGS (United States Geological Survey). 2018. San Bernardino North, California, Quadrangle. 7.5 Minute Series (topographic map).

Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov/>. Accessed August 2021.

Williams, D. F., 1986. Mammalian Species of Special Concern in California. Wildlife Management Division Administrative Report 86-1. Prepared for The Resources Agency, California Department of Fish and Game.

Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer and M. White, 1990. California's Wildlife, Volume III Mammals, The Resources Agency, Department of Fish and Game, Sacramento, California.

FIGURES

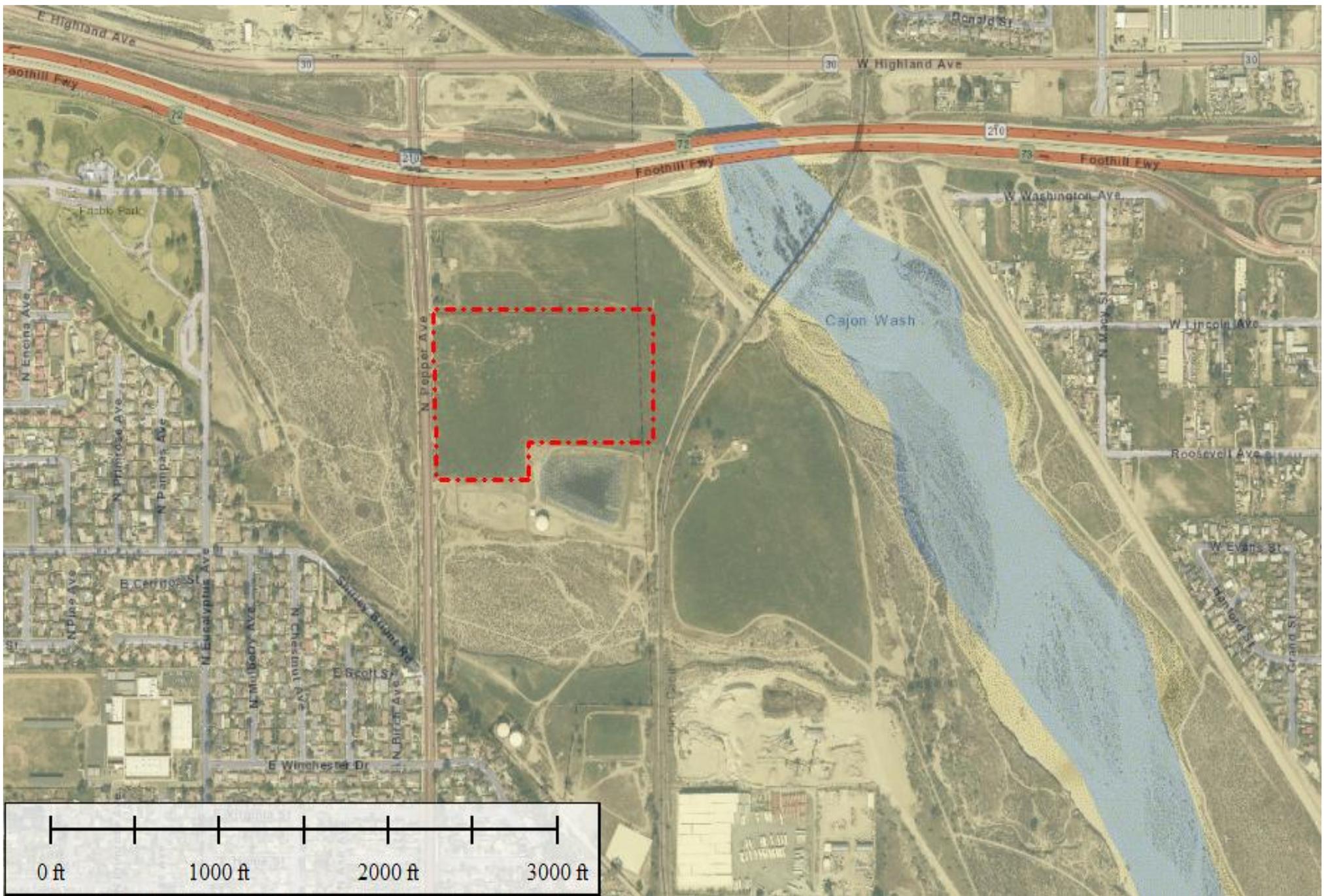


Figure 1
 Location Map
 Pepper Industrial Building
 San Bernardino County, California

Legend

 Project Site Boundary



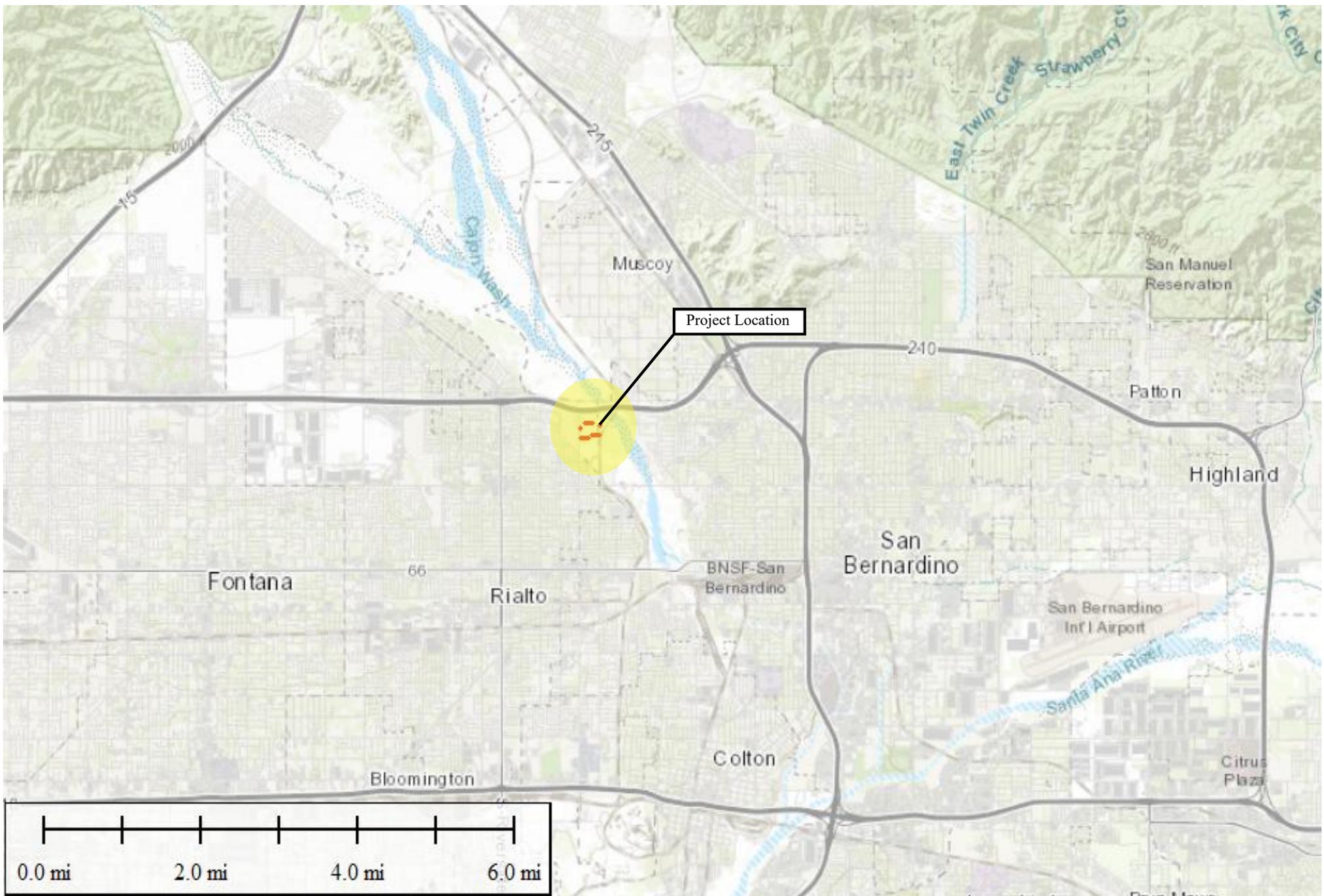


Figure 2
 Vicinity Map
 Pepper Industrial Building
 San Bernardino County, California

Legend
 Project Site Boundary



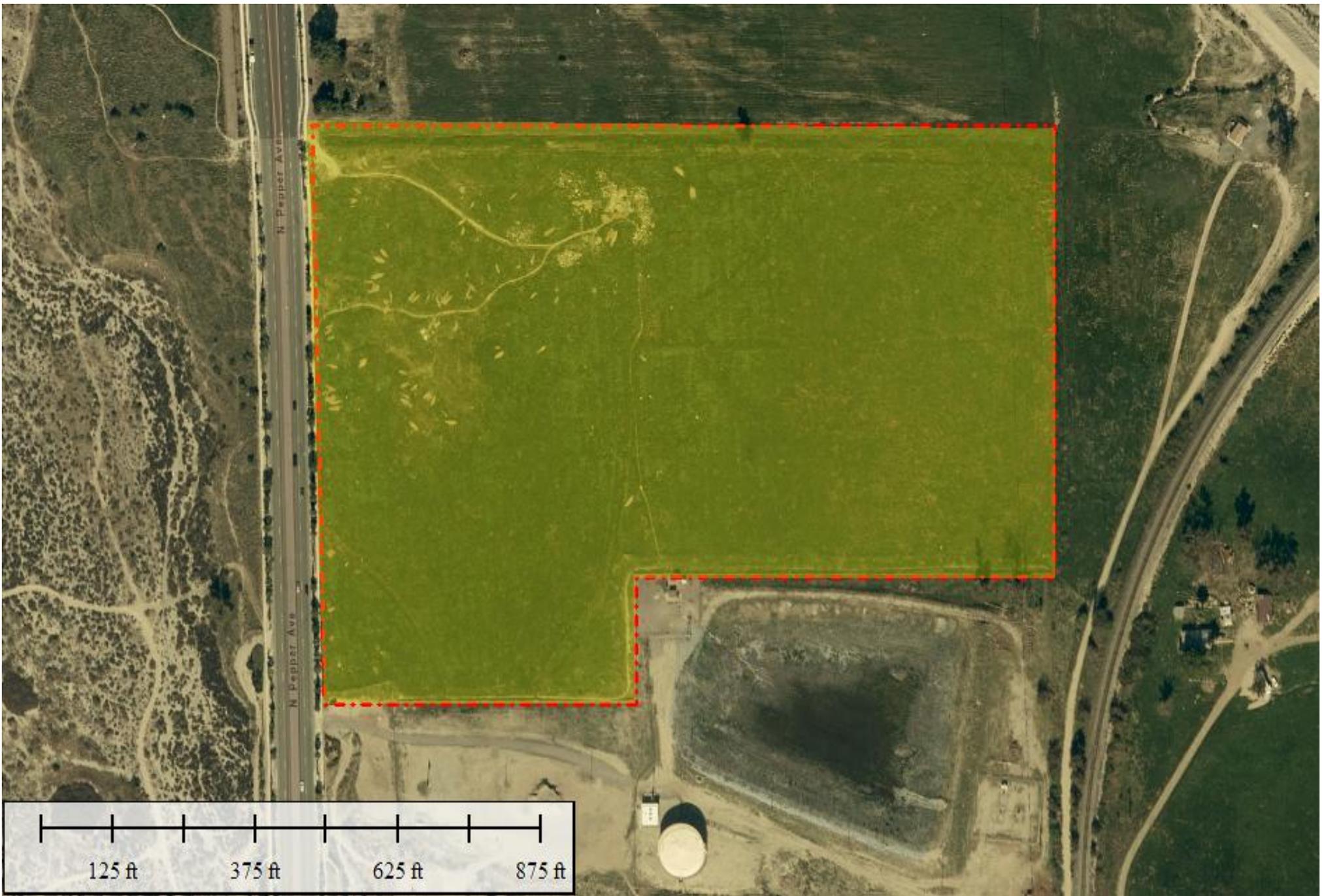


Figure 4
 Habitat Map
 Pepper Industrial Building
 San Bernardino County, California

Legend



Project Site Boundary



Ruderal Habitat (24.6 Acres)



APPENDIX A

Species List

Plant List

<i>Acmispon glaber</i>	Deerweed
<i>Ailanthus altissima</i>	Tree of heaven
<i>Ambrosia psilostachya</i>	Western ragweed
<i>Amsinckia menziesii</i>	Menzies' fiddleneck
<i>Avena barbata</i>	Slender oats
<i>Avena fatua</i>	Wild oats
<i>Brassica juncea</i>	Savanna mustard
<i>Bromus diandrus</i>	Rip gut brome
<i>Bromus madritensis rubens</i>	Red brome
<i>Centaurea melitensis</i>	Yellow starthistle
<i>Cryptantha intermedia</i>	Common cryptanth
<i>Datura stramonium</i>	Jimson weed
<i>Erigeron canadensis</i>	Canada horseweed
<i>Erodium cicutarium</i>	Common stork's-bill
<i>Erodium cicutarium</i>	Red-stemmed filaree
<i>Eucalyptus</i> sp.	Eucalyptus
<i>Helianthus annuus</i>	Common sunflower
<i>Heterotheca grandiflora</i>	Telegraph weed

Hirschfeldia incana

Short pod mustard

Hordeum jubatum

Foxtail barley

Hordeum murinum

Wall barley

Malva parviflora

Cheeseweed

Marrubium vulgare

Horehound

Pinus

Pine tree

Ricinus communis

Castor bean

Sambucus

Elderberry

Sisymbrium irio

London rocket

Washingtonia robusta

Mexican fan palm

Animal List

<i>Buteo jamaicensis</i>	Red-tailed hawk
<i>Calypte anna.</i>	Anna's Hummingbird
<i>Charadrius vociferus</i>	Killdeer
<i>Eremophila alpestris</i>	Horned lark
<i>Euphagus cyanocephalus</i>	Brewer's blackbird
<i>Haemorhous mexicanus</i>	House finch
<i>Icterus cucullatus</i>	Hooded oriole
<i>Melospiza melodia</i>	Song sparrow
<i>Otospermophilus beecheyi</i>	Ground squirrel
<i>Passerculus sandwichensis</i>	Savannah sparrow
<i>Petrochelidon pyrrhonota</i>	Cliff swallow
<i>Spinus psaltria</i>	Lesser goldfinch
<i>Sturnella neglecta</i>	Western meadowlark
<i>Sylvilagus audubonii</i>	Desert cottontail
<i>Thomomys talpoides</i>	Pocket gopher
<i>Trochilidae</i> sp.	Hummingbird sp.
<i>Zenaida macroura</i>	Mourning dove
<i>Zonotrichia leucophrys</i>	White crowned sparrow

APPENDIX B

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ 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>Ambrosia monogyra</i>	singlewhorl burrobrush	Dicots	None	None	2B.2	Chaparral Sonoran desert scrub	Chaparral, Sonoran desert scrub.	Sandy soils. 5-475 m.	No suitable habitat is present on site. This species is not present.
<i>Arenaria paludicola</i>	marsh sandwort	Dicots	Endangered	Endangered	1B.1	Freshwater marsh Marsh & swamp Wetland	Marshes and swamps.	Growing up through dense mats of Typha, Juncus, Scirpus, etc. in freshwater marsh. Sandy soil. 3-170 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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
Astragalus hornii var. hornii	Horn's milk-vetch	Dicots	None	None	1B.1	Alkali playa Meadow & seep Wetland	Meadows and seeps, playas.	Lake margins, alkaline sites. 75-350 m.	No suitable habitat is present on site. This species is not present.
Berberis nevinii	Nevin's barberry	Dicots	Endangered	Endangered	1B.1	Chaparral Cismontane woodland Coastal scrub Riparian scrub	Chaparral, cismontane woodland, coastal scrub, riparian scrub.	On steep, N-facing slopes or in low grade sandy washes. 90-1590 m.	No suitable habitat is present on site. This species is not present.
Brodiaea filifolia	thread-leaved brodiaea	Monocots	Threatened	Endangered	1B.1	Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland Vernal pool Wetland	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools.	Usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats. Occurs in openings on clay soils. 15-1030 m.	No suitable habitat is present on site. This species is not present.
Calochortus palmeri var. palmeri	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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
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.
Carex comosa	bristly sedge	Monocots	None	None	2B.1	Coastal prairie Freshwater marsh Marsh & swamp Valley & foothill grassland Wetland	Marshes and swamps, coastal prairie, valley and foothill grassland.	Lake margins, wet places; site below sea level is on a Delta island. -5-1010 m.	No suitable habitat is present on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
<i>Castilleja lasiorhyncha</i>	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.
<i>Centromadia pungens</i> ssp. <i>laevis</i>	smooth tarplant	Dicots	None	None	1B.1	Alkali playa Chenopod scrub Meadow & seep Riparian woodland Valley & foothill grassland Wetland	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland.	Alkali meadow, alkali scrub; also in disturbed places. 5-1170 m.	No suitable habitat is present on site. This species is not present.
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	salt marsh bird's-beak	Dicots	Endangered	Endangered	1B.2	Coastal dunes Marsh & swamp Salt marsh Wetland	Marshes and swamps, coastal dunes.	Limited to the higher zones of salt marsh habitat. 0-10 m.	No suitable habitat is present on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
Chorizanthe parryi var. parryi	Parry's spineflower	Dicots	None	None	1B.1	Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland.	Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 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.
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Dicots	None	None	2B.2	Marsh & swamp Wetland	Marshes and swamps (freshwater).	Freshwater marsh. 15-280 m.	No suitable habitat is present on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
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.
Dodecahema leptoceras	slender-horned spineflower	Dicots	Endangered	Endangered	1B.1	Chaparral Cismontane woodland Coastal scrub	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub).	Flood deposited terraces and washes; associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils. 200-765 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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
<i>Eremothera boothii</i> ssp. <i>boothii</i>	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.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Santa Ana River woollystar	Dicots	Endangered	Endangered	1B.1	Chaparral Coastal scrub	Coastal scrub, chaparral.	In sandy soils on river floodplains or terraced fluvial deposits. 180-705 m.	No suitable habitat is present on site. This species is not present.
<i>Erigeron parishii</i>	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 grainite. 1050-2245 m.	No suitable habitat is present on site. This species is not present.
<i>Fimbristylis thermalis</i>	hot springs <i>fimbristylis</i>	Monocots	None	None	2B.2	Meadow & seep Wetland	Meadows and seeps (alkaline).	Near hot springs. 115-1585 m.	No suitable habitat is present on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
<i>Galium californicum</i> ssp. <i>primum</i>	Alvin Meadow bedstraw	Dicots	None	None	1B.2	Chaparral Lower montane coniferous forest	Chaparral, lower montane coniferous forest.	Grows in shade of trees and shrubs at the lower edge of the pine belt, in pine forest-chaparral ecotone. Granitic, sandy soils. 1460-1830 m.	No suitable habitat is present on site. This species is not present.
<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Los Angeles sunflower	Dicots	None	None	1A	Freshwater marsh Marsh & swamp Salt marsh Wetland	Marshes and swamps (coastal salt and freshwater).	35-1525 m.	No suitable habitat is present on site. This species is not present.
<i>Heuchera parishii</i>	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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
Horkelia cuneata var. puberula	mesa horkelia	Dicots	None	None	1B.1	Chaparral Cismontane woodland Coastal scrub	Chaparral, cismontane woodland, coastal scrub.	Sandy or gravelly sites. 15-1645 m.	No suitable habitat is present on site. This species is not present.
Imperata brevifolia	California satintail	Monocots	None	None	2B.1	Chaparral Coastal scrub Meadow & seep Mojavean desert scrub Riparian scrub Wetland	Coastal scrub, chaparral, riparian scrub, mojavean desert scrub, meadows and seeps (alkali), riparian scrub.	Mesic sites, alkali seeps, riparian areas. 3-1495 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.
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	Dicots	None	None	4.3	Chaparral Coastal scrub	Chaparral, coastal scrub.	Dry soils, shrubland. 4-1435 m.	No suitable habitat is present on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
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 & seeps. 625-2930 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.
Malacothamnus parishii	Parish's bush-mallow	Dicots	None	None	1A	Chaparral Coastal scrub	Chaparral, coastal sage scrub.	In a wash. 305-455 m.	No suitable habitat is present on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
<i>Monardella macrantha</i> ssp. <i>hallii</i>	Hall's monardella	Dicots	None	None	1B.3	Broadleaved upland forest Chaparral Cismontane woodland Lower montane coniferous forest Valley & foothill grassland	Broadleafed upland forest, chaparral, lower montane coniferous forest, cismontane woodland, valley and foothill grassland.	Dry slopes and ridges in openings. 700-1800 m.	No suitable habitat is present on site. This species is not present.
<i>Monardella pringlei</i>	Pringle's monardella	Dicots	None	None	1A	Coastal scrub	Coastal scrub.	Sandy hills. 300-400 m.	No suitable habitat is present on site. This species is not present.
<i>Nasturtium gambelii</i>	Gambel's water cress	Dicots	Endangered	Threatened	1B.1	Brackish marsh Freshwater marsh Marsh & swamp Wetland	Marshes and swamps.	Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-305 m.	No suitable habitat is present on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
<i>Opuntia basilaris</i> var. <i>brachyclada</i>	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.
<i>Pediomelum castoreum</i>	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.	No suitable habitat is present on site. This species is not present.
<i>Perideridia parishii</i> ssp. <i>parishii</i>	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.
<i>Ribes divaricatum</i> var. <i>parishii</i>	Parish's gooseberry	Dicots	None	None	1A	Riparian woodland	Riparian woodland.	Salix swales in riparian habitats. 65-300 m.	No suitable habitat is present on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
Riversidian Alluvial Fan Sage Scrub	Riversidian Alluvial Fan Sage Scrub	Scrub	None	None		Coastal scrub			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.
Senecio aphanactis	chaparral ragwort	Dicots	None	None	2B.2	Chaparral Cismontane woodland Coastal scrub	Chaparral, cismontane woodland, coastal scrub.	Drying alkaline flats. 20-1020 m.	No suitable habitat is present on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
<i>Sidalcea malviflora</i> ssp. <i>dolosa</i>	Bear Valley checkerbloom	Dicots	None	None	1B.2	Lower montane coniferous forest Meadow & seep Riparian woodland Upper montane coniferous forest Wetland	Meadows and seeps, riparian woodland, lower montane coniferous forest, upper montane coniferous forest.	Known from wet areas within forested habitats. Affected by hydrological changes. 1575-2590 m.	No suitable habitat is present on site. This species is not present.
<i>Sidalcea neomexicana</i>	salt spring checkerbloom	Dicots	None	None	2B.2	Alkali playa Chaparral Coastal scrub Lower montane coniferous forest Mojavean desert scrub Wetland	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub.	Alkali springs and marshes. 3-2380 m.	No suitable habitat is present on site. This species is not present.
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	Riparian	None	None		Riparian forest			Not present.
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	Riparian	None	None		Riparian forest			Not present.
Southern Mixed Riparian Forest	Southern Mixed Riparian Forest	Riparian	None	None		Riparian forest			Not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
Southern Riparian Forest	Southern Riparian Forest	Riparian	None	None		Riparian forest			Not present.
Southern Riparian Scrub	Southern Riparian Scrub	Riparian	None	None		Riparian scrub			Not present.
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	Riparian	None	None		Riparian woodland			Not present.
Sphenopholis obtusata	prairie wedge grass	Monocots	None	None	2B.2	Cismontane woodland Meadow & seep Wetland	Cismontane woodland, meadows and seeps.	Open moist sites, along rivers and springs, alkaline desert seeps. 15-2625 m.	No suitable habitat is present on site. This species is not present.
Streptanthus bernardinus	Laguna Mountains jewelflower	Dicots	None	None	4.3	Chaparral Lower montane coniferous forest Upper montane coniferous forest	Chaparral, lower montane coniferous forest.	Clay or decomposed granite soils; sometimes in disturbed areas such as streamsides or roadcuts. 1440-2500 m.	No suitable habitat is present on site. This species is not present.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
Streptanthus campestris	southern jewelflower	Dicots	None	None	1B.3	Chaparral Lower montane coniferous forest Pinon & juniper woodlands	Chaparral, lower montane coniferous forest, pinyon and juniper woodland.	Open, rocky areas. 605-2590 m.	No suitable habitat is present on site. This species is not present.
Symphotrichum 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.
Symphotrichum greatae	Greata's aster	Dicots	None	None	1B.3	Broadleaved upland forest Chaparral Cismontane woodland Lower montane coniferous forest Riparian woodland	Chaparral, cismontane woodland, broadleaved 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	Rare Plant Rank	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
<i>Thelypteris puberula</i> var. <i>sonorensis</i>	Sonoran maiden fern	Ferns	None	None	2B.2	Meadow & seep Wetland	Meadows and seeps.	Along streams, seepage areas. 60-930 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	Presenc/ 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 flood-plains; 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 & 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.
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	Birds	None	None	CDFW_WL-Watch List	Chaparral Coastal scrub	Resident in Southern California coastal sage scrub and sparse mixed chaparral.	Frequents relatively steep, often rocky hillsides with grass and forb patches.	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	Presenc/ Absence
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.
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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
<i>Antrozous pallidus</i>	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.
<i>Arizona elegans occidentalis</i>	California glossy snake	Reptiles	None	None	CDFW_SSC-Species of Special Concern		Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California.	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	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	Presenc/ Absence
Artemisiospiza belli 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 hyperythra	orange-throated whiptail	Reptiles	None	None	CDFW_WL-Watch List IUCN_LC-Least Concern USFS_S-Sensitive	Chaparral Cismontane woodland Coastal scrub	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats.	Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food: termites.	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	Presenc/ Absence
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 & riparian areas.	Ground may be firm soil, sandy, or rocky.	No suitable habitat is present on site. This species is not 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. Focused burrowing owl surveys determined this species is not present.
Batrachoseps gabrieli	San Gabriel slender salamander	Amphibians	None	None	IUCN_DD-Data Deficient USFS_S-Sensitive	Talus slope	Known only from the San Gabriel Mtns. Found under rocks, wood, and fern fronds, and on soil at the base of talus slopes.	Most active on the surface in winter and early spring.	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	Presenc/ Absence
Bombus crotchii	Crotch bumble bee	Insects	None	Candidate Endangered			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, & 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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
Catostomus santaanae	Santa Ana sucker	Fish	Threatened	None	AFS_TH- Threatened IUCN_VU- Vulnerable	Aquatic South coast flowing waters	Endemic to Los Angeles Basin south coastal streams.	Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	No suitable habitat is present on site. This species is not present.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	Mammals	None	None	CDFW_SSC-Species of Special Concern	Chaparral Coastal scrub	Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County.	Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
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.
Cicindela tranquebarica viridissima	greenest tiger beetle	Insects	None	None		Riparian woodland	Inhabits the woodlands adjacent to the Santa Ana River basin.	Usually found in open spots between trees.	No suitable habitat is present on site. This species is not present.
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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
Coleonyx variegatus abbotti	San Diego banded gecko	Reptiles	None	None	CDFW_SSC-Species of Special Concern	Chaparral Coastal scrub	Coastal & cismontane Southern California.	Found in granite or rocky outcrops in coastal scrub and chaparral habitats.	No suitable habitat is present on site. This species is not present.
Crotalus ruber	red-diamond rattlesnake	Reptiles	None	None	CDFW_SSC-Species of Special Concern USFS_S-Sensitive	Chaparral Mojavean desert scrub Sonoran desert scrub	Chaparral, woodland, grassland, & desert areas from coastal San Diego County to the eastern slopes of the mountains.	Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	No suitable habitat is present on site. This species is not present.
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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
Dipodomys merriami parvus	San Bernardino kangaroo rat	Mammals	Endangered	Candidate Endangered	CDFW_SSC-Species of Special Concern	Coastal scrub	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains.	Needs early to intermediate seral stages.	No suitable habitat is present on site. This species is not present.
Dipodomys stephensi	Stephens' kangaroo rat	Mammals	Endangered	Threatened	IUCN_EN-Endangered	Coastal scrub Valley & foothill grassland	Primarily annual & perennial grasslands, but also occurs in coastal scrub & sagebrush with sparse canopy cover.	Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil.	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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
<i>Emys marmorata</i>	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.
<i>Eremophila alpestris actia</i>	California horned lark	Birds	None	None	CDFW_WL-Watch List IUCN_LC-Least Concern	Marine intertidal & splash zone communities Meadow & seep	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills.	Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	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	Presenc/ Absence
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 & Arabis holboellii var pinetorum; larval foodplant is Descurainia richardsonii.	No suitable habitat is present on site. This species is not present.
Eugnosta busckana	Busck's gallmoth	Insects	None	None		Coastal dunes Coastal scrub			No suitable habitat is present on site. This species is not present.
Eumops perotis californicus	western mastiff bat	Mammals	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern WBWG_H-High Priority	Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	Roosts in crevices in cliff faces, high buildings, trees and tunnels.	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	Presenc/ Absence
Euphydryas editha quino	quino checkerspot butterfly	Insects	Endangered	None		Chaparral Coastal scrub	Sunny openings within chaparral & coastal sage shrublands in parts of Riverside & San Diego counties.	Hills and mesas near the coast. Need high densities of food plants <i>Plantago erecta</i> , <i>P. insularis</i> , and <i>Orthocarpus purpurescens</i> .	No suitable habitat is present on site. This species is not present.
Falco columbarius	merlin	Birds	None	None	CDFW_WL-Watch List IUCN_LC-Least Concern	Estuary Great Basin grassland Valley & foothill grassland	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands & deserts, farms & ranches.	Clumps of trees or windbreaks are required for roosting in open country.	No suitable habitat is present on site. This species is not present.
Gila orcuttii	arroyo chub	Fish	None	None	AFS_VU-Vulnerable CDFW_SSC-Species of Special Concern USFS_S-Sensitive	Aquatic South coast flowing waters	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave & San Diego river basins.	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	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	Presenc/ Absence
<i>Glaucomys oregonensis californicus</i>	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.
<i>Haliaeetus leucocephalus</i>	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.
<i>Helminthoglypta taylori</i>	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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
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 & washes.	Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	No suitable habitat is present on site. This species is not present.
Lasiurus xanthinus	western yellow bat	Mammals	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_H-High Priority	Desert wash	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.	Roosts in trees, particularly palms. Forages over water and among trees.	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	Presenc/ Absence
Laterallus jamaicensis coturniculus	California black rail	Birds	None	Threatened	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_NT-Near Threatened NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	Brackish marsh Freshwater marsh Marsh & swamp Salt marsh Wetland	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays.	Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	No suitable habitat is present on site. This species is not present.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	Mammals	None	None	CDFW_SSC-Species of Special Concern	Coastal scrub	Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges.	Coastal sage scrub habitats in Southern California.	No suitable habitat is present on site. This species is not present.
Neolarra alba	white cuckoo bee	Insects	None	None			Known only from localities in Southern California.	Cleptoparasitic in the nests of perdita bees.	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	Presenc/ Absence
Neotamias speciosus speciosus	lodgpole chipmunk	Mammals	None	None		Chaparral Upper montane coniferous forest	Summits of isolated Piute, San Bernardino, & San Jacinto mountains. Usually found in open-canopy forests.	Habitat is usually lodgepole pine forests in the San Bernardino Mts & chinquapin slopes in the San Jacinto Mts.	No suitable habitat is present on site. This species is not present.
Neotoma lepida intermedia	San Diego desert woodrat	Mammals	None	None	CDFW_SSC-Species of Special Concern	Coastal scrub	Coastal scrub of Southern California from San Diego County to San Luis Obispo County.	Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	No suitable habitat is present on site. This species is not present.
Nyctinomops femorosaccus	pocketed free-tailed bat	Mammals	None	None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern WBWG_M-Medium Priority	Joshua tree woodland Pinon & juniper woodlands Riparian scrub Sonoran desert scrub	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc.	Rocky areas with high cliffs.	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	Presenc/ Absence
Oncorhynchus mykiss irideus pop. 10	steelhead - southern California DPS	Fish	Endangered	None	AFS_EN-Endangered	Aquatic South coast flowing waters	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County).	Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	No suitable habitat is present on site. This species is not present.
Onychomys torridus ramona	southern grasshopper mouse	Mammals	None	None	CDFW_SSC-Species of Special Concern	Chenopod scrub	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	Feeds almost exclusively on arthropods, especially scorpions and orthopteran insects.	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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
Perognathus alticola alticola	white-eared pocket mouse	Mammals	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_EN-Endangered USFS_S-Sensitive	Lower montane coniferous forest Mojavean desert scrub Pinon & juniper woodlands	Ponderosa and Jeffrey pine habitats; also in mixed chaparral and sagebrush habitats in the San Bernardino Mountains.	Burrows are constructed in loose soil.	No suitable habitat is present on site. This species is not present.
Perognathus longimembris brevinasus	Los Angeles pocket mouse	Mammals	None	None	CDFW_SSC-Species of Special Concern	Coastal scrub	Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin.	Open ground with fine, sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	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.	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	Presenc/ Absence
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None	CDFW_SSC-Species of Special Concern NABCI_YWL-Yellow Watch List	Coastal bluff scrub Coastal scrub	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California.	Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
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.
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	Insects	Endangered	None		Interior dunes	Found only in areas of the Delhi Sands formation in southwestern San Bernardino & northwestern Riverside counties.	Requires fine, sandy soils, often with wholly or partly consolidated dunes & sparse vegetation. Oviposition req. shade.	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	Presenc/ Absence
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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
Spea hammondii	western spadefoot	Amphibians	None	None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	Cismontane woodland Coastal scrub Valley & foothill grassland Vernal pool Wetland	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg-laying.	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	Presenc/ Absence
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 scrub Interior dunes lone formation Joshua tree woodland	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.

Scientific Name	Common Name	Taxon Group	Federal List	State List	Other Status	Habitats	General Habitat	Micro Habitat	Presenc/ Absence
Thamnophis hammondi	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.
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.

APPENDIX C



View of ruderal habitat on the western portion of the site.



View of ruderal habitat on eastern portion of the project site.



View of ruderal habitat from southeast portion of the project site.



View of ruderal habitat on site that was reseeded. View from the western border of site facing east.



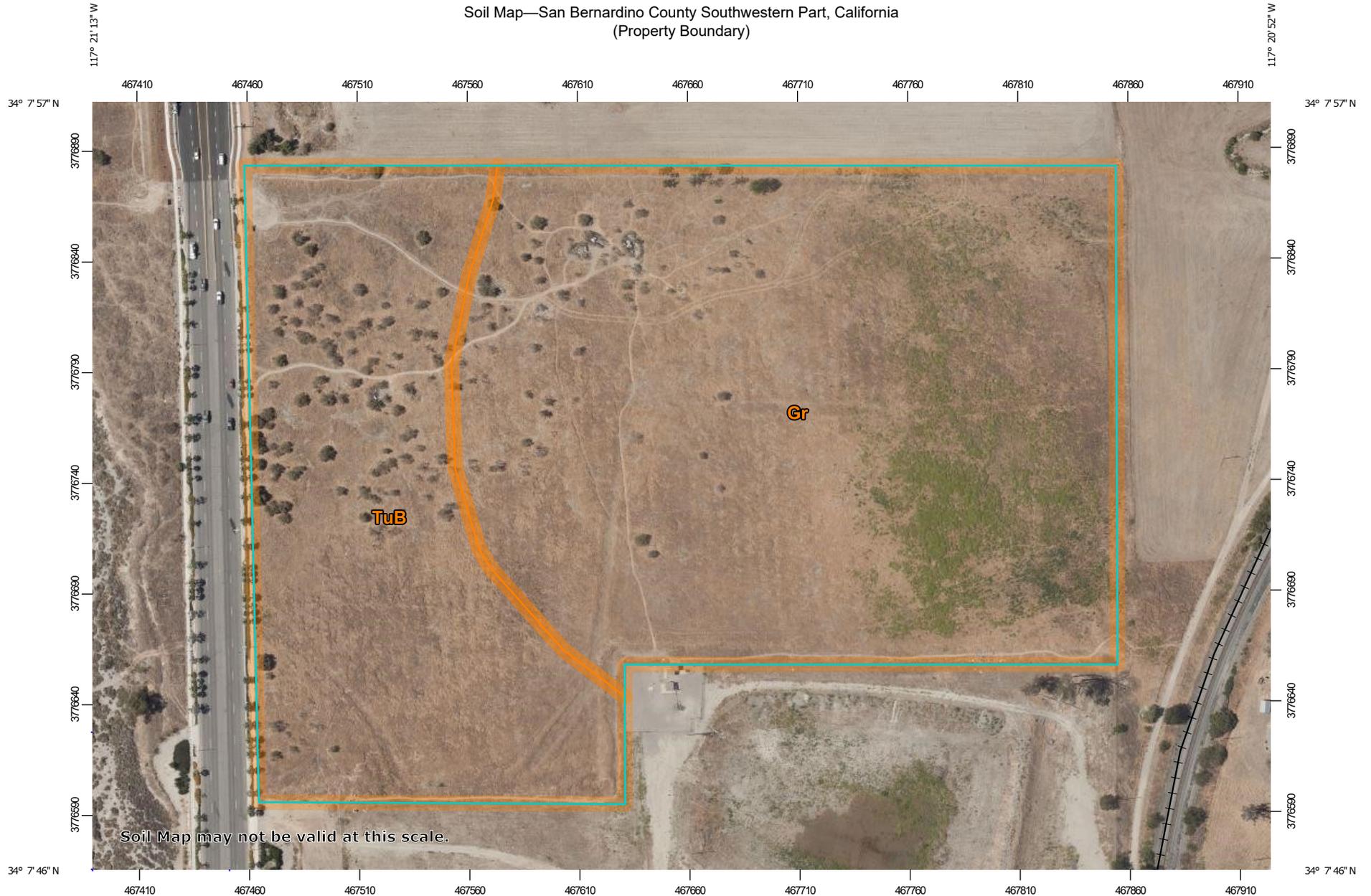
View of ruderal habitat from the northern border of the site facing south.



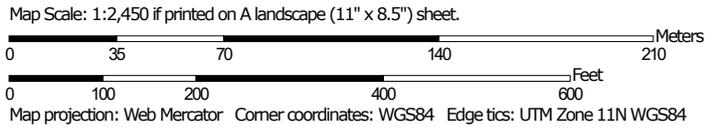
View of litter located in ruderal habitat on site.

APPENDIX D

Soil Map—San Bernardino County Southwestern Part, California
(Property Boundary)



Soil Map may not be valid at this scale.



Soil Map—San Bernardino County Southwestern Part, California
(Property Boundary)

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 Southwestern Part, California
Survey Area Data: Version 12, May 27, 2020

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

Date(s) aerial images were photographed: Apr 1, 2018—Jun 30, 2018

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
Gr	Grangeville fine sandy loam, warm MAAT, MLRA 19	16.2	65.8%
TuB	Tujunga loamy sand, 0 to 5 percent slopes	8.4	34.2%
Totals for Area of Interest		24.6	100.0%

APPENDIX E

Botanical Survey for a Property in Rialto, California

San Bernardino County Assessor's Parcel Numbers 026-420-105, 026-420-126, and 026-420-106



Prepared for

Hernandez Environmental Services
17037 Lakeshore Drive
Lake Elsinore, CA 92530

Prepared by

Ricardo Montijo
926 South Prospero Drive
Glendora, CA 91740

August 2021

Table of Contents

1	INTRODUCTION.....	1
1.1	Property Description	1
1.1.1	Geography, Geology, Hydrology, Soils and Climate	1
1.2	Adjacent Lands.....	1
2	METHODS.....	6
2.1	Background Analysis	6
2.2	Field Surveys.....	7
3	RESULTS.....	8
3.1	Preliminary Analysis	8
3.1.1	Smooth Tarplant.....	8
3.1.2	Salt Marsh Bird’s Beak.....	10
3.1.3	Parry’s Spineflower	10
3.1.4	Slender Horned Spineflower.....	10
3.1.5	Santa Ana River Woolly Star.....	11
3.1.6	Mesa Horkelia.....	11
3.1.7	California Satintail	11
3.1.8	Robinson’s Peppergrass	12
3.1.9	San Bernardino Aster	12
3.1.10	Vegetation	18
3.1.11	Rare Plants	20
5.0	REFERENCES	21

Table of Tables

Table 1. Soil Types in the Survey Area Described.....	6
Table 2. Average Temperatures on Survey Dates	7
Table 3. Rainfall average (in inches) for the period of October 2020 to June 2021 and known average rainfall for the same months from 1981 to 2010 compared.	8
Table 4. Preliminary Analysis Results Summary	13
Table 5. Field Survey Results Summary.....	20

Table of Figures

Figure 1. Location and Vicinity Map.....	2
Figure 2. Aerial Image	3
Figure 3. Topography and Geographic Features.....	4
Figure 4. Soils	5
Figure 5. Special Status Plants within the Site’s Vicinity	9
Figure 7. Vegetation types overlapping the site mapped during the surveys.	19

Appendices

Appendix A. Flora Observed

Appendix B. Site Photographs

CERTIFICATION

I hereby certify that the statements furnished below and in the attached exhibits present 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.



Ricardo Montijo

August 6, 2021

Date

1 INTRODUCTION

Hernandez Environmental Services (HES) was retained to conduct biological surveys and studies that support permitting for a development project in Rialto, San Bernardino County, California. The approximately 23.5-, 16-, and 1-acre (total of 40.5 acres) properties are designated San Bernardino County Assessor's Parcel Numbers (APNs) 026-420-105, 026-420-126, and 026-420-106. The properties occur in the southwest quarter of Section 36, Township 1 South, Range 5 West of the USGS 7.5-minute Devore Quadrangle (Figures 1 and 2).

The following report summarizes the results of botanical surveys on the approximately 45-acre property in the spring and summer of 2021.

1.1 Property Description

1.1.1 Geography, Geology, Hydrology, Soils and Climate

The property (project site or site) consists of three parcels, designated San Bernardino County APNs 026-420-105, 026-420-126, and 026-420-106 (Figure 2). The project site is on flat ground in historically farmed lands of Rialto/San Bernardino.

The properties are located west of Lytle Creek in a channelized and inactive portion of the stream. The deposited in the natural alluvium of the site is conducive to farming and have been farmed since at least 1938. Soils are described in Table 1 and illustrated in Figure 4.

1.2 Adjacent Lands

Adjacent lands consist of open space and a reservoir to the southeast (see Figure 2 and Photograph 1). The 210 Freeway is located north of the properties.

Figure 1. Location and Vicinity Map

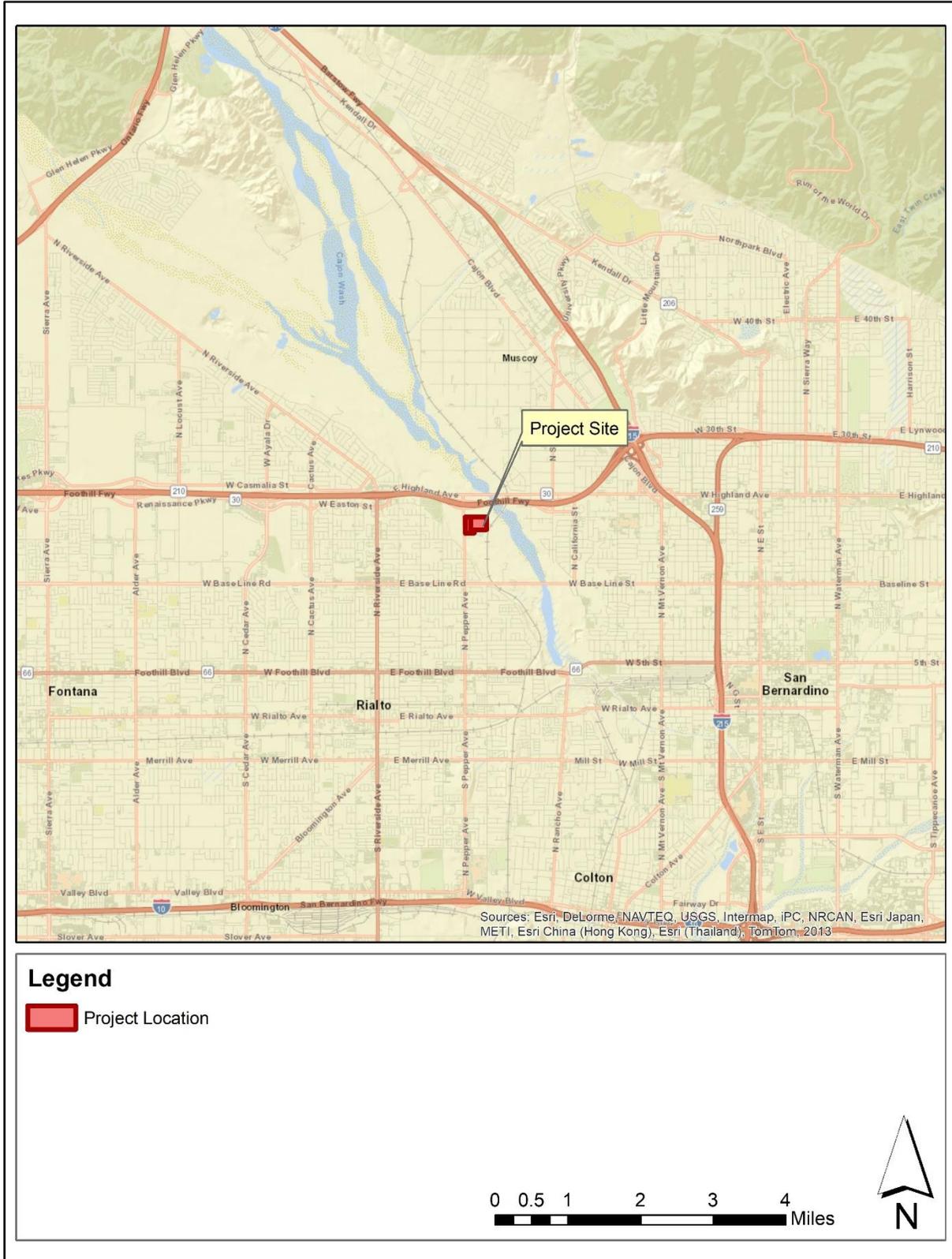


Figure 2. Aerial Image



Figure 3. Topography and Geographic Features

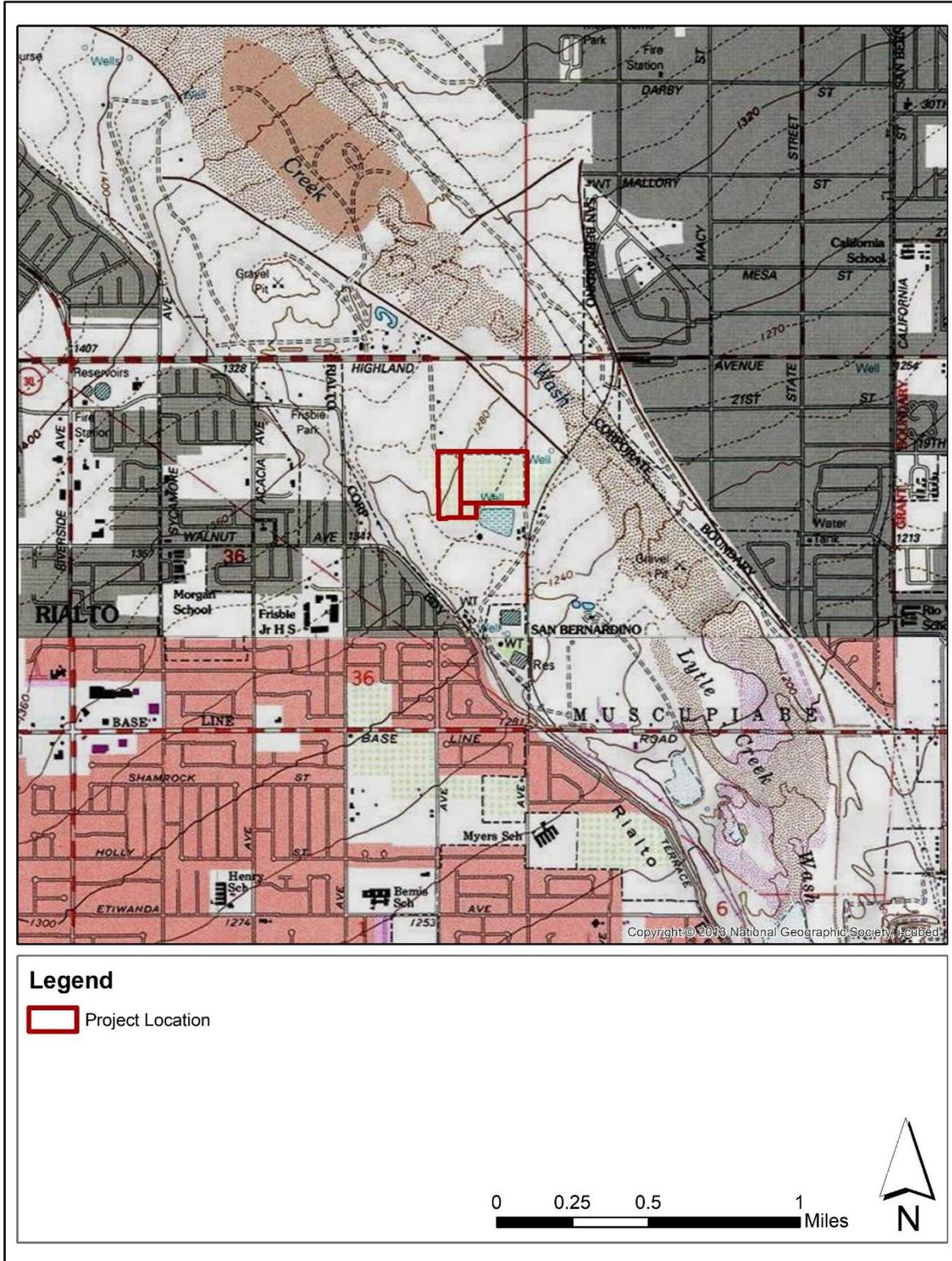


Figure 4. Soils

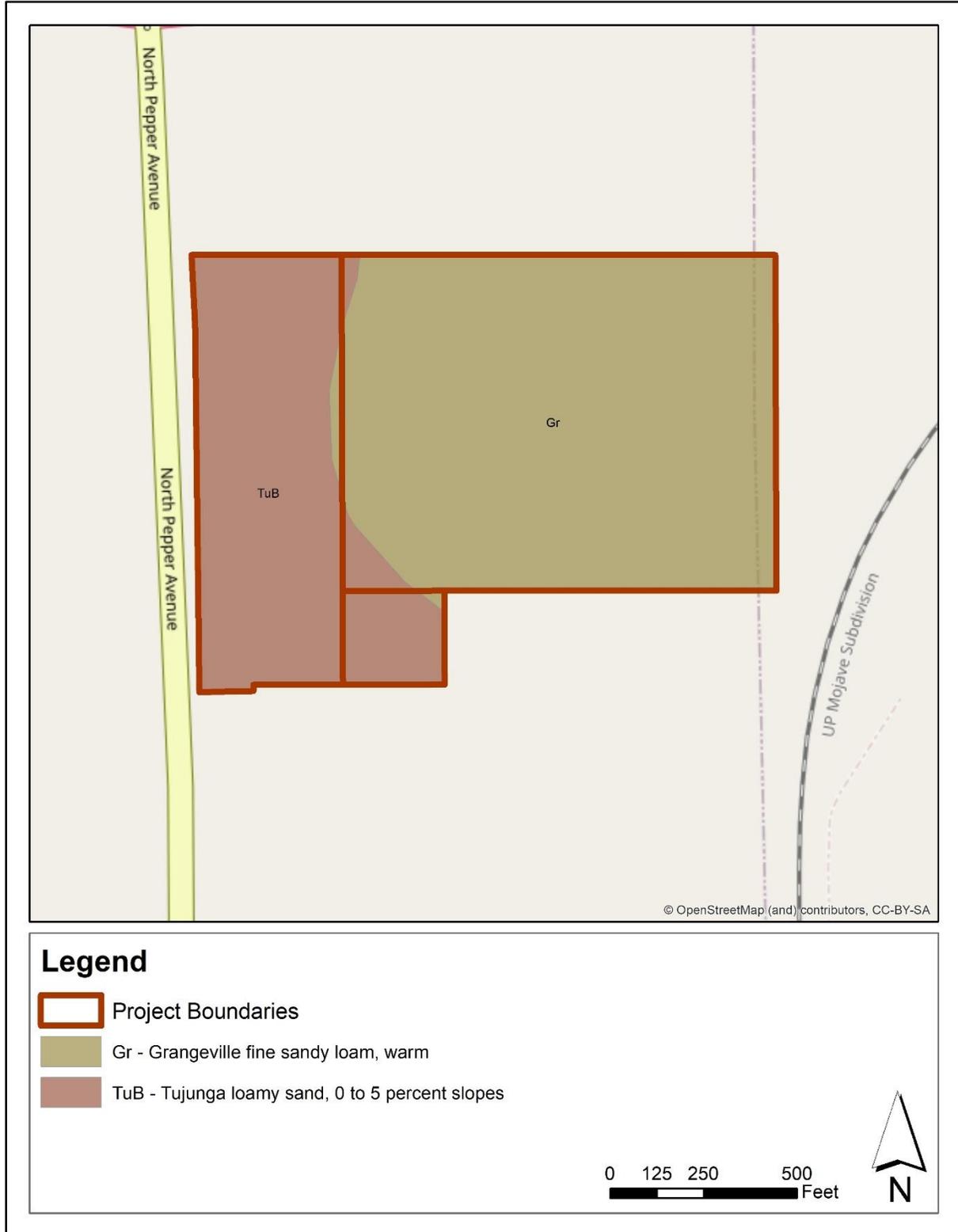


Table 1. Soil Types in the Survey Area Described

Map Unit Symbol	Map Unit Name	Description
TuB	Tujunga Loamy Sand	The Tujunga series consists of very deep, somewhat excessively drained soils that formed in granitic alluvium Tujunga soils occur on alluvial fans and floodplains, including urban areas.
Gr	Grangeville Fine Sandy Loam	The Grangeville series consists of very deep, somewhat poorly drained soils that formed in moderate coarse textured alluvium dominantly from granitic rock sources. Grangeville soils are on alluvial fans and floodplains and have slopes ranging from 0 to 2 percent.

This region gets approximately 3.29 inches of rain per year and the number of days with any measurable precipitation is 22, which is generally consistent with comparable areas in Southern California. There are 276 sunny days per year. The August high is around 94 degrees. The January low is 40.

2 METHODS

2.1 Background Analysis

Pertinent plant occurrence records were reviewed prior to undertaking field surveys. The analysis included a review of records from the following sources:

- A review of collection records from participating herbaria in California available through the Consortium of California Herbaria, 2021;
- Documented rare plant occurrences compiled in the California Natural Diversity Data Base (CNDDDB) by the California Department of Fish and Wildlife, 2021;
- A review of documented occurrences of common and rare plants for California in Calflora, 2021;
- Species descriptions from the Jepson Online Interchange, 2021;
- Soils data from the Natural Resources Conservation Service and available from the Web Soil Survey, 2021; and,

- Aerial photographs from Historic Aerials, Google Earth, ESRI, Digital Globe, GeoEye, US Department of Agriculture, US Geological Survey, i-cubed, Aerogrid and Getmapping.

The background analysis yielded data that were compiled in a Geographic Information System (GIS) using ArcMap 10.8 and ArcGIS Pro 2.8. These data were modified and uploaded to ArcGIS online for use with Collector in the field as geographic reference and for collecting field data. Several paper maps were also made from the data, which were printed for use during the surveys.

2.2 Field Surveys

Biologist Ricardo Montijo conducted botanical surveys on three non-consecutive days during the 2021 growing season. The initial survey was conducted on 16 April 2021, under clear skies with ambient temperature reaching the mid-70s. Subsequent surveys were conducted on 8 and 19 July 2021. Reference populations were checked on 24 March, 19 and 25 April 2021, and 19 July 2021. Table 3 summarizes the average temperature during each survey.

Table 2. Average Temperatures on Survey Dates

Date	Temperature in Degrees Fahrenheit
16 April	77
8 July	104
19 July	102

Rainfall has been far below normal for the period from November 2020 to June 2021 (Table 3).

Table 3. Rainfall average (in inches) for the period of October 2020 to June 2021 and known average rainfall for the same months from 1981 to 2010 compared.¹

	October	November	December	January	February	March	April	May	June
2020-2021	0.00	0.01	0.91	0.68	0.00	0.51	0.00	0.00	0.00
1981-2010	0.46	0.81	1.37	2.33	2.42	1.69	0.68	0.20	0.09

The surveyor noted weather and site conditions and recorded plants detected. Plants not readily identified in the field were collected and pressed and keyed out later. The property was systematically surveyed by walking transects, spaced approximately 10 to 12 meters.

A complete list of plants observed is included as Appendix A of this report. All plant nomenclature in this report follows Baldwin *et al.* (2012).

3 RESULTS

3.1 Preliminary Analysis

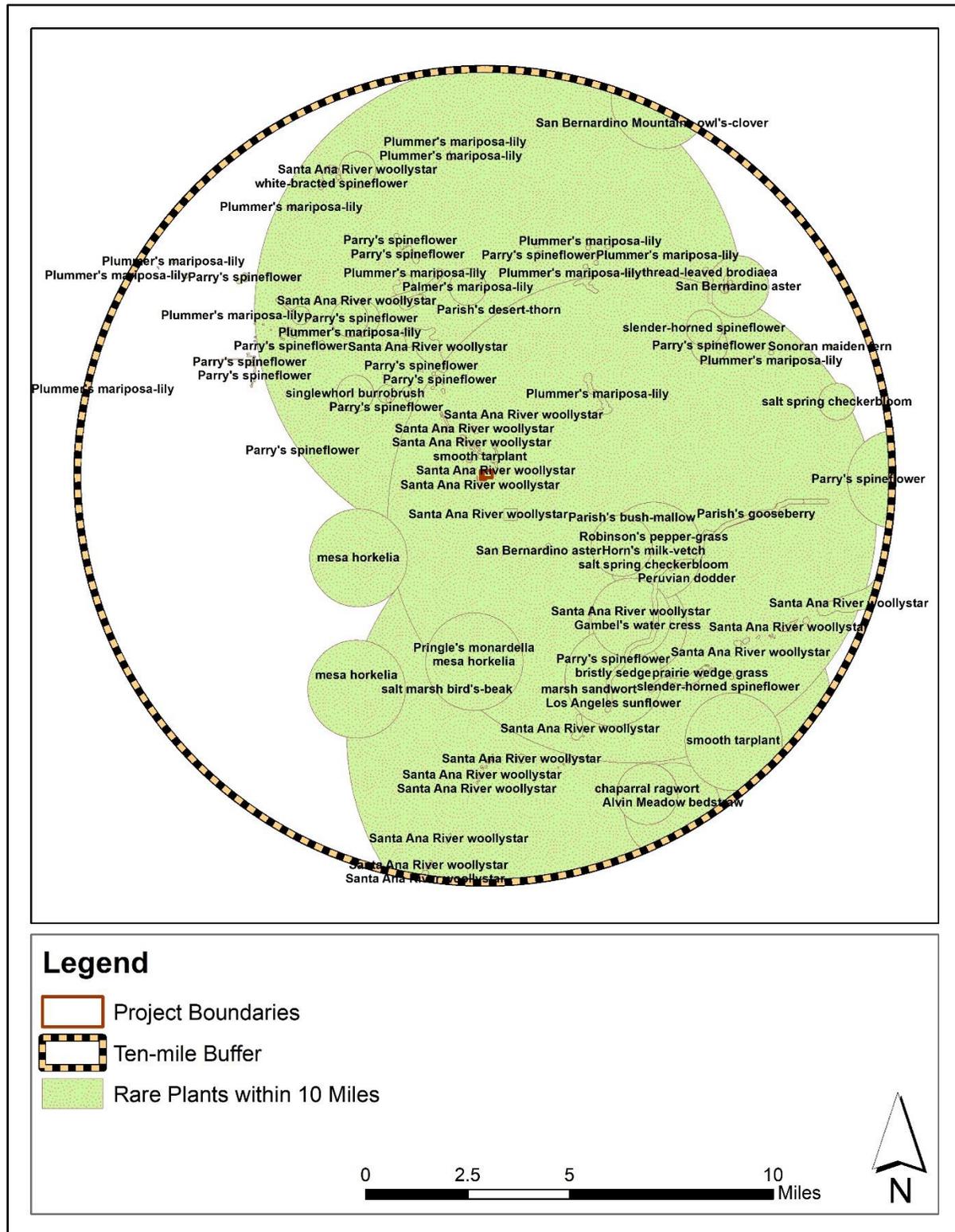
The following are descriptions of plants compiled from distribution and biological data that were used to evaluate the potential presence of the species during the preliminary analysis. Table 5 summarizes the results of this analysis and Figure 5 shows rare plants near the project site.

3.1.1 Smooth Tarplant

Smooth tarplant (*Centromadia pungens* ssp. *laevis*) is an annual herb that occurs in shadscale scrub, valley grasslands and vernal pools and playas with alkaline soils. It occurs from the central valley down to Baja California at elevation ranges from 90 to 500 meters (270 to 1640 feet). It blooms from April through September. It is not listed by the USFWS or the CDFW. It is

¹ <https://www.usclimatedata.com/climate/riverside/california/united-states/usca1695>

Figure 5. Special Status Plants within the Site's Vicinity



designated a List 1B.1 (rare, threatened, or endangered in California and elsewhere) species according to the CNPS Inventory.

The closest mapped populations are within one mile north of the subject parcels (Figure 5). Reference populations in Riverside were visited during the appropriate flowering season.

3.1.2 Salt Marsh Bird's Beak

Salt marsh bird's beak is native to the Southwestern United States and northern Baja California. It grows in areas of high salt concentrations, including coastal salt marshes and the inland salt flats. It is hemiparasitic, such that it is greenish and has chlorophyll but also parasitizes other plants by tapping their roots to obtain their nutrients. No salt marsh birds beak was detected during the surveys,

3.1.3 Parry's Spineflower

Parry's spineflower (*Chorizanthe parryi* var. *parryi*) is a diminutive annual herb that grows in openings within chaparral and coastal sage scrub. It has been collected at elevations from 900 to 3,600 feet in dry sandy soils. This species occurs in a wide variety of conditions in chaparral and coastal sage scrub. It has been previously reported and collected from sites approximately three miles northwest of the site. This CNPS List 1B.1 species was not detected during the surveys.

3.1.4 Slender Horned Spineflower

Slender-horned spineflower is a diminutive annual plant of the buckwheat family found in areas prone to drought. It often occurs in isolated patches of large floodplain habitats categorized as alluvial scrub. Onset of germination is likely related to rainfall and occurs by late February with flowers emerging from April to May. This species has been affected by development, surface mining, off-road vehicle use, and altered flood regimes prompting listing under the California and federal Endangered Species Acts.

Although the survey overlapped the flowering season of this species, no individuals were found. Flood control devices have effectively cutoff regular flows to the site and farming has severely altered the substrates on the property. This species was not detected during the surveys.

3.1.5 Santa Ana River Woolly Star

The Santa Ana River woolly-star is a short-lived subshrub of phlox family (Polemoniaceae). It has a basally branched, generally erect or spreading form. The entire plant, including the blue to violet-blue inflorescence, is covered with woolly pubescence, giving it a silvery-white appearance. Each inflorescence is dense and spiny-bracted with about 20 flowers (Patterson 1993, p. 826). The subspecies is endemic to the Santa Ana River watershed and its 21 known occurrences are dispersed across private (CNDDDB 2021). *Eriastrum densifolium* subsp. *sanctorum* was listed as endangered under the California Endangered Species Act (CESA) in 1987. The subspecies was listed as endangered under the Act in 1987.

The site is located in the historic range of the species. Reference populations on Institution Road were visited in 2021 (Photograph 1), but although those were in flower, they were not found on the project parcels.

3.1.6 Mesa Horkelia

Mesa horkelia (*Horkelia cuneata* ssp. *puberula*) is a perennial herb that blooms from February to July. It is found on sandy or gravelly substrate within chaparral (including maritime chaparral), cismontane woodland and coastal scrub habitats at elevations between 140 and 860 meters (CalFlora 2021). The Project area is within the historic distribution range of the species, but historic land use has likely precluded this plant from occurring in the project area. No mesa horkelia was found on the project parcels.

3.1.7 California Satintail

California satintail is a perennial grass growing from a hard rhizome to heights near four feet. The flat leaves are up to 20 centimeters long and 0.5 inches wide. The inflorescence is a narrow, cylindrical white plume to 12 inches. It is filled thickly with silky white hairs and dotted with dark speckles that are the orange-brown anthers and purplish-brown stigmas of the spikelets. No perennial tall grasses were found on the properties.

3.1.8 Robinson's Peppergrass

Robinson's peppergrass (*Lepidium virginicum* var. *robinsonii*) is an annual herb with densely hairy stems that grows from three to six feet tall. This species occurs in dry soils in chaparral and coastal sage scrub below 1,600 feet in elevation. This plant occurs on dry soils in open areas, and sometimes on coarse alluvium and rocky slopes. Near the project site, Robinson's peppergrass has been found within 2.5 miles in Lytle Creek and within 10 miles in portions of the Santa Ana River. It was not found during the surveys.

3.1.9 San Bernardino Aster

San Bernardino aster is an annual that grows on interior sand dunes and sandy soils near Colton and within Riverside and San Bernardino counties at elevations from 1,000 to 1,400 feet. It is endemic to Southern California where it grows in grasslands and meadows. The nearest documented occurrences of this species are eight miles northeast of the project parcels. It blooms from June to November producing lavender colored flowers. The final surveys overlapped the typical flowering season for this species; however, it was not detected.

Table 4. Preliminary Analysis Results Summary

Species Name Common Name	Status	Preferences	Status on the Site
<i>Ambrosia monogyra</i> Singlewhorl Burrobush	Fed: - State: - CNPS: 2B.2	Perennial shrub found in chaparral and Sonoran desert scrub in sandy soils. Occurs from 10–500 m and blooming period is August–November. It has been documented previously upstream in Cajon Wash.	No singlewhorl burrobush was found on the site.
<i>Arenaria paludicola</i> Marsh Sandwort	Fed: E State: E CNPS: 1B.1	This plant grows in marshes and freshwater wetlands, from near sea level to approximately 600 feet. This species flowers from May to August.	The site lacks suitable growing conditions and, therefore, is unlikely to occur on the project site.
<i>Astragalus hornii</i> var. <i>hornii</i> Horn’s Milkvetch	Fed: - State: - CNPS: 1B.1	Annual herb found in meadows, seeps, and playas, in lake margins, and alkaline soils. Occurs from 60–850 m and blooming period is May–October.	The site lacks suitable growing conditions and, therefore, is unlikely to occur on the project site.
<i>Brodiaea filifolia</i> Thread-leaved Brodiaea	Fed: T State: E CNPS: 1B.1	Perennial bulbiferous herb found in cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools. Usually associated with annual grassland and vernal pools often surrounded by shrubland habitats. Clay soils and at elevations of 25–860 m. Blooming period is from March–June.	The site lacks suitable growing conditions and, therefore, is unlikely to occur on the project site.
<i>Calochortus palmeri</i> var. <i>palmeri</i> Palmer’s Mariposa Lily	Fed: - State: - CNPS: 4.1	This species is a perennial from a bulb, that is often associated with chamise - California scrub oak chaparral (<i>Adenostoma</i>	The site lacks suitable growing conditions and, therefore, is unlikely to occur on the project site.

		<i>fasciculatum</i> - <i>Quercus berberidifolia</i>) and buckwheat grassland/scrub (<i>Eriogonum fasciculatum</i>). Also found in creek beds. Occurs at elevations above 4000 feet, much higher than those found on the project site.	
<i>Calochortus plummerae</i> Plummer's Mariposa Lily	Fed: - State: - CNPS: 4.1	Perennial from bulb that occurs in granitic, rocky substrate in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grasslands. Occurs at elevations below 5,600 feet.	The site has been disturbed at least as far back 1938 (Historic Aerials 2021). No bulbiferous plants were found on the project site.
<i>Carex comosa</i> Bristly Sedge	Fed: - State: - CNPS: 2B.1	Perennial rhizomatous herb found in coastal prairie, marshes, and swamps (lake margins), and valley and foothill grasslands. Occurs from 0–625 m and blooming period is May–September.	The site lacks suitable growing conditions, and the plant is unlikely to occur on the project site.
<i>Castilleja lasiorhyncha</i> San Bernardino Mountains Owl's Clover	Fed: - State: - CNPS: 2B.2	An annual that occurs in Meadows, flats, and open forest at elevations higher than 3,280 feet.	The site lacks suitable growing conditions, and the plant is unlikely to occur on the project site.
<i>Centromadia pungens</i> ssp. <i>laevis</i> Smooth Tarplant	Fed: - State: - CNPS: 1B.1	Annual herb associated with valley and foothill grasslands, chenopod scrub, meadows, playas, and riparian woodlands from 0–640 m. Blooming period is from April–September.	May occur in the property's wetter portions.
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i> Salt Marsh Bird's Beak	Fed: E State: E CNPS: 2B.2	Occurs in near wet areas like saltmarshes, dunes, the coastal strand, and coastal wetland-riparian areas.	May occur; suitable growing conditions occur on the site.
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's Spineflower	Fed: - State: - CNPS: 1B.2	This plant grows in sandy or rocky substrate in chaparral, cismontane woodland, coastal scrub, and valley and foothill grasslands.	May occur; suitable growing conditions occur on the site
<i>Chorizanthe xanti</i> var. <i>leucotheca</i> White-bracted Spineflower	Fed: - State: -	Annual herb found in coastal scrub (alluvial fans), Mojavean desert scrub, and pinyon	The site lacks suitable growing conditions, and the plant is unlikely

	CNPS: 1B.2	and juniper woodlands at 1,000 to 4,000 elevation. Blooming period is April to June.	to occur on the project site.
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> Peruvian Dodder	Fed: - State: - CNPS: 2B.2	Annual vine found in freshwater marshes and swamps. Occurs from 15–280 m in elevation and blooms from July–October.	The site lacks suitable growing conditions, and the plant is unlikely to occur on the project site.
<i>Dodecahema leptoceras</i> Slender -horned Spineflower	Fed: E State: E CNPS: 1B.1	Annual that occurs in sandy and gravelly places, often alluvial benches.	May occur; suitable growing conditions occur on the site
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River Woolly Star	Fed: E State: E CNPS: 1B.1	Grows in sandy or gravelly soils in chaparral and coastal scrub at elevations from 300 to 2,000 feet.	May occur; suitable growing conditions occur on the site
<i>Fimbristylis thermalis</i> Hot Springs Fimbristylis	Fed: - State: - CNPS: 2B.2	This fimbry grows in moist or wet place where water, usually groundwater, reaches the earth's surface from an underground aquifer. This species grows in alkaline mud or sand at elevations of 300 to 4,400 feet. It blooms from July to September.	The site lacks suitable growing conditions, and the plant is unlikely to occur on the project site.
<i>Galium californicum</i> ssp. <i>primum</i> California Bedstraw	Fed: - State: - CNPS: 1B.2	California bedstraw is a high elevation (over 4,400 feet) montane species that grows in shade.	The site lacks suitable growing conditions, and the plant is unlikely to occur on the project site.
<i>Helianthus nuttallii</i> ssp. <i>parishii</i> Los Angeles Sunflower	Fed: - State: - CNPS: 1A	Perennial rhizomatous herb occurs in coastal salt and freshwater marshes and swamps. Blooming period is August–October and it occurs at 40 to 5,500 ft elevation.	Presumed extinct and The site lacks suitable growing conditions, and the plant is unlikely to occur on the project site.
<i>Horkelia cuneata</i> var. <i>puberula</i> Mesa Horkelia	Fed: - State: - CNPS: 1B.1	Perennial found on sandy or gravelly substrates within chaparral (including maritime chaparral), cismontane woodland and coastal scrub below 2,825 feet.	May occur; suitable growing conditions occur on the site
<i>Imperata brevifolia</i> California Satintail	Fed: - State: - CNPS: 2B.1	Perennial rhizomatous herb found in wet springs, meadows, streambanks, and floodplains in chaparral, coastal scrub, meadows, seeps, Mojavean desert scrub,	May occur; suitable growing conditions occur on the site

		riparian scrub from 0 to 4,000 elevation. Blooming period is September to May.	
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's Peppergrass	Fed: - State: - CNPS: 4.3	Annual that grows in coastal sage scrub and chaparral from near sea level to 2,900 feet. It occurs in dry, disturbed areas, bottomland, riverbanks, meadows, fields, pastures, cliffs, and scrub	May occur; suitable growing conditions occur on the site
<i>Lycium parishii</i> Parish's Desert-thorn	Fed: - State: - CNPS: 2B.3	This perennial plant occurs in coastal scrub and Sonoran desert scrub. Found at elevations ranging from 425 to 3,300 feet.	No plants of the Genus <i>Lycium</i> were observed on the project site.
<i>Malacothamnus parishii</i> Parish's Bush Mallow	Fed: - State: - CNPS: 1A	Perennial deciduous shrub found in chaparral and coastal scrub habitats. Plant is presumed extinct based on best available information (CNPS 2021, CNDDDB 2021).	No plants of the Genus <i>Malacothamnus</i> were observed on the project site.
<i>Monardella pringlei</i> Pringle's Monardella	Fed: - State: - CNPS: 1A	Annual herb found in coastal scrub in sandy soils. Occurs from 300–400 m and blooming period is May–June.	No plants of the Genus <i>Monardella</i> were observed on the project site.
<i>Nasturtium gambelii</i> Gambel's Watercress	Fed: E State: T CNPS: 1B.1	Perennial rhizomatous herb found in marshes and swamps (freshwater or brackish). Blooming period is April–October; found at elevations of 5–330 m.	The site lacks suitable growing conditions, and the plant is unlikely to occur on the project site.
<i>Ribes divaricatum</i> var. <i>parishii</i> Parish's Gooseberry	Fed: - State: - CNPS: 1A	Perennial deciduous shrub found in riparian woodland at 65–300 m elevation. This species blooms from February to April.	No plants of the Genus <i>Ribes</i> were observed on the project site.
<i>Schoenus nigricans</i> Black Bog-Rush	Fed: - State: - CNPS: 1A	Occurs in wetlands and other perennial water sources.	No plants of the Genus <i>Schoenus</i> were observed on the project site.
<i>Senecio aphanactis</i> Chaparral Ragwort	Fed: - State: - CNPS: 2B.2	Chaparral ragwort blooms from January to April. It occurs in alkaline flats and dry open rocky areas in cismontane woodlands, coastal scrub, and coastal sage scrub at elevations between 425 and 2,200 feet.	The site lacks suitable growing conditions (alkaline flats), and the plant is unlikely to occur on the project site.

<i>Sidalcea neomexicana</i> Salt Spring Checkerbloom	Fed: - State: - CNPS: 2B.2	Perennial herb. Alkaline, usually wet places. Coastal sage scrub, chaparral, creosote bush scrub. Los Angeles, Orange, San Bernardino, Riverside Counties.	The site lacks suitable growing conditions, and the plant is unlikely to occur on the project site.
<i>Sphenopholis obtusata</i> Prairie Wedge Grass	Fed: - State: - CNPS: 2B.2	Perennial grass that grows from 750 feet to over 9,500 feet in wet meadows, streambanks, and ponds.	The site lacks suitable growing conditions, and the plant is unlikely to occur on the project site.
<i>Symphyotrichum defoliatum</i> San Bernardino Aster	Fed: — State: — CNPS: 1B.2	Annual that grows on interior sand dunes and sandy soils near Colton and within Riverside and San Bernardino counties at elevations from 1,000 to 1,400 feet.	May occur; suitable growing conditions occur on the site
<i>Thelypteris puberula</i> var. <i>sonorensis</i> Sonoran Maiden Fern	Fed: — State: — CNPS: 2B.2	Occasional in wet shaded canyons below 3000 feet; chaparral, creosote bush scrub. Lower slopes of Peninsular and Transverse mountains to Baja California.	The site lacks suitable growing conditions, and the plant is unlikely to occur on the project site.

3.1.10 Vegetation

Vegetation on the property has an extensive history of agricultural use dating and generally conforms to agricultural areas mapped as agricultural lands.

3.1.10.1 Avena spp. - Bromus spp. Herbaceous Semi-Natural Alliance

Wild Oats and Annual Brome Grasslands occur in disturbed and formerly farmed areas. They are principally comprised of non-native grasses such as slender oats (*Avena barbata*), wild oats (*Avena fatua*), cheat grass (*Bromus diandrus*), or wall barley (*Hordeum murinum*). Other weedy plants and emergent trees and shrubs may be present at low cover.

3.1.10.2 Brassica Hirschfeldia Centaurea Semi-natural Alliance

This is the common vegetation type found on fallow fields, grasslands, roadsides, disturbed coastal scrub, riparian areas, cleared roadsides, and waste places (Sawyer et al. 2009). This association is comprised of upland mustards (*Brassica*, *Hirschfeldia*, etc.) and other ruderal forbs like yellow starthistle (*Centaurea melitensis*) and cheeseweed (*Malva parviflora*) (Photographs 2).

3.1.10.3 Disturbed/Developed

Disturbed/Developed areas include those areas within the property which were cleared previously for projects. They include the very few barren or nearly barren dirt roads within property boundaries. Many invasive annuals and native herbs grow in these areas, including the non-native red brome (*Bromus madritensis rubens*), red-stemmed filaree (*Erodium cicutarium*) and mustard (*Hirschfeldia incana*) and the native common fiddleneck (*Amsinckia intermedia*), and common cryptanth (*Cryptantha intermedia*).

Figure 6. Vegetation types overlapping the site mapped during the surveys.



A portion of the disturbed area near the properties’ center has been hydroseeded with a drought-tolerant seed mix. The seed mix is comprised of both native and non-native annuals

- *Calendula officinalis* (calendula)
- *Dianthus barbatus* (sweet William, pinks)
- *Dimorphotheca sinuata* (African daisy)
- *Eschscholzia caespitosa* (dwarf California poppy)
- *Eschscholzia californica* (California poppy)
- *Gazania splendens* (gazania)
- *Lasthenia californica* (dwarf goldfields)
- *Layia platyglossa* (Tidy tips)
- *Lobularia maritima* Carpet of Snow (sweet alyssum)
- *Lotus corniculatus* (birds-foot trefoil)
- *Lupinus microcarpus densiflorus* (dense flowered lupine)
- *Nemophila menziesii* (baby blue eyes)
- *Phacelia campanularia* (california blue bell)
- *Silene armeria* (catchfly)

3.1.11 Rare Plants

The surveys were conducted in a below rainfall year (see Table 1). No sensitive species was detected during the 2021 survey. Features of interest were mapped using GPS and a Glonass-enabled receivers with ESRI collector. Survey results for sensitive plants with a potential for occurrence on the site are summarized in Table 7.

Table 5. Field Survey Results Summary

Species	Likelihood of Occurrence
Smooth Tarplant	Not Found
Salt Marsh Bird’s Beak	Not Found/Presumed Absent
Parry’s Spineflower	Not Found
Slender Horned Spineflower	Not Found/Presumed Absent
Santa Ana River Woolly Star	Not Found/Presumed Absent
Mesa Horkelia	Not Found/Presumed Absent
California Satintail	Not Found/Presumed Absent
Robinson’s Peppergrass	Not Found
San Bernardino Aster	Not Found

5.0 REFERENCES

- Baldwin, B.G., D.H. Goldman, and L.A. Vorobik. 2012. The Jepson Manual: Vascular Plants of California. University of California Press, Berkeley.
- California Department of Fish and Wildlife. 2021. California Natural Diversity Data Base (Rarefind). Data available by subscription.
- California Geological Survey. 2002. California Geomorphic Provinces. Note 36.
- California Native Plant Society (CNPS). 2001. CNPS Botanical Survey Guidelines.
- California Native Plant Society, Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> Accessed 10 June 2021.
- Consortium of California Herbaria. 2021. Species Voucher Data. Available online at: <http://ucjeps.berkeley.edu/consortium/>. Accessed on March 20, 2021.
- Inland Valley Engineering. 2018. Geotechnical and Geologic Review of an Existing Commercial Building Site. San Jacinto, California. Accessed on June 29, 2021
- Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A manual of California vegetation. Second edition. Calif. Native Plant Society Press, in collaboration with Calif. Fish and Game. Sacramento.
- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture [a]. Soil Survey Geographic (SSURGO) Database for [French Valley, California]. Available online at: <http://www.arcgis.com/apps/OnePane/basicviewer/index.html?appid=a23eb436f6ec4ad6982000dbaddea5ea>. Accessed: March 15, 2021.
- U.S. Fish and Wildlife Service. 1998. Endangered and threatened wildlife and plants; determination of endangered or threatened status for four southwestern California plants from vernal wetlands and clay soils. Federal Register 63:54975-54994.

APPENDIX A

Flora Observed

DICOTYLEDONS	TWO COTYLEDON PLANTS
Adoxaceae	Moschatel Family
<i>Amsinckia intermedia</i> Fisch. & C. A. Mey.	Elderberry
Amaranthaceae	Amaranthus Family
<i>Amaranthus albus</i> L. *	Tumbleweed
Asteraceae	Sunflower Family
<i>Ambrosia acanthicarpa</i> Hook	Annual Burweed
<i>Centaurea melitensis</i> L. *	Yellow Starthistle
<i>Heterotheca grandiflora</i>	Telegraphweed
Brassicaceae	Mustard Family
<i>Descurainia pinnata</i> (Walter) Britton *	Tansy Mustard
<i>Hirschfeldia incana</i> (L.) Lagr.-Fossat *	Short-pod Mustard
<i>Sisymbrium irio</i> L. *	London Rocket
Bignoniaceae	Borage Family
<i>Jacaranda mimosifolia</i> D. Don *	Blue Jacaranda
Boraginaceae	Borage Family
<i>Amsinckia intermedia</i> Fisch. & C. A. Mey.	Common Fiddleneck
<i>Cryptantha muricata</i> (Hook. & Arn.) A. Nelson & J. F. Macbr.	Prickly Cryptantha
Euphorbiaceae	Euphorb Family
<i>Croton californicus</i> Müll. Arg.	California Croton
<i>Croton setiger</i> Hook	Turkey Mullein
Fabaceae	Pea Family
<i>Acmispon glaber</i> (Vogel) Brouillet	Deerweed
<i>Lobularia maritima</i> (L.) Desv. **	Sweet alyssum
<i>Lotus corniculatus</i> L. *	Birdsfoot Trefoil
<i>Melilotus indica</i> L. *	Indian Sweetclover
Geraniaceae	Geranium Family
<i>Erodium cicutarium</i> (L.) L'Hér. ex Aiton *	Red-stemmed Filaree
<i>Erodium moschatum</i> (L.) L'Hér. ex Aiton *	Whitestem Filaree
Lamiaceae	Mint Family
<i>Marrubium vulgare</i> L. *	Horehound
<i>Rosmarinus officinalis</i> L. *	Rosemary
<i>Salvia apiana</i> Jeps.	White Sage
Malvaceae	Mallow Family
<i>Malva parviflora</i> L. *	Cheeseweed
Myrtaceae	Myrtle Family

<i>Eucalyptus camaldulensis</i> Dehnh. *	Red River Gum
<i>Melaleuca viminalis</i> (Sol. ex Gaertn.) Bymes *	Weeping Bottlebrush
Papaveraceae	Poppy Family
<i>Eschscholzia californica</i> Cham. +	California Poppy
Platanaceae	Plane Tree Family
<i>Platanus racemosa</i> Nutt.	California Sycamore
Solanaceae	Nightshade Family
<i>Datura wrightii</i> Regel.	Datura
<i>Nicotiana glauca</i> Graham *	Tree Tobacco
MONOCOTYLEDONS	SINGLE COTYLEDON PLANTS
Arecaceae	Palm Family
<i>Bromus diandrus</i> Roth. *	Ripgut Brome
Poaceae	Grass Family
<i>Bromus diandrus</i> Roth. *	Ripgut Brome
<i>Cynodon dactylon</i> (L.) Pers. *	Bermuda Grass
<i>Hordeum murinum</i> L. cf. ssp. <i>glaucum</i> (Steud.) Tzvelev *	Foxtail
* Non-native	
** Planted or Seeded Non-native	
*+ Planted or Seeded Non-native	

APPENDIX B

Site Photographs



Photograph 1. This photograph from a nearby reference population shows Santa Ana River Woolly Star (date: June 2021).



Photograph 2. This photograph faces north along Pepper Avenue and shows the typical plant composition of the project site. Dominant plants include invasive species such as wall barley (*Hordeum murinum*), wild oats (*Avena* spp.), and mustards.



Photograph 3. A view looking south from the western limits of the project site. Invasive plants are pervasive.



Photograph 4. This southeast facing view shows lantana (*Lantana camera*) and wall barley (*Hordeum murinum*) in the northwestern limits of the project site.

APPENDIX F



Memorandum

Date: August 20, 2021

To: Jeremy Krout, EPD Solutions, Inc.

From: Juan J. Hernandez, Principal Biologist

Subject: Focused Burrowing Owl Survey Report for Assessor's Parcel Numbers 0264-201-05, 0264-201-06, and 0264-201-26 located in the city of Rialto, San Bernardino County, California.

This memorandum provides the methods and results of focused burrowing owl (*Athene cunicularia*; BUOW) survey for Assessor's Parcel Numbers (APNs) 0264-201-05, 0264-201-06, and 0264-201-26 located in the city of Rialto, San Bernardino County, California.

Project Location

The approximate 24.6-acre project site is located south of the Interstate 210 and east of North Pepper Avenue in the city of Rialto. The project site consists of San Bernardino County APNs 0264-201-05, 0264-201-06, and 0264-201-26. Specifically, the project site is located within the Muscupiabe land grant in the San Bernardino North United States Geological Survey (USGS) 7.5' topographic quadrangle. The center point latitude and longitude for the project site are 34.13153802° North and 117.35110039 West (Figures 1 and 2).

The Study Area included APNs 0264-201-05, 0264-201-06, and 0264-201-2 and a 150-meter (500-foot) buffer around the site (Figure 3), where accessible.

Project Contact Information

Owner/Applicant: EPD Solutions, Inc.
2 Park Plaza Suite 1120
Irvine, CA 92614

Principal Investigator: Juan J. Hernandez
Hernandez Environmental Services
17037 Lakeshore Drive
Lake Elsinore, CA 92530
(909) 772-9009

Field Survey Methods

In accordance with the *California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl Mitigation (CDFW, 2012)*, protocol surveys consisted of four site visits conducted on four separate days as follows: 1) at least one site visit between 15 February and 15 April, and 2) a minimum of three survey visits, at least three weeks apart, between 15 April and 15 July, with at least one visit after 15 June. Survey times, weather, and sunrise/sunset information is described in Table 1 below.

Table 1. Survey Information

Survey	Date	Survey Start Time	Survey End Time	Sunrise	Weather
1	April 5, 2021	0715 hours	0845 hours	0629 hours	52 degrees Fahrenheit, clear, winds 0-4 miles per hour from the northeast
2	May 12, 2021	0730 hours	0830 hours	0545 hours	61 degrees Fahrenheit, 100% cloud cover, winds 0-4 miles per hour from the southeast
3	June 15, 2021	0630 hours	0712 hours	0537 hours	70 degrees Fahrenheit, 10% cloud cover, winds 0-2 miles per hour from the northeast
4	July 9, 2021	0700 hours	0740 hours	0546 hours	72 degrees Fahrenheit, 10% cloud cover, winds 0-3 miles per hour from the southwest.

Surveys were conducted from one hour before sunrise to two hours after sunrise or two hours before sunset to one hour after sunset and during weather that was conducive to observing owls outside their burrows and detecting BUOW sign. The surveys were not conducted during rain, high winds (> 20 miles per hour), dense fog, or temperatures above 90 degrees Fahrenheit. Surveys involved walking through potentially suitable habitat within the survey area. The pedestrian survey transects were spaced approximately 30 to 50 feet apart to allow 100 percent visual coverage of the ground surface. Special attention was paid to those habitat areas that appeared to provide suitable habitat for BUOW. Where permission to access the buffer areas could not be obtained, the biologist visually inspects adjacent habitats with binoculars.

All encountered burrows or structure entrances were checked for the presence of BUOW, molted feathers, cast pellets, prey remains, eggshell fragments, tracks, or excrement. Natural or man-made structures and debris piles that could support BUOW were also

surveyed. The locations of all suitable BUOW habitat, potential burrows, BUOW sign, and any BUOW observed was recorded and mapped with a handheld Global Positioning System (GPS) unit.

All wildlife species encountered visually or audibly during the field survey were identified and recorded in field notes. Binoculars were used to aid in the identification of observed wildlife. Photographs were taken to document existing conditions within the survey area.

Results

The project site contains approximately 24.6 acres of ruderal habitat. The onsite ruderal habitat is heavily disturbed areas. This habitat type is dominated by non-native plant species with very few native species. Portions of these areas appear to have been reseeded with native annual flowers. The project site consists of disturbed land historically used for agricultural use. The site appears to be continually disturbed for weed abatement purposes. The site is bordered by vacant lands and Interstate 210 to the north, North Pepper Avenue to the west, vacant land and railroad tracks to the east, and ruderal habitat to the south. The site is relatively flat with onsite elevations ranging from 1,256 feet above mean sea-level (AMSL) to 1,287 feet AMSL. According to the USDA Web Soil Survey, soils at the project site are classified as Grangeville fine sandy loam (Gr), warm MAAT, MLRA 19 and Tujunga loamy sand (TuB), 0 to 5 percent slopes.

The Study Area provides suitable burrows/nesting opportunities for BUOW. A total of 47 suitable burrow measuring four inches or greater in diameter were checked and recorded within the Study Area; 12 of the burrows were located within the project site boundaries (Figure 4). Evidence of ground squirrels and ground squirrel activities were observed throughout the Study Area. Although the Study Area supports fossorial mammal burrows and non-natural substrates capable of supporting BUOW, no BUOW or BUOW sign was observed at the entrance or adjacent to these burrows within the Study Area.

Despite systematic searches of the Study Area, no BUOW or evidence (i.e., including scat, pellets, feathers, tracks, and prey remains) were found which suggest recent or historical use by BUOW. Therefore, it can be concluded that BUOW are not currently present within the Study Area.

Certification

I hereby certify that the statements furnished above and in the attached exhibits present 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: August 21, 2019



Juan J. Hernandez
Principal Biologist

Enclosures:

- Figure 1: Project Location Map
- Figure 2: Project Vicinity Map
- Figure 3: Survey Area Map
- Figure 4: Survey Results Map
- Appendix A: Site Photographs

FIGURES

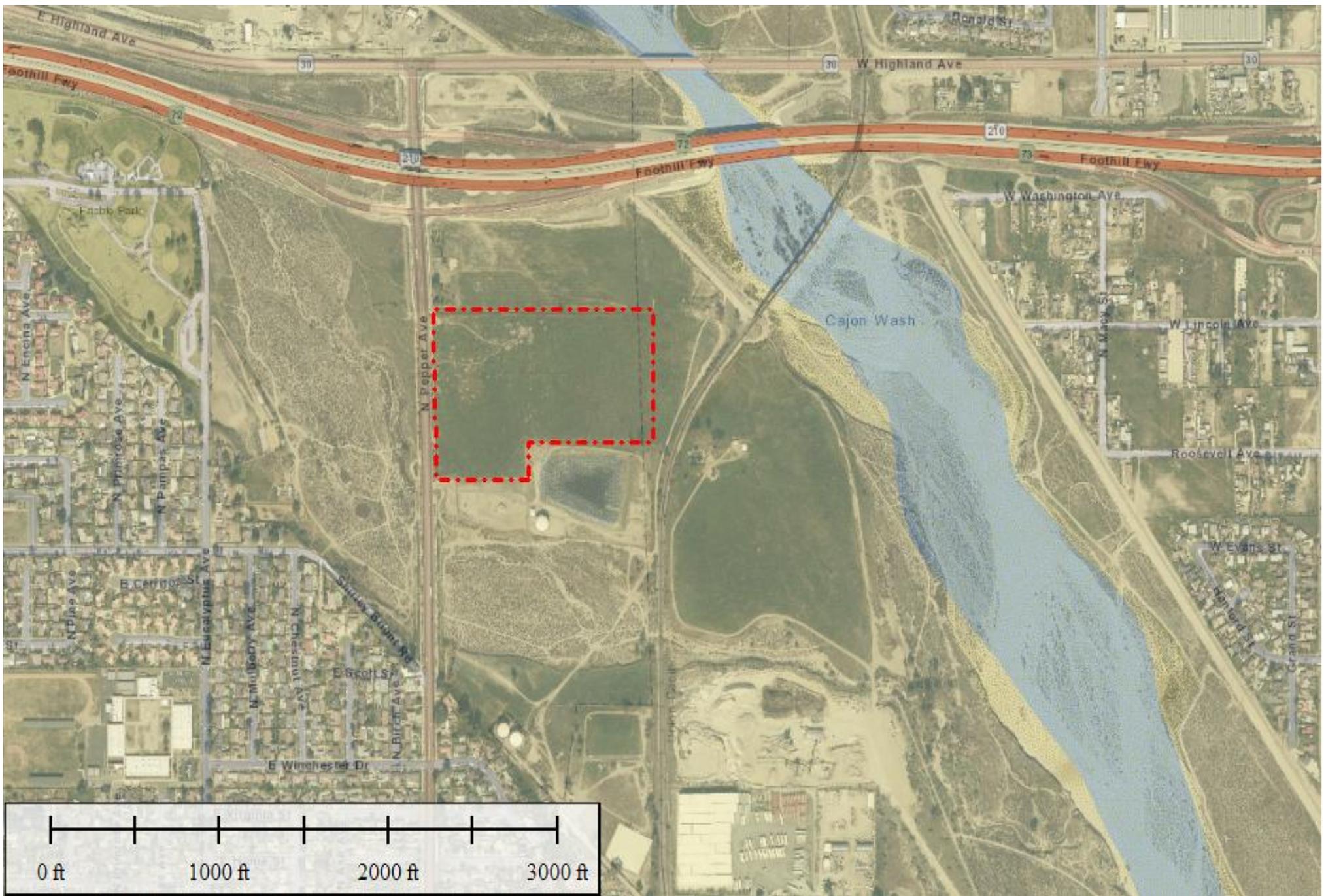


Figure 1
 Location Map
 Pepper Industrial Building
 San Bernardino County, California

Legend

 Project Site Boundary



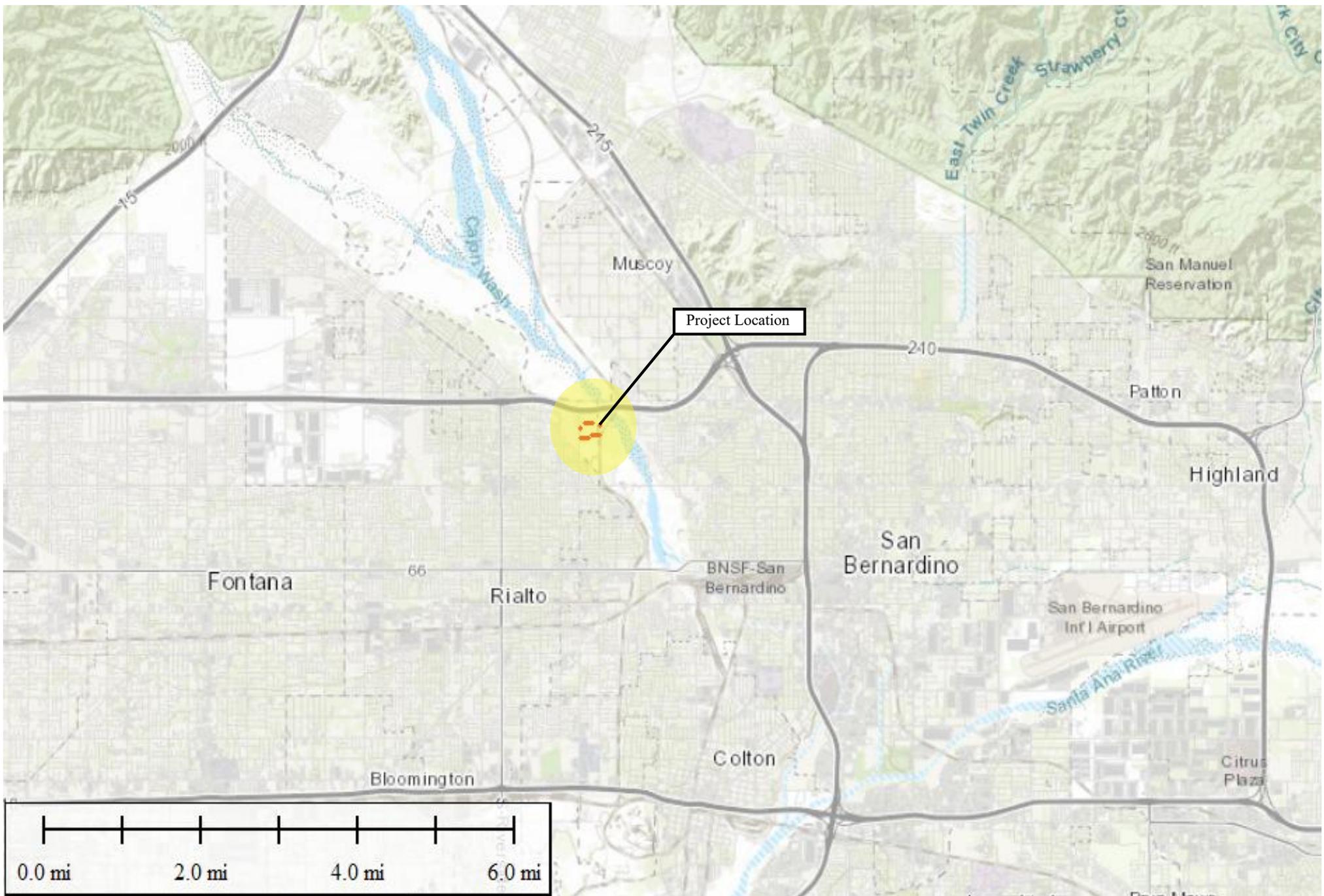


Figure 2
 Vicinity Map
 Pepper Industrial Building
 San Bernardino County, California

Legend
 Project Site Boundary



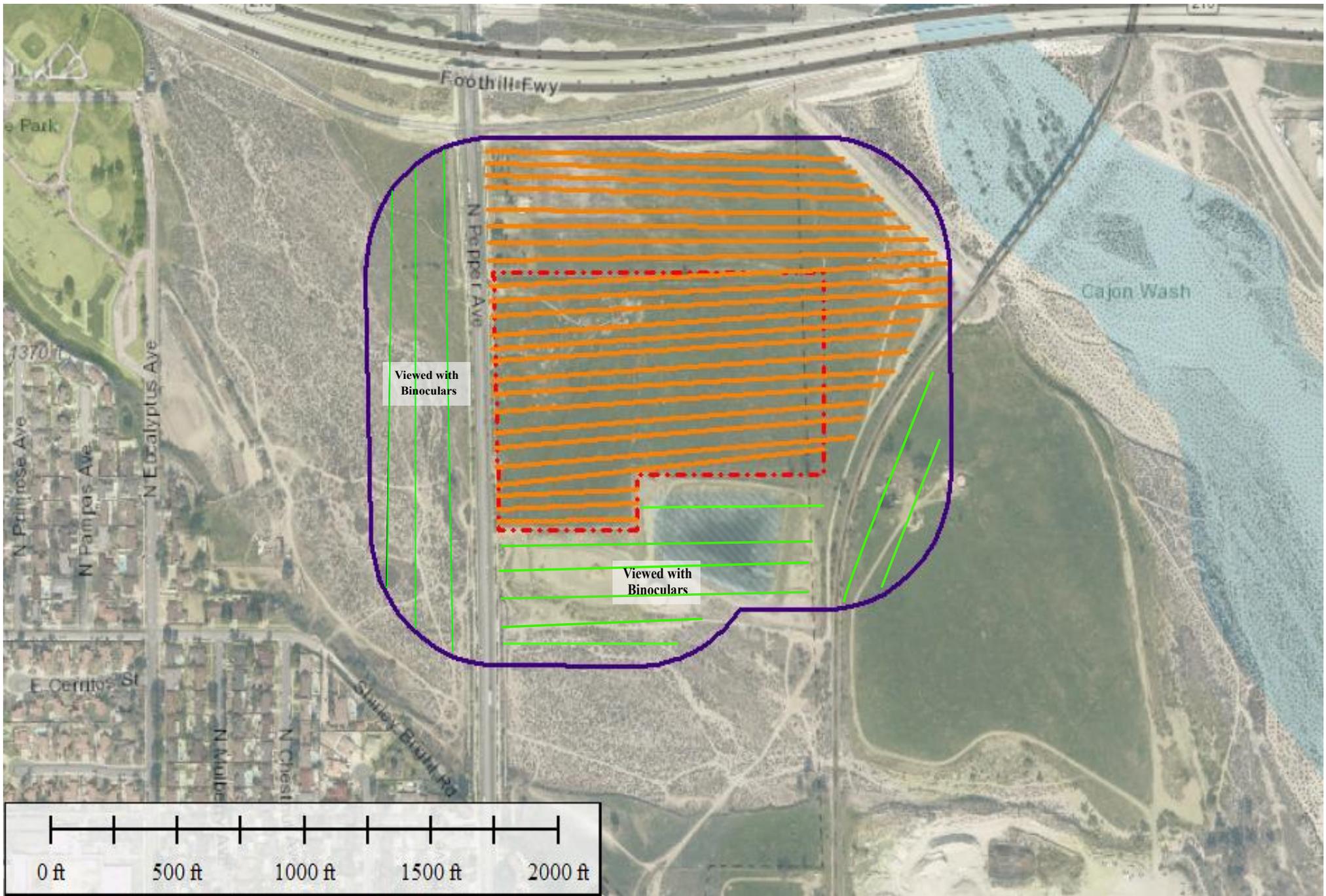


Figure 3
 BUOW Survey Area Map
 Pepper Industrial Building
 San Bernardino County, California

Legend

- Project Site Boundary
- 150 Meter (500 Foot) Buffer Area
- Transect Locations
- Binocular Surveyed Locations



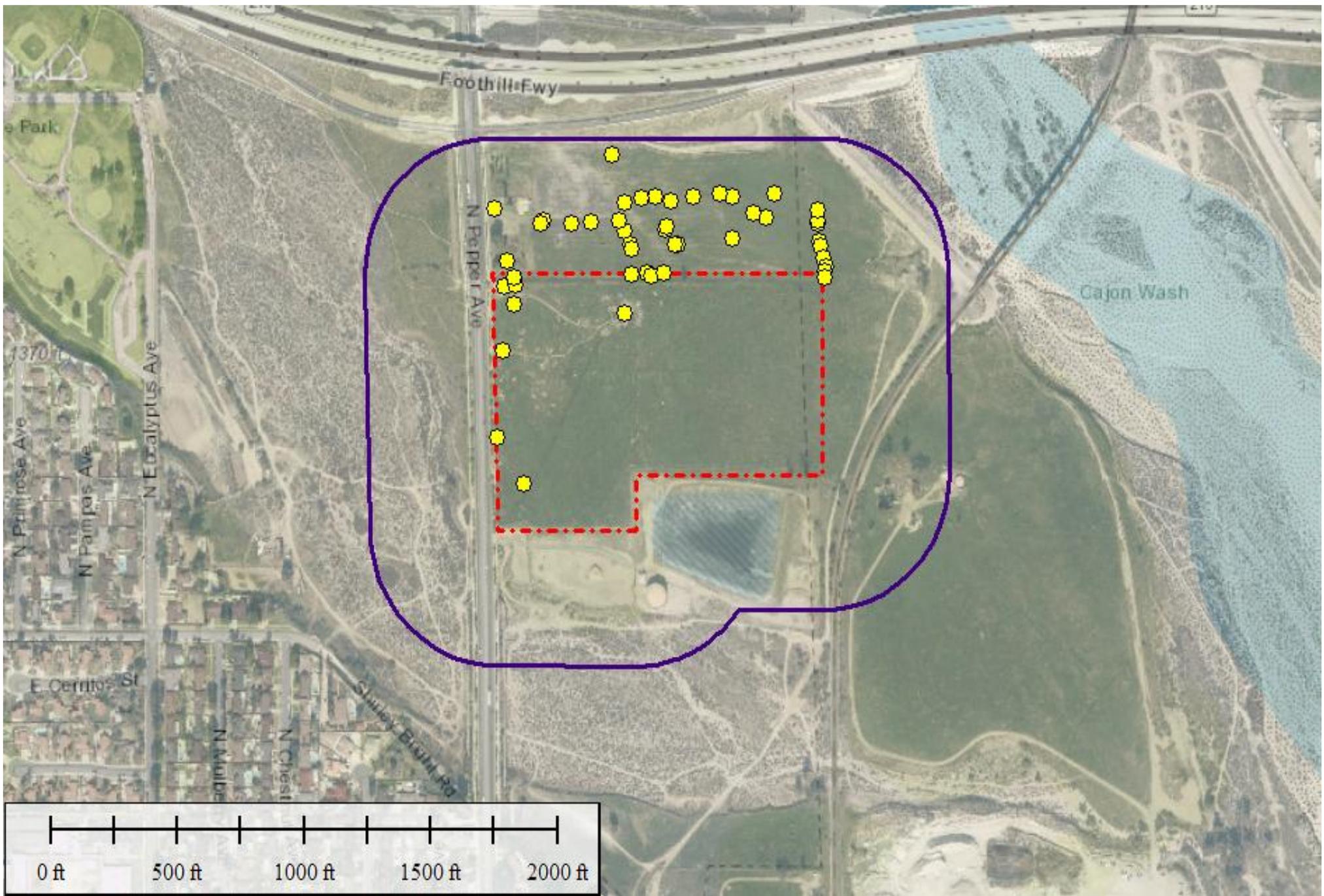
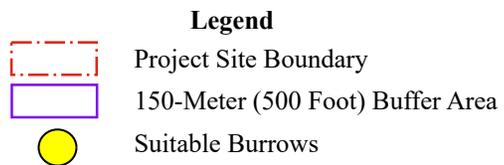


Figure 4
 BUOW Results Map
 Pepper Industrial Building
 San Bernardino County, California



APPENDIX A



View of suitable burrow without sign on site.



View of ruderal habitat from the northern border of the site facing south.



View of ruderal habitat on site with piles of liter.