ROCKS
BIOLOGICAL CONSULTING



BLOOMINGTON GAS STATION PROJECT

BIOTIC RESOURCES REPORT

San Bernardino County, California

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TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

1 SUMMARY

This report presents the results of a biological resource assessment conducted by Rocks Biological Consulting (RBC) for the Bloomington Gas Station Project (project) in the City of Bloomington, San Bernardino County, California. The 9.32-acre project site primarily supports non-native grassland with large areas that are disturbed or developed. The site has a very low potential to support the U.S. Fish and Wildlife Service (USFWS) federally endangered Delhi Sands flower-loving fly (*Raphiomidas terminatus abdominalis*), and a high potential to support the California Department of Fish and Wildlife (CDFW) Species of Special Concern burrowing owl (*Athene cunicularia*). The site does not appear to support waters of the U.S./State, jurisdictional by the U.S. Army Corps of Engineers (Corps) and Santa Ana Regional Water Quality Control Board (RWQCB), or streambed and associated riparian/wetland habitat jurisdictional by CDFW. Impacts on biological resources will be less than significant with implementation of the mitigation measures outlined in this report.

2 INTRODUCTION

2.1 PROJECT LOCATION

The 9.32-acre project site APN 0257-101-01) for the proposed project is located south of Santa Ana Avenue and directly east of Cedar Avenue within the City of Bloomington, in San Bernardino County, California (Figure 1). The project site is located approximately 0.8 mile south of Interstate 10 (I-10), 5.5 miles west of Interstate 215 (I-215), and approximately 3.5 miles north of State Route 60 (SR-60).

2.2 PROJECT DESCRIPTION

The proposed project will include a single-story gas station/truck stop with two fuel canopies (one for gasoline and one for diesel trucks), an automated car wash with on-site wash water recycling, an automated commercial truck wash with on-site wash water recycling, two quick serve restaurants and a full service sit down restaurant. The site development may include construction of a “pork-chop” type island at the northwest corner to keep the existing traffic signal standard undisturbed and facilitate anticipated truck traffic to the truck-stop portion of the proposed development along Santa Ana Avenue. The project may be developed in phases, with the gas station, truck stop and truck wash (parcels 1, and 6) built during Phase 1 and the southerly portion remaining (parcels 2, 3, 4, and 5) as Phase 2. The project is anticipated to require a change of zone from the existing Residential 1 - AA to general commercial.

2.3 SCOPE OF WORK

This report provides an analysis of impacts on biological resources associated with the proposed project in the context of County of San Bernardino (County) Land Use regulations, the California Environmental Quality Act (CEQA; Public Resources Code § 21000 et seq.), and state and federal regulations, such as the federal Endangered Species Act (ESA; 16 U.S. Code [USC] § 1531 et

seq.), Clean Water Act (CWA; 33 USC § 1251 et seq.), and the California Fish and Game Code (CFGC).

For this analysis, the following tasks were performed: (1) General biological surveys; (2) Vegetation mapping; (3) Habitat assessments for special-status species, including Delhi Sands flower-loving fly and burrowing owl; and (4) An assessment for areas anticipated to be jurisdictional under the Corps pursuant to Section 404 of the CWA, under the RWQCB pursuant to Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act; Water Code Section 13000 et seq.), and under CDFW pursuant to Section 1602 of the CFGC.

Several regulations have been established by federal, state, and local agencies to protect and conserve biological resources as listed below. Detailed descriptions of agency regulations that may be applicable to the project are provided in Appendix A.

Federal Regulations

- Federal Endangered Species Act
- Migratory Bird Treaty Act
- Rivers and Harbors Appropriation Act of 1899
- Clean Water Act

State Regulations

- California Endangered Species Act
- California Environmental Quality Act
- Native Plant Protection Act and Natural Community Conservation Planning Act
- California Fish and Game Code Sections 1600-1602
- California Fish and Game Code Sections 3503, 3511, 3513, 3800, 4700, 5050, and 5515
- Porter-Cologne Water Quality Control Act

Regional and Local Plans

- County of San Bernardino Land Use Services, Planning Division

2.4 EXISTING CONDITIONS

The project site is mostly flat with elevations ranging from approximately 1,120 to 1,140 feet above mean sea level (amsl). The project site primarily supports non-native grassland with scattered ruderal vegetation and disturbed areas. Site photographs are presented in Appendix E.

3 METHODS

RBC biologists Brenda Bennett and Chris Thomson visited the project site on December 27, 2019 to conduct general biological surveys, vegetation mapping, a wetland/waters jurisdictional constraints assessment, and habitat assessments for special-status plant and wildlife species, with

a focus on Delhi Sands flower-loving fly and burrowing owl. Binoculars (10 x 42) were used to aid in the observation of species during the survey. RBC biologists identified plant species using *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012) and local botanical knowledge. All plant and wildlife species observed on the project site are presented in Appendices B and C.

3.1 BIOLOGICAL RESOURCE DATABASE REVIEW

RBC queried CDFW's California Natural Diversity Database (CNDDB) (CDFW 2019) and the database of threatened/endangered USFWS species for a one-mile radius around the project site (USFWS 2019). RBC queried the California Native Plant Society (CNPS) Electronic Inventory (CNPS 2019) for the nine USGS 7.5' quadrangles surrounding the project site for the elevation range of 800 to 1,200 feet amsl. RBC also queried the Natural Resources Conservation Service (NRCS; USDA 2019) for the soils present on the project site and consulted the County of San Bernardino's Biotic Resources Overlay Map (County of San Bernardino 2012) for biotic resources overlay zones within the project site and any County-mapped biological resources with potential to occur on site. RBC refined the potential for special-status species to occur within the project site by considering the habitat affinities of each species, the results of field habitat assessments, vegetation mapping, and knowledge of local biological resources.

3.2 DELHI SANDS FLOWER–LOVING FLY HABITAT ASSESSMENT

Delhi Sands flower-loving fly is most commonly observed in sandy areas composed of Delhi fine sand with sparse cover of native shrubs (USFWS 2008). The primary nectar source for the Delhi Sands flower-loving fly is California buckwheat (*Eriogonum fasciculatum*) (USFWS 1997). Since several historic occurrences surround the project site, RBC conducted a habitat assessment by surveying for suitable Delhi fine sands soil and potential Delhi Sands flower-loving fly nectar sources on the project site.

3.3 BURROWING OWL HABITAT ASSESSMENT

RBC assessed burrowing owl habitat in accordance with CDFW's *Staff Report on Burrowing Owl Mitigation* (the Guidelines; California Department of Fish and Game 2012). Suitable burrowing owl habitat can be found in annual and perennial grasslands, deserts, and scrublands characterized by low-growing vegetation (Zarn 1974). Suitable owl habitat may also include trees and shrubs if the canopy covers less than 30 percent of the ground surface. Burrows are the essential component of burrowing owl habitat; both natural and artificial burrows provide protection, shelter, and nests for burrowing owl (Henny and Blus 1981). Burrowing owl typically use burrows made by rodents, such as ground squirrels or badgers, but may also use human-made structures, such as concrete culverts; concrete, asphalt, or wood debris piles; or openings beneath concrete or asphalt pavement.

RBC conducted a habitat assessment by surveying for burrowing owl sign, suitable habitat and burrows, and suitable prey species on the project site.

3.4 VEGETATION MAPPING AND GENERAL PLANT AND WILDLIFE SURVEYS

Vegetation mapping took place directly on a 150-scale (1" = 150') aerial photograph following *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). RBC mapped vegetation on the project site plus a 50-foot buffer, and identified flora and fauna for inclusion in plant and wildlife lists for the project site.

3.5 INITIAL AQUATIC RESOURCE ASSESSMENT

RBC conducted an initial assessment to identify potential areas that may be considered jurisdictional under the Corps pursuant to Section 404 of the CWA; jurisdictional under the RWQCB pursuant to Section 401 of the CWA and the Porter-Cologne Act; and streambed and riparian habitats under the CDFW pursuant to Cal. Fish and Game Code §1602. No formal jurisdictional delineation was conducted as part of this effort.

4 RESULTS

4.1 BIOLOGICAL RESOURCE DATABASE REVIEW RESULTS

The CNDDB and USFWS results include historical occurrences of three special-status plant species and two special-status wildlife species within one mile of the project site (Figure 3A). The CNPS electronic inventory search results included an additional 46 plant species with a California Rare Plant Ranking (CRPR). Appendix D provides details regarding the potential for these special-status species to occur on site.

There is one historical occurrence for Delhi Sands flower-loving fly within one mile of the project site. There is no designated critical habitat for Delhi Sands flower-loving fly or other species within one mile of the project site. The project site is within the County of San Bernardino's Burrowing Owl Overlay Zone (County of San Bernardino 2012).

4.2 DELHI SANDS FLOWER–LOVING FLY HABITAT ASSESSMENT RESULTS

Delhi fine sands are not present on the project site according to the NRCS soils map for the site (Figure 4), the Delhi Soils Area Boundary Figure (City of Rancho Cucamonga 2001), and based on the field investigation. The site mainly supports non-native grassland with scattered areas that are ruderal or disturbed and supports very few possible nectar sources for the Delhi Sands flower-loving fly. Due to a lack of suitable Delhi fine sands and a lack of nectar sources for the Delhi Sands flower-loving fly, there is a very low potential for this species to occur on-site.

4.3 BURROWING OWL HABITAT ASSESSMENT RESULTS

RBC did not observe any burrowing owl individuals, active burrows or burrowing owl sign during the December 27, 2019 habitat assessment. However, the project site is within the County of San Bernardino's Burrowing Owl Overlay Zone (County of San Bernardino 2012) and burrowing owls have been reported approximately 1.2 miles from the project site, according to the CNDDB (Figure

3). Highly suitable non-native grassland habitat and California ground squirrel burrows were observed on site. As such, this species has a high potential to occur on site

4.4 VEGETATION COMMUNITIES AND LAND USE

The project site supports non-native grassland (8.57 acres), disturbed habitat (0.41 acre), ruderal (0.33 acre), and a eucalyptus tree (*Eucalyptus* sp.; 0.01 acre; Figure 2). The vegetation communities/land uses that occur within the project site are described below.

Disturbed

Disturbed habitat is typically classified as land on which the native vegetation has been significantly altered by agriculture, construction, or other land-clearing activities, and the species composition and site conditions are not characteristic of the disturbed phase of a plant association (e.g., disturbed chaparral). Disturbed habitat is typically found in vacant lots, along roadsides, within construction staging areas, and in abandoned fields. This habitat is typically dominated by non-native annual species and perennial broadleaf species. Disturbed habitat occurs near the intersection of Cedar Avenue and Santa Ana Avenue, and at the southern site boundary (Figure 2).

Eucalyptus tree

A single eucalyptus tree exists on site near the southern site boundary (Figure 2). Eucalyptus trees are native to Australia, and some species are considered to be invasive in California. Eucalyptus trees are often planted as windbreaks along agriculture fields and pastures due to their fast-growing nature.

Non-Native Grassland

Non-native grassland comprises a majority of the project site (Figure 2). Non-native grassland generally occurs on fine-textured loam or clay soils that are moist during the winter rainy season and very dry during the summer and fall (Holland 1986). Non-native grassland within the project site is dominated by red brome (*Bromus rubens*), Mediterranean schismus (*Schismus barbatus*) and other non-native grasses. Broadleaf species include short-pod mustard (*Hirschfeldia incana*) and horseweed (*Erigeron canadensis*) (Appendix B).

Ruderal

Ruderal vegetation consists of 50 percent or greater cover of broadleaf plant species. This vegetation community typically includes non-native grasses and forbs such as short-pod mustard and tumbleweed (*Salsola* sp.); this community is often the first to inhabit disturbed lands. Ruderal vegetation is commonly found on previously disturbed lands, such as agricultural lands, dirt lots, and recently burned areas. Ruderal vegetation occurs along the northeast and southwest project boundary, and in the southwest portion of the site (Figure 2).

4.5 SPECIAL-STATUS WILDLIFE SPECIES

No special-status wildlife species were observed on site during the project survey on December 27, 2019. However, three special-status wildlife species have a moderate or high potential to occur on the project site.

Birds

Burrowing Owl (Athene cunicularia)

Burrowing owl is a CDFW Species of Special Concern at nesting sites and is federally protected by the Migratory Bird Treaty Act (MBTA). The western subspecies of burrowing owl (*A. c. hypugaea*) breeds from southern Canada to the western half of the United States and into Baja California and central Mexico. In California, suitable habitat for burrowing owl is generally characterized by short, sparse vegetation with few shrubs, level to gentle topography, and well-drained soils, such as naturally occurring grassland, shrub steppe, and desert habitats (Haug et al. 1993). Burrowing owls may also occur in agricultural areas, ruderal grassy fields, vacant lots, and pastures containing suitable vegetation structure and useable burrows with foraging habitat in proximity (Gervais et al. 2008). Burrowing owls usually use burrows dug by California ground squirrel (*Otospermophilus beecheyi*) and round-tailed ground squirrel (*Citellus tereticaudus*) and dens or holes dug by other fossorial species including badger (*Taxidea taxus*), coyote (*Canis latrans*), and fox (e.g., San Joaquin kit fox (*Vulpes macrotis mutica*)) (Ronan 2002). Burrowing owls also frequently use natural rock cavities, debris piles, culverts, and pipes for nesting and roosting (Rosenberg et al. 2004) and have been documented using artificial burrows for nesting and cover (Smith and Belthoff 2001).

Burrowing owls have declined throughout much of their range because of habitat loss due to urbanization, agricultural conversion, and destruction of ground squirrel colonies (Remsen 1978). The incidental poisoning of burrowing owls and the destruction of their burrows during eradication programs aimed at rodent colonies have also caused their decline (Collins 1979; Remsen 1978). Although burrowing owls are relatively tolerant of lower levels of human activity, human related effects such as shooting and introduction of non-native predators have negative population effects. Burrowing owls often nest and perch near roads where they are vulnerable to roadside shooting, fatal car strikes, and general harassment (Remsen 1978).

Burrowing owl have been historically detected within approximately 1.2 miles of the project site (Figure 3A). Focused burrowing owl surveys have not been conducted for the project. Burrowing owl or burrowing owl sign were not observed on site during the December 27, 2019 biological survey. However, based on the presence of suitable grassland habitat, on-site California ground squirrel burrows, and the ability of burrowing owls to occupy fairly disturbed and urban environments, this species has a high potential to occur on site.

California Horned Lark (Eremophila alpestris actia)

California horned lark is a CDFW Watch List species found from coastal deserts and grasslands to alpine dwarf-shrub habitat above tree line and in coniferous or chaparral habitats. It is a common to abundant resident in a variety of open habitats, usually found in habitats where trees and large shrubs are absent.

Within southern California, California horned lark nest on the ground in open fields, grasslands, and rangelands. Horned larks forage in areas with low-growing vegetation and feed primarily on grains and other seeds and shift to mostly insects in the summer months. California horned lark breeds from March through July, with a peak in activity in May (Beason 1995). Outside of the breeding season pairs do not maintain territories and instead form large gregarious, somewhat nomadic flocks. Threats to the California horned lark include habitat destruction and fragmentation, as well as threats to successful nesting such as pesticides and agricultural mowing.

California horned lark have not been historically documented within one mile of the project site (Figure 3A) and were not observed on site during the December 27, 2019 biological survey. However, this species has a moderate potential to occur based on the ability of the species to utilize disturbed grassland habitats.

Reptiles

California Glossy Snake (Arizona elegans occidentalis)

California glossy snake is a CDFW Species of Special Concern. This species is found in arid scrublands, rocky washes, grasslands, and chaparral containing open areas and loose soil for burrowing. This species occurs from the eastern portion of the San Francisco Bay region, south, along the coastal plain, to northwestern Baja California (Stebbins et al. 2012).

California glossy snake is nocturnal, and typically burrows underground during the day. This species is generally active from late February until November, demonstrating lower activity levels during summer months. California glossy snake preys primarily upon diurnal lizards, and will also consume snakes, birds, and nocturnal mammals.

Historical records for California glossy snake do not occur within one mile of the project site, however, the species has been documented approximately 1.5 miles from the project site (Figure 3A). Suitable open grassland habitat containing appropriate soils for this species are present on site. As such, California glossy snake has a moderate potential to occur.

4.6 SPECIAL-STATUS PLANT SPECIES

Paniculate Tarplant (Deinandra paniculata)

Paniculate tarplant holds a CRPR of 4.2, meaning this species has a limited distribution in California and is fairly endangered in California. Paniculate tarplant is an annual herb that blooms from (March) April through November (December). This species is typically found in mesic or sandy

soils within coastal scrub, valley and foothill grassland, and vernal pools, at elevations between 82 and 3,084 feet amsl. Paniculate tarplant is known to inhabit disturbed grasslands.

RBC performed the general biological survey on December 27, 2019, outside the survey window for this species. However, suitable sandy soils and non-native grassland habitat occur throughout much of the project site. As such, paniculate tarplant has a moderate potential to occur on site.

Smooth Tarplant (Centromadia pungens ssp. laevis)

Smooth tarplant holds a CRPR 1B.1, meaning this species is rare or endangered in California and elsewhere and seriously endangered in California. Smooth tarplant is an annual herb that blooms from April through September. This species is found in alkaline soils within chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland, at elevations between 0 and 2,100 feet amsl. Smooth tarplant is known to inhabit disturbed grasslands.

RBC performed the general biological survey on December 27, 2019, outside the survey window for this species. However, suitable non-native grassland habitat occurs throughout much of the project site. As such, smooth tarplant has a moderate potential to occur on site.

4.7 AQUATIC RESOURCES

No areas with depressions, drainage patterns, defined channels, and/or wetland vegetation were observed during the project site visit. As such, no potential federal-, or state-jurisdictional aquatic resources are expected to occur on site.

5 IMPACTS

Direct impacts refer to any alteration, disturbance, or destruction of biological resources caused by and occurring at the same time and place as the project. Examples include direct losses to native habitats, potential jurisdictional waters, wetlands, and special-status species; the crushing of adult plants, bulbs, or seeds; the diversion of natural surface water flows; injury, death, and/or harassment of listed and/or special-status species; and the destruction of habitats necessary for species breeding, feeding, or sheltering.

Indirect impacts may occur later in time or at a place that is farther removed in distance from the project than direct impacts, but indirect impacts are still reasonably foreseeable and attributable to project-related activities. Examples include habitat fragmentation; elevated noise, dust, and lighting levels; changes in hydrology, runoff, and sedimentation; decreased water quality; soil compaction; increased human activity; and the introduction of invasive wildlife (domestic cats and dogs) and plants.

Cumulative impacts are the direct and indirect impacts of a proposed project which, when considered alone, would not be deemed substantial, but when considered in addition to the impacts of related projects in the area, would be considered potentially significant. ‘Related projects’ refers to past, present, and reasonably foreseeable future projects which would have similar impacts on the proposed project.

CEQA Guidelines Form J thresholds of significance have been used to determine whether project implementation would result in a significant direct, indirect, and/or cumulative impact. These thresholds are based on Appendix G of the CEQA Guidelines (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3, Sections 15000–15387). A significant biological resources impact would occur if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS;
- Have a substantial adverse effect on federal protected wetlands (including, but not limited to, marshes, vernal pools, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy, or ordinance;
- Conflict with the provisions of an adopted HCP; Natural Community Conservation Plan; or other approved local, regional, or state habitat conservation plan.

5.1 NATIVE HABITAT IMPACT ANALYSIS

The project will impact four habitats or land uses as outlined in Table 1. The project will not impact native vegetation communities. Based on historical aerials, the property has been previously disturbed in the form of agriculture and is dominated by non-native vegetation. Impacts on non-native vegetation communities or habitats would be less than significant.

Table 1. Potential Project Impacts on Vegetation Communities/Land Uses

Land Use (Map Code)	Impacts within Project Boundary (Acres)*
Disturbed (DIST)	0.41
Eucalyptus tree (EUC)	0.01
Non-native grassland (NNG)	8.57
Ruderal (RUD)	0.33
Total	9.32

*Acreages rounded to the hundredths based on raw numbers provided during GIS analysis of the project, which are available upon request.

5.2 SPECIAL-STATUS PLANTS IMPACT ANALYSIS

The CNDDB results included historical occurrences of three special-status plant species within one mile of the project site. The CNPS electronic inventory nine quadrangle search results included an additional 46 CRPR plant species. The potential for special-status plant species to occur within the project site was refined by considering the habitat affinities of each species, the results of field habitat assessments, vegetation mapping, and knowledge of local biological resources.

There are two special-status plant species with moderate or high potential to occur on the project site: paniculate tarplant (*Deinandra paniculata*, CRPR 4.2); and smooth tarplant (*Centromadia pungens* ssp. *laevis,* CRPR 1B.1). Given the size of the project site and high level of site disturbance, extensive populations of special-status plant species are not anticipated to occur on site. If present, impacts on these species would be adverse but would be relatively small and would occur in an area surrounded by development; as such, impacts on special-status plants would be less than significant.

5.3 SPECIAL-STATUS ANIMALS IMPACT ANALYSIS

The project site has a high potential to support CDFW Species of Special Concern burrowing owl. Special-status species California glossy snake and California horned lark have a moderate potential to occur on site.

Burrowing owl surveys in accordance with the 2012 Staff Report on Burrowing Owl Mitigation (CDFG) are necessary to determine presence or absence of burrowing owl on the project site, potential effects of the proposed project on burrowing owl, and to avoid take in accordance with CFGC Sections 86, 3503, and 3503.5.

Given the size of the project site and high level of site disturbance, extensive populations of California glossy snake or California horned lark are not anticipated to occur on site. If present, impacts on these species would be adverse but would be relatively small and would occur in an area surrounded by development. Further, compliance with nesting birds regulations outlined in Section 6.2 would avoid direct take of California horned lark, if present. Through compliance with the recommended burrowing owl surveys and project-specific mitigation measure in Section 6.1 of this report, project activities will avoid impacts on burrowing owls, and impacts on special-status animals would be less than significant.

5.4 NESTING BIRD IMPACT ANALYSIS

The project site has the potential to impact active bird nests if vegetation is removed or ground disturbing activities occur during the nesting season (February 1 to August 31). Impacts on nesting birds are prohibited by the MBTA and CFGC. A project-specific mitigation measure that will avoid project impacts on nesting birds is identified in Section 6.2 of this report. With implementation of this measure, impacts on nesting birds would be less than significant.

5.5 JURISDICTIONAL RIPARIAN AREAS IMPACT ANALYSIS

The project will not impact riparian areas or vernal pools as such features do not occur onsite based on the initial aquatic resource assessment.

5.6 JURISDICTIONAL AQUATIC RESOURCES IMPACT ANALYSIS

The project will not impact jurisdictional aquatic resources as such features do not occur onsite based on the initial aquatic resource assessment.

5.7 INDIRECT IMPACT ANALYSIS

In the context of biological resources, indirect impacts are secondary effects associated with development activities. Examples of indirect effects include water quality impacts from drainage into adjacent open space/downstream aquatic resources; lighting effects; noise effects; invasive plant species from landscaping; and effects from human access into adjacent open space, such as recreational activities (including off-road vehicles and hiking), pets, dumping, etc. Since the project is adjacent to already developed or disturbed areas, and will comply with stormwater regulations, the project will not result in significant indirect effects to biological resources.

5.8 CUMULATIVE IMPACT ANALYSIS

Due to the level of disturbance on the project site, the adjacent developed land, and the lack of sensitive biological resources, the project will not result in any significant cumulative impacts to biological resources.

6 MITIGATION AND AVOIDANCE MEASURES

The following discussion provides project-specific mitigation/avoidance measures for actual or potential impacts on special-status biological resources.

6.1 BURROWING OWL

As noted above, burrowing owls, active burrows, or burrowing owl sign were not observed at the project site during the habitat assessment, however suitable habitat is present on site. The potential for burrowing owl to occur on site is high and protocol, as well as pre-construction burrowing owl surveys should be conducted prior to project construction to ensure that burrowing owl have not colonized the site.

Once protocol surveys are complete, a revised analysis of burrowing owl impacts can be performed if protocol surveys are negative, no additional analysis is required and only the following pre-construction measures should be implemented to ensure no burrowing owl have colonized the site.

> MM-1: A qualified biologist(s) will conduct a pre-construction presence/absence survey for burrowing owls at 14 days prior to ground disturbing activities and within 24 hours immediately before ground disturbing activities. If burrowing owls are documented on site,

then a plan for avoidance or passive exclusion shall be made in coordination with CDFW. If the survey is negative, the project may proceed without further restrictions related to burrowing owls.

6.2 NESTING BIRDS

As noted above, the project site has the potential to support nesting birds. To avoid impacts on nesting birds the following mitigation measure is recommended:

> MM-2: Vegetation clearing and ground disturbing activities should be conducted outside of the nesting season (February 1 to August 31). If construction activities occur during the nesting season, a qualified biologist will conduct a nesting bird survey within seven days prior to any disturbance of the site, including tree and shrub removal, disking, demolition activities, and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests depending on the level of activity within the buffer and species observed, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. Raptor species will have an avoidance buffer of 500 feet and other bird species will have an avoidance buffer of 300 feet. These buffers may be reduced in consultation with the CDFW. If active nests are not identified, vegetation clearing and ground disturbing activities may commence. If ground disturbing activities are scheduled outside of the nesting season, a nesting bird survey will not be required.

7 CONCLUSION

As outlined above, the project will not result in significant impacts on biological resources with the implementation of MM-1 through MM-2 outlined in Section 6. The project site has been historically disturbed and primarily consists of non-native grassland. The potential for burrowing owl is high based on its current distribution and habitat requirements. Burrowing owl surveys are recommended for the project to ensure that no impacts on this species would occur with project implementation (see Section 5.3). Additionally, pre-construction burrowing owl surveys should be conducted to determine presence or absence of burrowing owl from the project site immediately prior to construction (see recommended MM-1). Suitable avian nesting habitat is present on site. A pre-construction clearance survey for nesting birds should be conducted to ensure there are no impacts on nesting birds (see recommended MM-2).

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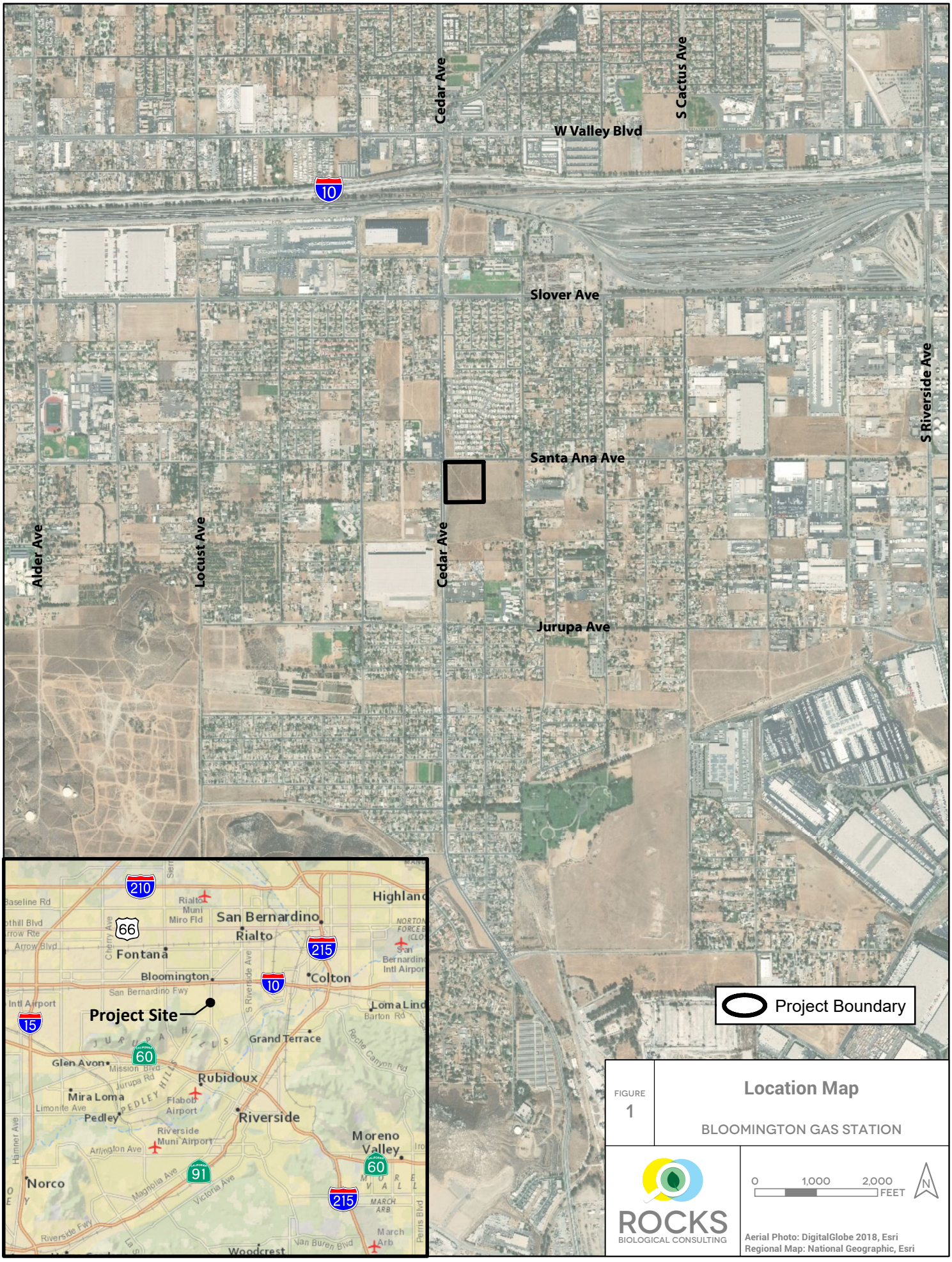


FIGURE 1

Location Map

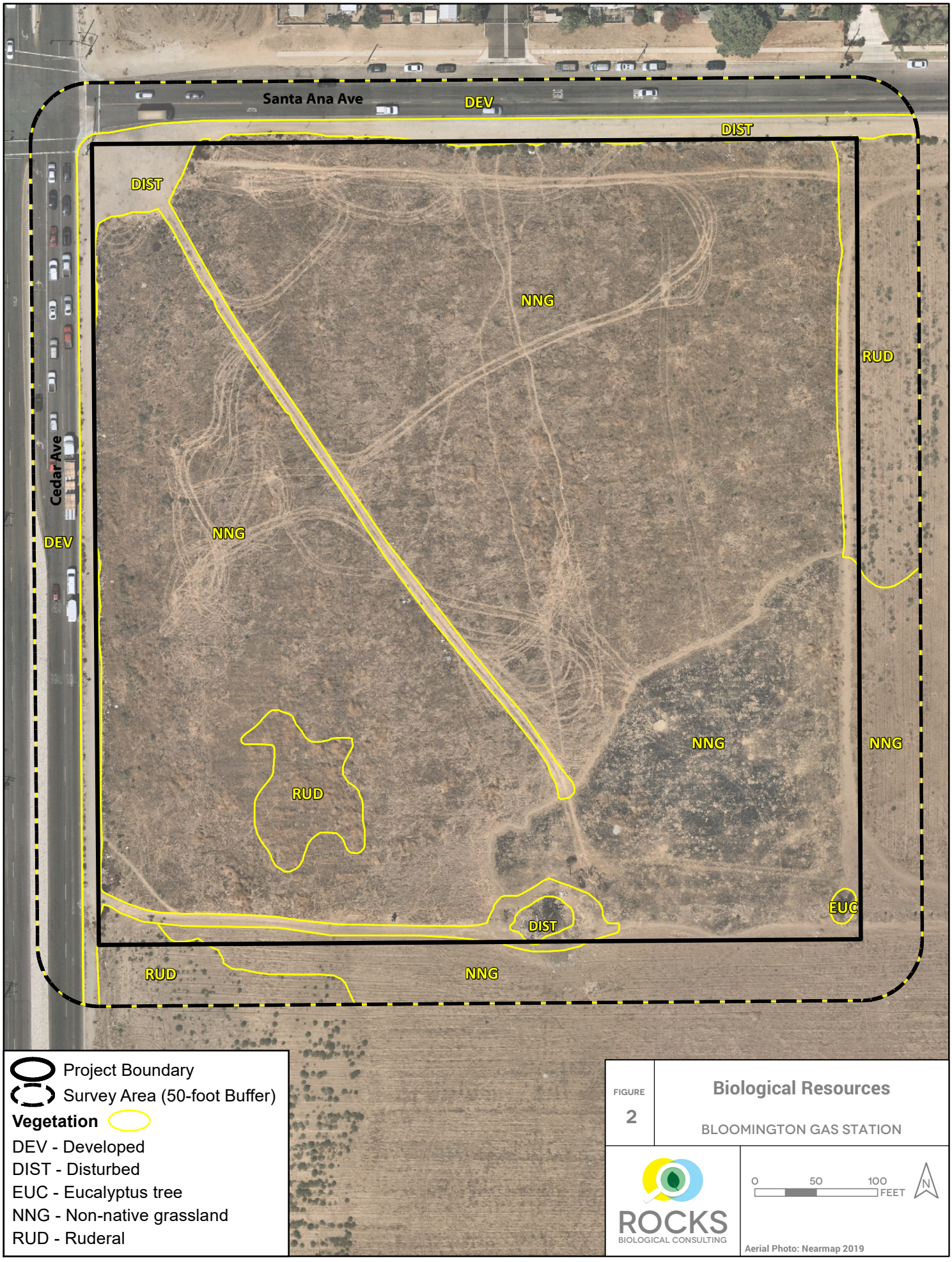
BLOOMINGTON GAS STATION

ROCKS BIOLOGICAL CONSULTING

0 1,000 2,000 FEET

N

Aerial Photo: DigitalGlobe 2018, Esri
Regional Map: National Geographic, Esri


Santa Ana Ave
Cedar Ave
DEV
DIST
NNG
RUD
EUC
Project Boundary
Survey Area (50-foot Buffer)
Vegetation
DEV - Developed
DIST - Disturbed
EUC - Eucalyptus tree
NNG - Non-native grassland
RUD - Ruderal
FIGURE
2
Biological Resources
BLOOMINGTON GAS STATION
ROCKS
BIOLOGICAL CONSULTING
0
50
100
FEET
N
Aerial Photo: Nearmap 2019

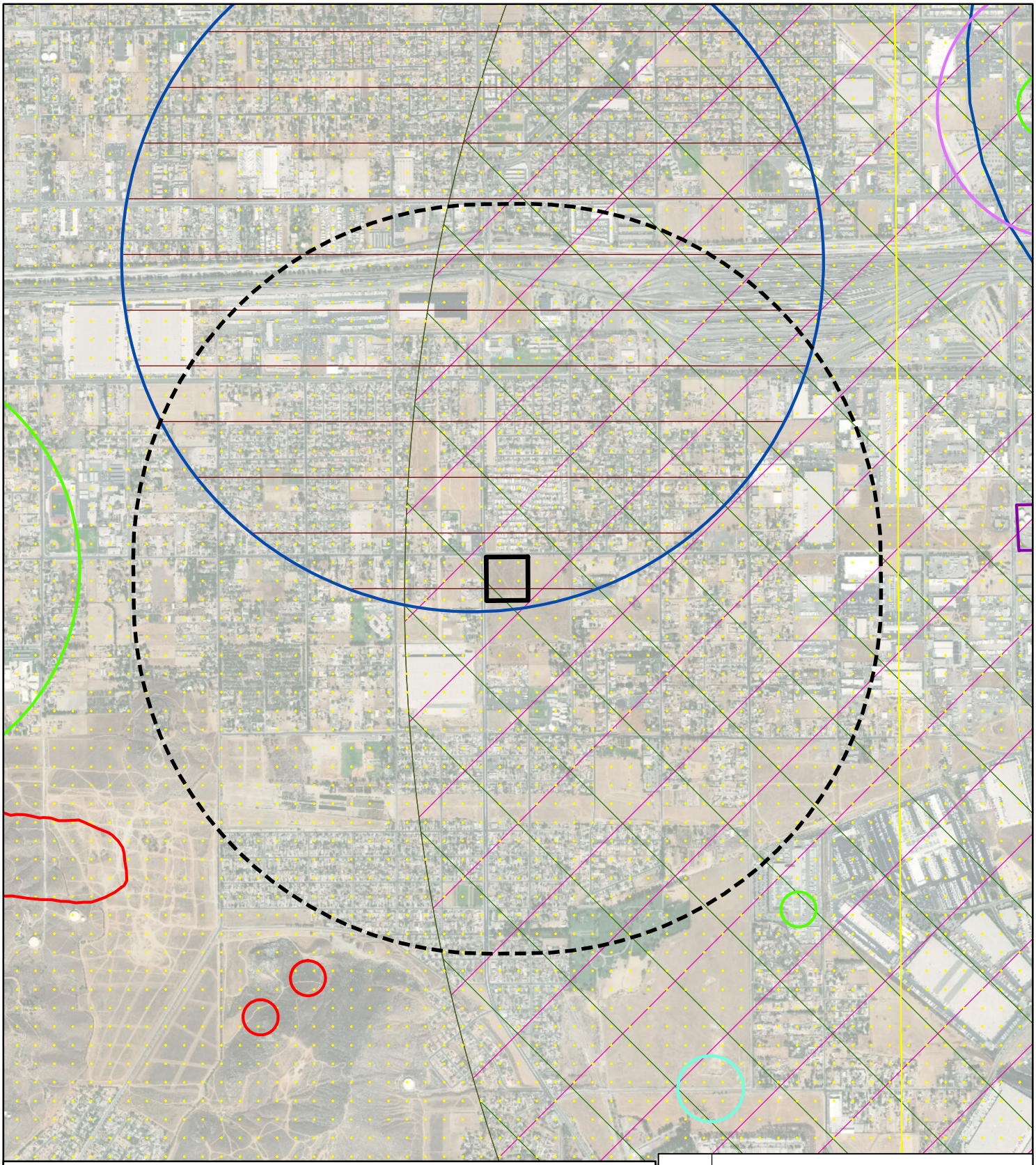


FIGURE 3A

CNDDB Species Locations

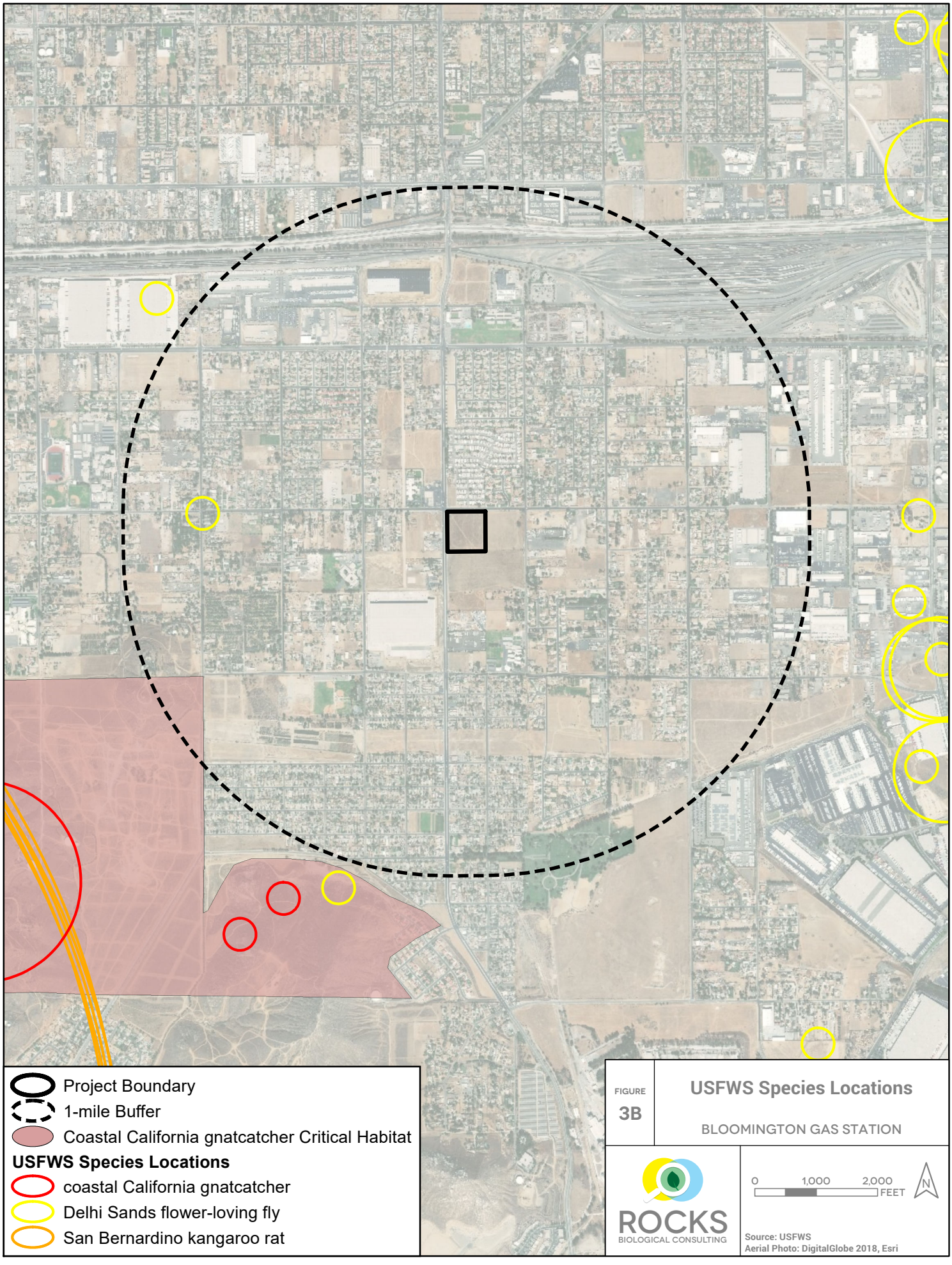
BLOOMINGTON GAS STATION

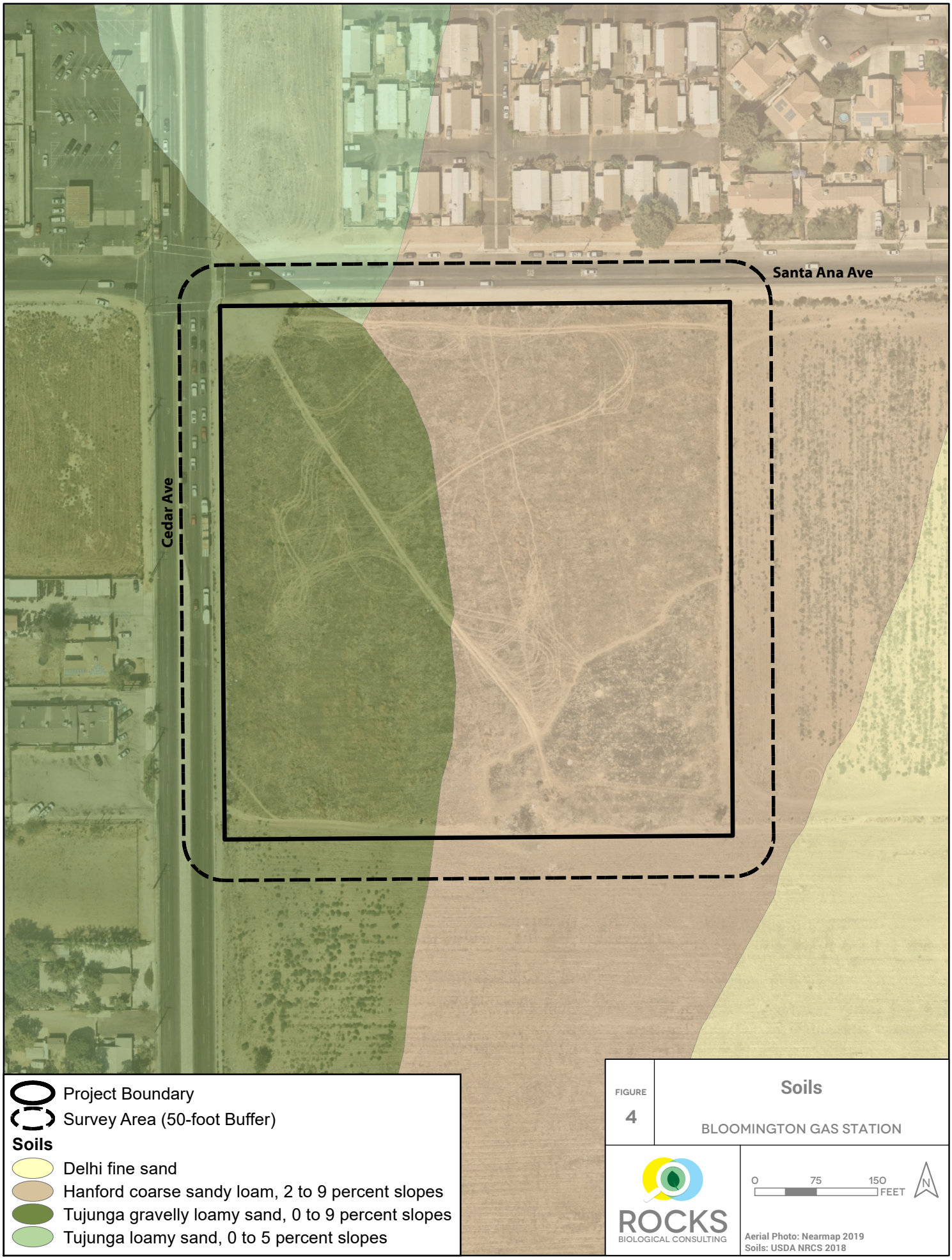
ROCKS BIOLOGICAL CONSULTING

0 1,000 2,000 FEET

N

Source: CDFW
Aerial Photo: DigitalGlobe 2018, Esri


Project Boundary
1-mile Buffer
Coastal California gnatcatcher Critical Habitat
USFWS Species Locations
coastal California gnatcatcher
Delhi Sands flower-loving fly
San Bernardino kangaroo rat
FIGURE
3B
USFWS Species Locations
BLOOMINGTON GAS STATION
ROCKS
BIOLOGICAL CONSULTING
0
1,000
2,000
FEET
N
Source: USFWS
Aerial Photo: DigitalGlobe 2018, Esri


Santa Ana Ave
Cedar Ave
Project Boundary
Survey Area (50-foot Buffer)
Soils
Delhi fine sand
Hanford coarse sandy loam, 2 to 9 percent slopes
Tujunga gravelly loamy sand, 0 to 9 percent slopes
Tujunga loamy sand, 0 to 5 percent slopes
FIGURE
4
Soils
BLOOMINGTON GAS STATION
ROCKS
BIOLOGICAL CONSULTING
0
75
150
FEET
N
Aerial Photo: Nearmap 2019
Soils: USDA NRCS 2018

Appendix A
Regulatory Framework

REGULATORY FRAMEWORK

Federal, state, and local agencies have established several regulations to protect and conserve biological resources. The descriptions below provide an overview of the agency regulations that may be applicable to the project. The final determination as to what types of permits are required will be made by the regulating agencies.

FEDERAL REGULATIONS

Federal Endangered Species Act

The ESA provides for the listing of endangered and threatened species of plants and animals and the designation of critical habitat for these listed species. ESA regulates the "taking" of any endangered fish or wildlife species, per Section 9. As development is proposed, the responsible agency or individual landowner is required to consult with the U.S. Fish and Wildlife Service (USFWS) to assess potential impacts on listed species (including plants) or the critical habitat of a listed species, pursuant to Sections 7 and 10 of the ESA. USFWS is required to determine the extent a project would impact a particular species. If USFWS determines that a project is likely to potentially impact a species, measures to avoid or reduce such impacts must be identified. Following consultation and the issuance of a Biological Opinion, USFWS may issue an incidental take statement which allows for the take of a species if it is incidental to another authorized activity and will not adversely affect the existence of the species. Section 10 of the ESA provides for issuance of incidental take permits to non-federal parties in conjunction with the development of a habitat conservation plan (HCP). Section 7 of the ESA provides for permitting of projects where interagency cooperation is necessary to ensure that a federal action/decision does not jeopardize the existence of a listed species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA; 16 USC § 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and is listed at 50 Code of Federal Regulations (CFR) 10.13. USFWS enforces the MBTA, which prohibits "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird, or attempt such actions, except as permitted by regulation.

Rivers and Harbors Appropriation Act of 1899

The Rivers and Harbors Appropriation Act of 1899 (Rivers and Harbors Act; 33 USC § 403) prohibits the discharge of any material into navigable waters of the United States, or tributaries thereof, without a permit. The act also makes it a misdemeanor to excavate, fill, or alter the course, condition, or capacity of any port, harbor, or channel; or to dam navigable streams without a permit.

Many activities originally covered by the Rivers and Harbors Act are now regulated under the CWA, discussed below. However, the 1899 act retains relevance and created the structure under which the Corps oversees permitting under CWA § 404.

Clean Water Act

Pursuant to Section 404 of the CWA, the Corps is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. (including wetlands), which includes those waters listed in 33 CFR 328.3 (as amended at 80 Federal Register [FR] 37104, June 29, 2015). The Corps, with oversight from the U.S. Environmental Protection Agency (EPA), has the principal authority to issue CWA Section 404 permits. The Corps would require a Standard Individual Permit (SIP) for more than minimal impacts to waters of the U.S. as determined by the Corps. Projects with minimal individual and cumulative adverse effects on the environment may meet the conditions of an existing Nationwide Permit (NWP).

A water quality certification or waiver pursuant to Section 401 of the CWA is required for all Section 404 permitted actions. The RWQCB, divisions of the State Water Resources Control Board (SWRCB), provides oversight of the 401-certification process in California. The RWQCB is required to provide "certification that there is reasonable assurance that an activity that may result in the discharge to waters of the United States will not violate water quality standards." Water Quality Certification must be based on the finding that a proposed discharge will comply with applicable water quality standards.

The National Pollutant Discharge Elimination System (NPDES) is the permitting program for discharge of pollutants into surface waters of the U.S. under Section 402 of the CWA.

STATE REGULATIONS

State of California Endangered Species Act

CESA, in combination with the California Native Plant Protection Act of 1977 (NPPA; CFGC § 1900 et seq.), regulates the listing and take of plant and animal species designated as endangered, threatened, or rare within the state. California also lists SSC based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. CESA defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." CESA defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species." Candidate species are defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed

regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the California Fish and Game Commission. Unlike the federal ESA, CESA does not list invertebrate species.

Sections 2080 through 2085 of CESA address the take of threatened, endangered, or candidate species by stating "no person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided." Under CESA, "take" is defined as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. CFGC §§ 1901 and 1913 provide that notification is required prior to disturbance. CDFW is responsible for assessing development projects for their potential to impact listed species and their habitats. State-listed special-status species are addressed through the issuance of a 2081 permit (Memorandum of Understanding).

California Environmental Quality Act

CEQA was established in 1970 as California's counterpart to the National Environmental Policy Act (NEPA; 42 USC § 4321 et seq.). This statute requires state and local agencies to identify significant environmental impacts related to their actions and to avoid or mitigate those impacts, where feasible.

A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity that must receive some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval) from a government agency that may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment.

Natural Community Conservation Planning Act

In 1991, the California Natural Community Conservation Planning Act (NCCP Act; CFGC § 1900 et seq.) was approved and the NCCP Coastal Sage Scrub program was initiated in Southern California. California law (CFGC § 2800 et seq.) established the NCCP program "to provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth." The NCCP Act encourages preparation of plans that address habitat conservation and management on an ecosystem basis rather than one species or habitat at a time.

California Fish and Game Code Sections 1600-1602

Pursuant to Division 2, Chapter 6, Section 1602 of the CFGC, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream, or lake that supports fish or wildlife. A Notification of Lake or Streambed Alteration must be submitted to

CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW has jurisdiction over riparian habitats associated with watercourses and wetland habitats supported by a river, lake, or stream. Jurisdictional waters are delineated by the outer edge of riparian vegetation (i.e., drip line) or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not extend to tidal areas or isolated resources. CDFW reviews the proposed actions and, if necessary, submits (to the applicant) a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement.

California Fish and Game Code Sections 3503, 3511, 3513, 3800, 4700, 5050, and 5515

Within California, fish, wildlife, and native plant resources are protected and managed by CDFW. The California Fish and Game Commission and/or CDFW are responsible for issuing permits for the take or possession of protected species. The following sections of the CFGC address protected species: Section 3511 (birds), Section 4700 (mammals), Section 5050 (reptiles and amphibians), and Section 5515 (fish). In addition, the protection of birds of prey is provided for in Sections 3503, 3513, and 3800 of the CFGC.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act provides for statewide coordination of water quality regulations. The SWRCB was established as the statewide authority and nine separate RWQCBs were developed to oversee water quality on a day-to-day basis.

The SWRCB is the primary agency responsible for protecting water quality in California. As discussed above, the RWQCBs regulate discharges to surface waters under the CWA. In addition, the RWQCBs are responsible for administering the Porter-Cologne Act.

Pursuant to the Porter-Cologne Act, the state is given authority to regulate waters of the state, which are defined as any surface water or groundwater, including saline waters. As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if Section 404 of the CWA is not required for the activity. "Waste" is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

REGIONAL AND LOCAL PLANS

County of San Bernardino Land Use Services, Planning Division

According to the County's Biotic Resources Overlay Map the project site is located within the County of San Bernardino's Burrowing Owl Overlay Zone (County of San Bernardino 2012). The burrowing owl is listed as an SSC by CDFW.

Appendix B

Plant Species Observed

Family	Common Name	Scientific Name
Asteraceae	*Ambrosia acanthicarpa*	Annual Bur-Sage
Asteraceae	*Erigeron bonariensis**	Flax-Leaf Fleabane
Asteraceae	*Erigeron canadensis*	Horseweed
Asteraceae	*Helianthus annuus*	Western Sunflower
Asteraceae	*Heterotheca grandiflora*	Telegraph Weed
Asteraceae	*Pseudognaphalium californicum*	California Everlasting
Asteraceae	*Verbesina encelioides* ssp. *encelioides**	Golden Crownbeard
Brassicaceae	*Hirschfeldia incana**	Short-Pod Mustard
Chenopodiaceae	*Salsola* sp.*	Tumbleweed
Geraniaceae	*Erodium cicutarium**	Red-Stem Filaree
Myrtaceae	*Eucalyptus* sp*.	Eucalyptus
Poaceae	*Bromus rubens**	Red Brome
Poaceae	*Schismus barbatus**	Mediterranean Schismus
*: non-native species		

Appendix C

Wildlife Species Observed

Family	Code	Common Name	Scientific Name
BIRDS			
Columbidae	ROPI	rock pigeon*	*Columba livia*
Accipitridae	RTHA	red-tailed hawk	*Buteo jamaicensis*
Falconidae	AMKE	American kestrel	*Falco sparverius*
Tyrannidae	SAPH	Say's phoebe	*Sayornis saya*
Tyrannidae	CAKI	Cassin's kingbird	*Tyrannus vociferans*
Corvidae	AMCR	American crow	*Corvus brachyrhynchos*
Sturnidae	EUST	European starling*	*Sturnus vulgaris*
Passeridae	HOSP	house sparrow*	*Passer domesticus*
Passerellidae	SAVS	savannah sparrow (savannah group)	*Passerculus sandwichensis*
Parulidae	YRWA	yellow-rumped warbler	*Setophaga coronata*
MAMMALS			
Sciuridae	OTOBEE	California ground squirrel	*Otospermophilus beecheyi*
*: Non-native species			

Appendix D

Special-Status Plants and Animals with Potential to Occur

Species	Status	Habitat Description	Potential for Occurrence within Project Site
PLANTS			
black bog-rush (*Schoenus nigricans*)	CRPR 2B.2	Perennial herb. Blooms August-September. Marshes and swamps (often alkaline). Elev. 490-6560 ft.	None. No suitable habitat present.
Brand's star phacelia (*Phacelia stellaris*)	CRPR 1B.1	Annual herb. Blooms March-June. Coastal dunes, coastal scrub. Elev. 0-1310 ft.	None. No suitable habitat present.
bristly sedge (*Carex comosa*)	CRPR 2B.1	Perennial rhizomatous herb. Blooms May-September. Coastal prairie, marshes and swamps, (lake margins), valley and foothill grassland. Elev. 0-2050 ft.	None. Grasslands on site are not mesic enough to support species.
California muhly (*Muhlenbergia californica*)	CRPR 4.3	Perennial rhizomatous herb. Blooms June-September. Mesic, seeps and streambanks within chaparral, coastal scrub, lower montane coniferous forest, meadows and seeps. Elev. 325-6560 ft.	None. No suitable habitat present.
California satintail (*Imperata brevifolia*)	CRPR 2B.1	Perennial rhizomatous herb. Blooms September-May. Mesic soils within chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), riparian scrub. Elev. 0-3985 ft.	None. Coastal scrub on site is not mesic enough to support species.
California sawgrass (*Cladium californicum*)	CRPR 2B.2	Perennial rhizomatous herb. Blooms June-September. Meadows and seeps, alkaline or freshwater marshes and swamps. Elev. 195-5250 ft.	None. No suitable habitat present.
Catalina mariposa lily (*Calochortus catalinae*)	CRPR 4.2	Perennial bulbiferous herb. Blooms (February)March-June. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Elev. 45-2295 ft.	Low. Suitable grassland habitat on site. Nearest known occurrence is approximately 15 miles west, from a collection in 1918.
chaparral ragwort (*Senecio aphanactis*)	CRPR 2B.2	Annual herb. Blooms January-April(May). Sometimes alkaline soils within chaparral, cismontane woodland, coastal scrub. Elev. 45-2625 ft.	None. No suitable habitat present.
chaparral sand-verbena (*Abronia villosa* var. *aurita*)	CRPR 1B.1	Annual herb. Blooms (Jan)March-September. Sandy soils within chaparral, coastal scrub, desert dunes. Elev. 245-5250 ft.	None. No suitable habitat present.
Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)	CRPR 1B.1	Annual herb. Blooms February-June. Marshes and swamps (coastal salt), playas, vernal pools. Elev. 0-4005 ft.	None. No suitable habitat present.
Coulter's matilija poppy (*Romneya coulteri*)	CRPR 4.2	Perennial rhizomatous herb. Blooms March-July(August). Often in burns within chaparral and coastal scrub. Elev. 65-3935 ft.	None. No suitable habitat present.

Species	Status	Habitat Description	Potential for Occurrence within Project Site
fragrant pitcher sage (*Lepechinia fragrans*)	CRPR 4.2	Perennial shrub. Blooms March-October. Chaparral. Elev. 65-4300 ft.	None. No suitable habitat present.
Gambel's water cress (*Nasturtium gambelii*)	FE, ST, CRPR 1B.1	Perennial rhizomatous herb. Blooms April-October. Marshes and swamps (freshwater or brackish). Elev. 15-1085 ft.	None. No suitable habitat present.
Horn's milk-vetch (*Astragalus hornii* var. *hornii*)	CRPR 1B.1	Annual herb. Blooms May-October. Lake margins, alkaline soils within meadows and seeps, playas. Elev. 195-2790 ft.	None. No suitable habitat present.
hot springs fimbristylis (*Fimbristylis thermalis*)	CRPR 2B.2	Perennial rhizomatous herb. Blooms July-September. Meadows and seeps (alkaline, near hot springs). Elev. 360-4395 ft.	None. No suitable habitat present.
little mousetail (*Myosurus minimus* ssp. *apus*)	CRPR 3.1	Annual herb. Blooms March-June. Valley and foothill grassland, vernal pools (alkaline). Elev. 65-2100 ft.	None. Grasslands on site are not mesic enough to support species.
Los Angeles sunflower (*Helianthus nuttallii* ssp. *parishii*)	CRPR 1A	Perennial rhizomatous herb. Blooms August-October. Marshes and swamps (coastal salt and freshwater). Elev. 30-5005 ft.	None. No suitable habitat present.
many-stemmed dudleya (*Dudleya multicaulis*)	CRPR 1B.2	Perennial herb. Blooms April-July. Often clay soils within chaparral, coastal scrub, valley and foothill grassland. Elev. 45-2590 ft.	Low. Suitable grassland on site is significantly disturbed.
marsh sandwort (*Arenaria paludicola*)	FE, SE, CRPR 1B.1	Perennial stoloniferous herb. Blooms May-Aug. Sandy soils in openings in marshes and swamps. Elev. 10-560 ft.	None. No suitable habitat present.
mesa horkelia (*Horkelia cuneata* var. *puberula*)	CRPR 1B.1	Perennial herb. Blooms February-July(September). Sandy or gravelly soils within chaparral (maritime), cismontane woodland, coastal woodland. Elev. 225-2655 ft.	None. No suitable habitat present.
Nevin's barberry (*Berberis nevinii*)	FE, SE, CRPR 1B.1	Perennial evergreen shrub. Blooms (February)March-June. Sandy or gravelly soils within chaparral, cismontane woodland, coastal scrub, and riparian scrub. Elev. 225-2705 ft.	None. No suitable habitat present.
ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*)	CRPR 4.2	Perennial bulbiferous herb. Blooms March-July(August). Openings within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland. Elev. 95-5905 ft.	None. No suitable habitat present.
paniculate tarplant (*Deinandra paniculata*)	CRPR 4.2	Annual herb. Blooms (March)April-November(December). Usually vernally mesic, sometimes sandy soils within coastal scrub, valley and foothill grassland, vernal pools. Elev. 80-3085 ft.	Moderate. Suitable habitat on site. Species known to inhabit disturbed grassland.

Species	Status	Habitat Description	Potential for Occurrence within Project Site
Parish's bush-mallow (*Malacothamnus parishii*)	CRPR 1A	Perennial deciduous shrub. Blooms June-July. Chaparral, coastal scrub. Elev. 1000-1495 ft.	None. No suitable habitat present.
Parish's desert-thorn (*Lycium parishii*)	CRPR 2B.3	Perennial shrub. Blooms March-April. Coastal scrub, Sonoran desert scrub. Elev. 440-3280 ft.	None. No suitable habitat present.
Parish's gooseberry (*Ribes divaricatum* var. *parishii*)	CRPR 1A	Perennial deciduous shrub. Blooms February-April. Riparian woodland. Elev. 210-985 ft.	None. No suitable habitat present.
Parry's spineflower (*Chorizanthe parryi* var. *parryi*)	CRPR 1B.1	Annual herb. Blooms April-June. Sandy or rocky soil openings within chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Elev. 900-4005 ft.	Low. Suitable grassland on site is significantly disturbed.
Peninsular spineflower (*Chorizanthe leptotheca*)	CRPR 4.2	Annual herb. Blooms May-August. Alluvial fan, granitic soils within chaparral, coastal scrub, lower montane coniferous forest. Elev. 980-6235 ft.	None. No suitable habitat present.
Peruvian dodder (*Cuscuta obtusiflora* var. *glandulosa*)	CRPR 2B.2	Annual vine (parasitic). Blooms July-October. Marshes and swamps (freshwater). Elev. 45-920 ft.	None. No suitable habitat present.
Plummer's mariposa lily (*Calochortus plummerae*)	CRPR 4.2	Perennial bulbiferous herb. Blooms May-July. Granitic, rocky soils within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland. Elev. 325-5575 ft.	Low. Suitable grassland on site is significantly disturbed.
prairie wedge grass (*Sphenopholis obtusata*)	CRPR 2B.2	Perennial herb. Blooms April-July. Mesic soils within cismontane woodland, meadows and seeps. Elev. 980-6560 ft.	None. No suitable habitat present.
Pringle's monardella (*Monardella pringlei*)	CRPR 1A	Annual herb. Blooms May-June. Coastal scrub (sandy). Elev. 980-1310 ft.	None. No suitable habitat present.
prostrate vernal pool navarretia (*Navarretia prostrata*)	CRPR 1B.1	Annual herb. Blooms April-June. Mesic soils within coastal scrub, meadows and seeps, valley and foothill grassland (alkaline), vernal pools. Elev. 5-3970 ft.	None. Grasslands on site are not mesic enough to support species.
Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*)	CRPR 4.3	Annual herb. Blooms January-July. Chaparral, coastal scrub. Elev. 0-2905 ft.	None. No suitable habitat present.
salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum*)	FE, SE, CRPR 1B.2	Hemi-parasitic annual. Blooms May-Oct. Coastal dunes, and coastal marshes and swamps. Elev. 0-100 ft.	None. No suitable habitat present.

Species	Status	Habitat Description	Potential for Occurrence within Project Site
salt spring checkerbloom (*Sidalcea neomexicana*)	CRPR 2B.2	Perennial herb. Blooms March-June. Alkaline, mesic soils within chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas. Elev. 45-5020 ft.	None. No suitable habitat present.
San Bernardino aster (*Symphyotrichum defoliatum*)	CRPR 1B.2	Perennial rhizomatous herb. Blooms July-November(December). Near ditches, streams, springs within cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic). Elev. 5-6695 ft.	None. Grasslands on site are not mesic enough to support species.
San Diego ambrosia (*Ambrosia pumila*)	FE, CRPR 1B.1	Perennial rhizomatous herb. Blooms April-October. Sandy loam or clay, often in disturbed areas, sometimes alkaline soils within chaparral, coastal scrub, valley and foothill grassland, vernal pools. Elev. 65-1360 ft.	Low. Suitable grassland on site is significantly disturbed.
Sanford's arrowhead (*Sagittaria sanfordii*)	CRPR 1B.2	Perennial herb. Blooms August-September. Marshes and swamps (assorted shallow freshwater). Elev. 0-2135 ft.	None. No suitable habitat present.
Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*)	FE, SE, CRPR 1B.1	Perennial herb. Blooms April-September. Sandy or gravelly soils within chaparral, coastal scrub (alluvial fan). Elev. 295-2000 ft.	None. No suitable habitat present.
singlewhorl burrobrush (*Ambrosia monogyra*)	CRPR 2B.2	Perennial shrub. Blooms August-November. Sandy soils within chaparral, Sonoran desert scrub. Elev. 30-1640 ft.	None. No suitable habitat present.
slender-horned spineflower (*Dodecahema leptoceras*)	FE, SE, CRPR 1B.1	Annual herb. Blooms April-June. Sandy soils within chaparral, cismontane woodland, coastal scrub (alluvial fan). Elev. 655-2495 ft.	None. No suitable habitat present.
smooth tarplant (*Centromadia pungens* ssp. *laevis*)	CRPR 1B.1	Annual herb. Blooms May-September. Alkaline soils within chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland. Elev. 0-2100 ft.	Moderate. Suitable habitat on site. Species known to inhabit disturbed grassland.
Southern California black walnut (*Juglans californica*)	CRPR 4.2	Perennial deciduous tree. Blooms March-August. Alluvial soils within chaparral, cismontane woodland, coastal scrub, riparian woodland. Elev. 160-2955 ft.	None. No suitable habitat present.
thread-leaved brodiaea (*Brodiaea filifolia*)	FT, SE, CRPR 1B.1	Perennial bulbiferous herb. Blooms March-June. Often clay soils within chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools. Elev. 80-3675 ft.	Low. Suitable grassland on site is significantly disturbed.

Species	Status	Habitat Description	Potential for Occurrence within Project Site
western spleenwort (*Asplenium vespertinum*)	CRPR 4.2	Perennial rhizomatous herb. Blooms February-June. Rocky soils within chaparral, cismontane woodland, coastal scrub. Elev. 590-3280 ft.	None. No suitable habitat present.
white rabbit-tobacco (*Pseudognaphalium leucocephalum*)	CRPR 2B.2	Perennial herb. Blooms (July)August-November(December). Sandy, gravelly, soils within chaparral, cismontane woodland, coastal scrub, riparian woodland. Elev. 0-6890 ft.	None. No suitable habitat present.
white-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*)	CRPR 1B.2	Annual herb. Blooms April-June. Sandy or gravelly soils within coastal scrub (alluvial fans), Mojavean desert scrub, pinyon and juniper woodland. Elev. 980-3935 ft.	None. No suitable habitat present.
woolly chaparral-pea (*Pickeringia montana* var. *tomentosa*)	CRPR 4.3	Evergreen shrub. Blooms May-August. Gabbroic, granitic, clay soils within chaparral. Elev. 0-5575 ft.	None. Would have been observed if present. No suitable habitat present.
REPTILES			
California glossy snake (*Arizona elegans occidentalis*)	SSC	Found in arid scrub, rocky washes, grasslands, and chaparral habitats. Prefers habitats containing open areas and loose soils for burrowing.	Moderate. Suitable arid grassland habitat and soils present.
INVERTEBRATES			
Crotch bumble bee (*Bombus crotchii*)	SCE	Open grassland and scrub habitats containing food plants including plant genera: *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*.	Low. Suitable nectar sources not present.
Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*)	FE	Found in sandy areas composed of Delhi Fine Sands, stabilized by sparse native vegetation.	Very low. Suitable Delhi Sands habitat and nectar sources are not present.
BIRDS			
burrowing owl (*Athene cunicularia*)	SSC	Found in grasslands and open scrub from coast to foothills. Strongly associated with California ground squirrel and other fossorial mammal burrows.	High. Suitable, favorable open non-native grassland habitat containing California ground squirrel colony is present on site.

Species	Status	Habitat Description	Potential for Occurrence within Project Site
California horned lark (*Eremophila alpestris actia*)	WL	Found from coastal deserts and grasslands to alpine dwarf-shrub habitat above treeline. Also seen in coniferous or chaparral habitats.	Moderate. Species known to occupy disturbed, open habitats; however, this species was not observed during field surveys.
Cooper's hawk (*Accipiter cooperii*)	WL (Nesting)	Typically occurs in oak woodlands but occasionally in willow or eucalyptus woodlands.	Low. Although suitable foraging habitat is present, so suitable nesting habitat is present on site.
loggerhead shrike (*Lanius ludovicianus*)	SSC (Nesting)	Found within grassland, chaparral, desert, and desert edge scrub, particularly near dense vegetation used for nesting.	Low. Although suitable foraging habitat is present, so suitable nesting habitat is present on site.

California Rare Plant Rank (CRPR) Definitions		
California Rare Plant Rank (CRPR)	1A	presumed extirpated in California and rare or extinct elsewhere
	1B	rare, threatened, or endangered in California and elsewhere
	2A	presumed extirpated in California but more common elsewhere
	2B	rare, threatened, or endangered in California but more common elsewhere
	3	plants for which more information needed
	4	plants of limited distribution
CRPR Threat Ranks	0.1	Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
	0.2	Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)
	0.3	Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)
Endangered Species Act (ESA)		
FE: Endangered Species Act (ESA) Federally Endangered Species		
California Endangered Species Act (CESA)		
SE: California Endangered Species Act (CESA) State Endangered Species SCE: California Endangered Species Act (CESA) State Candidate for Endangered Species		

United States Fish and Wildlife Service (USFWS)
BCC: United States Fish and Wildlife Service (USFWS) Birds of Conservation Concern
California Department of Fish and Wildlife (CDFW)
FP: California Department of Fish and Wildlife (CDFW) Fully Protected Species SSC: California Department of Fish and Wildlife (CDFW) Species of Special Concern WL: California Department of Fish and Wildlife (CDFW) Watch List Species

Appendix E

Site Photographs
December 27, 2019

Photo 1. View of non-native grassland from the eastern site boundary, facing southwest.

Photo 2. View of non-native grassland (left) and ruderal (right) vegetation from western site boundary, facing northeast.

Photo 3. View of recently disked ruderal (foreground) and non-native grassland (background) vegetation along the eastern site boundary, facing southwest.

Photo 4. View of California ground squirrel burrow, suitable for burrowing owl, within non-native grassland.