Biological Technical Report for the North Fontana Industrial Complex

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ALDEN
ENVIRONMENTAL, INC

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1.0 INTRODUCTION

This report describes existing biological conditions on the North Fontana Industrial Complex project site (project site), which is a component of the proposed Sierra Business Center. This report provides the City of Fontana (City) with information necessary to assess impacts to biological resources under the California Environmental Quality Act (CEQA) and City, State, and federal regulations.

1.1 PROJECT LOCATION AND SITE DESCRIPTION

The project site is located in the City in San Bernardino County, California generally north of Interstate 210 and east of Interstate 15 (Figure 1). The project site (APNs 0239-151-19, -25, -26, and -36) is approximately 20.40 acres including off-site improvements and is on the Devore U.S. Geological Survey 7.5-minute series topographic map in the northwest corner of Section 20 in Township 1 North, Range 5 West.

The project site is generally bordered on the north by Duncan Canyon Road, on the south by undeveloped and disturbed land (part of the proposed Sierra Business Center), on the east by a Southern California Edison utility corridor, and on the west by Sierra Avenue and undeveloped land (Figures 2 and 3).

The project site has largely been undisturbed over time (Nationwide Environmental Title Research, LLC 2022); however, the west side of the project site appears to have been mowed by a brush cutter within the last year or two. Illegal dumping is also present.

1.2 PROJECT DESCRIPTION

The project would include the construction and operation of two, concrete tilt-up, dock-height commerce center buildings to be used primarily for the storage and distribution of dry goods. The facility would include 277 automobile parking stalls and 6 motorcycle spaces. Building 1 would provide a screened truck yard and trailer storage area with 35 dock doors and 60 trailer stalls. Building 2 would provide 14 dock-high doors. Proposed landscaping would be ornamental in nature and would feature trees, shrubs, and drought-tolerant accent plants in addition to a variety of groundcovers. Access to and from the facility would be provided from three private driveways: two driveways connecting to Sierra Avenue and one driveway connecting to Duncan Canyon Road.

The project would include improvements to Sierra Avenue including pavement infill, curb and gutter, two new driveway aprons, sidewalk, lane striping, and landscaping/irrigation (including approximately 16 new street trees), decorative streetlights, fire hydrants, and signage. The project would also include improvements to Duncan Canyon Road including pavement, curb and gutter, one new driveway apron, sidewalk, lane striping, and landscaping/irrigation (including approximately 10 new street trees), decorative streetlights, a fire hydrant, and signage. Utility improvements and connections would also be made.

Project construction is estimated to last 13 months. It is assumed that the facility would operate 24 hours per day, 7 days per week.

2.0 REGIONAL AND REGULATORY CONTEXT

2.1 FEDERAL

2.1.1 Federal Endangered Species Act

The federal Endangered Species Act (FESA) designates threatened and endangered animals and plants and provides measures for their protection and recovery. "Take" of listed animal species and of listed plant species in areas under federal jurisdiction is prohibited without obtaining a federal permit. Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Harm includes any act that actually kills or injures fish or wildlife, including significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife. Activities that damage the habitat of (i.e., harm) listed wildlife species require approval from the U.S. Fish and Wildlife Service (USFWS) for terrestrial species

The FESA also generally requires determination of Critical Habitat for listed species. If a project would involve a federal action potentially affecting Critical Habitat, the federal agency would be required to consult with USFWS. While the entire project site has been designated as Critical Habitat for the San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*), the project would not involve a federal action (e.g., a U.S. Army Corps of Engineers permit for impacts to wetlands); therefore, there is no federal nexus, and no consultation would be required.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA; 16 U.S. Code Sections 703-711) includes provisions for protection of migratory birds, including the non-permitted take of migratory birds. The MBTA regulates or prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50 Code of Federal Regulations Section 10.13. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, and many others. Disturbance that causes nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young) is considered a "take." The MBTA is an international treaty for the conservation and management of bird species that migrate through more than one country, and is enforced in the United States by the USFWS. The MBTA was amended in 1972 to include protection for migratory birds of prey (raptors). Birds that are regulated by the MBTA were observed on the project site.

2.1.3 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) was first enacted in 1940 to prohibit take, which includes to kill, wound, or disturb the bald eagle (*Haliaeetus leucocephalus*), except when permitted by the Secretary of Interior. In 1962, the act was amended to afford the same level of protection to the golden eagle (*Aquila chrysaetos*). The USFWS Final Rule regarding Regulations for Eagle Incidental Take and Take of Eagle Nests (USFWS 2016) states, "The Eagle Act [Bald and Golden Eagle Protection Act] does not provide protection to eagle habitat, except for nests themselves." No bald or golden eagle nest was observed, nor is any expected to occur on the project site due to a lack of nesting habitat.

Project Boundary

N
W E
S

0 1,000 2,000 Feet

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Figure 2

Project Location

NORTH FONTANA INDUSTRIAL COMPLEX

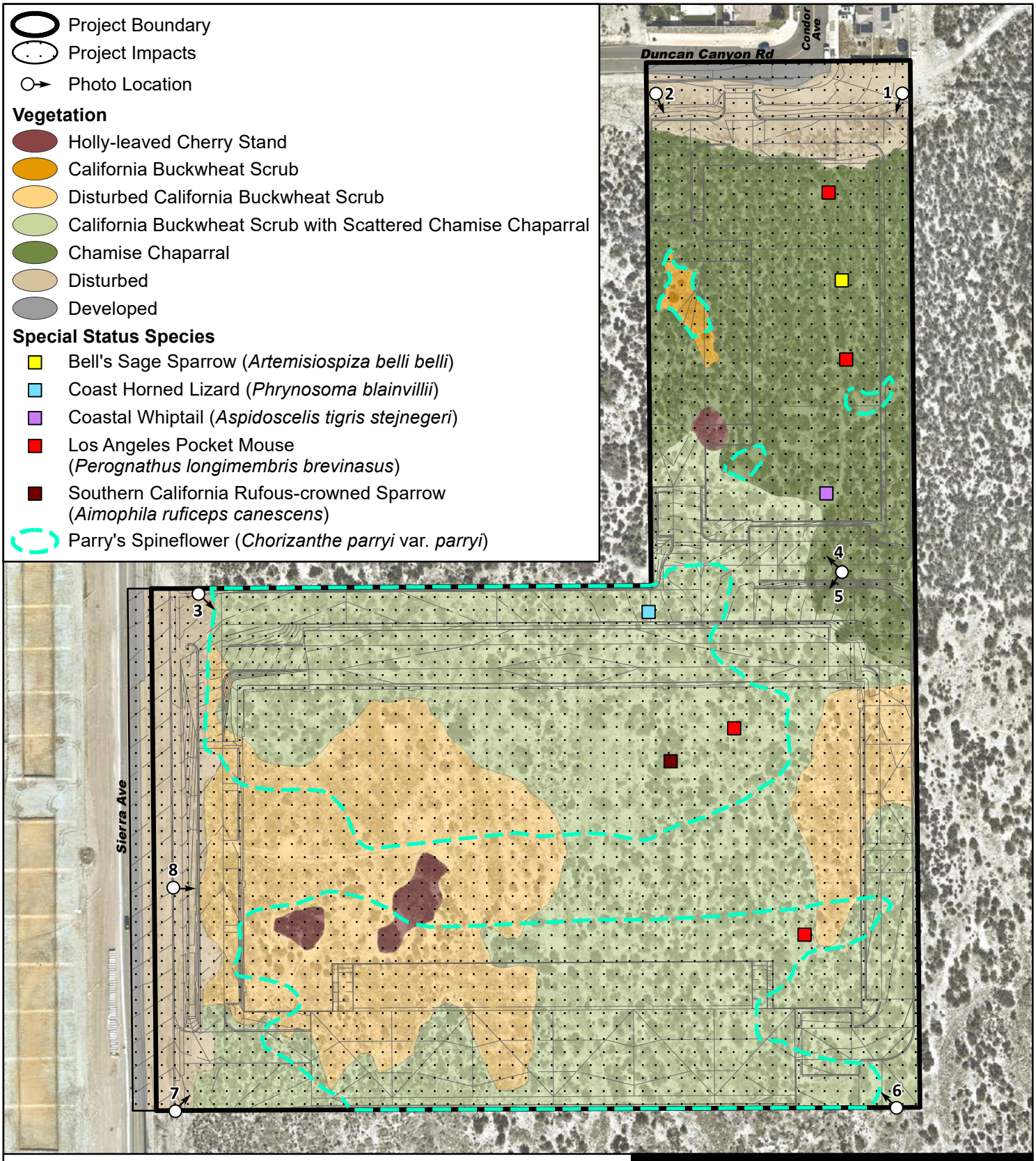

Figure 3

Biological Resources

NORTH FONTANA INDUSTRIAL COMPLEX

N
W E
S

0 85 170 Feet

ALDEN ENVIRONMENTAL, INC

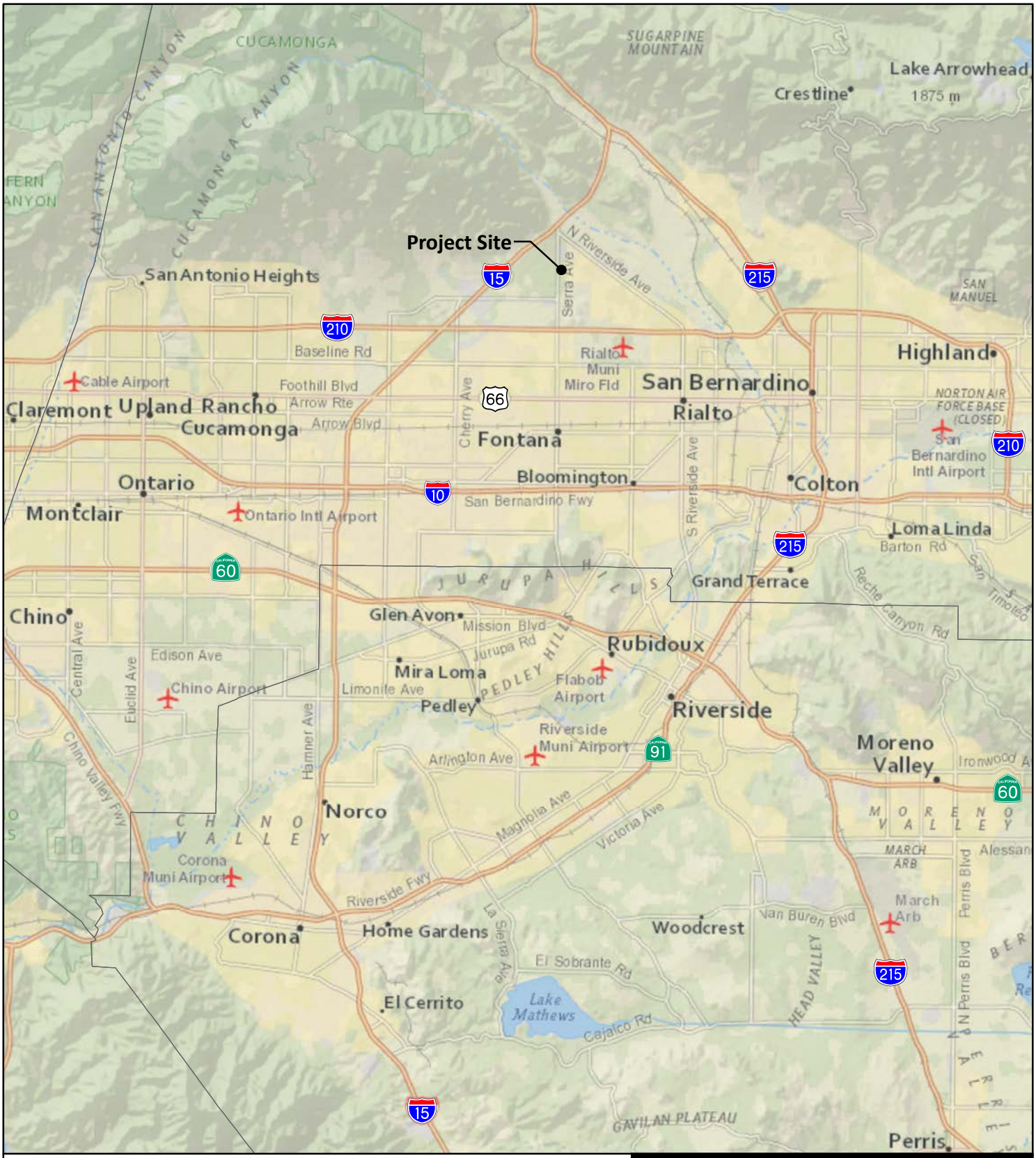

Figure 1

Regional Location

NORTH FONTANA INDUSTRIAL COMPLEX

ALDEN ENVIRONMENTAL, INC

2.1.4 Clean Water Act (Section 404)

Under Section 404 of the Clean Water Act (CWA), the U.S. Army Corps of Engineers (Corps) is charged with regulating the discharge of dredge and fill materials into jurisdictional waters of the United States (WUS). The terms "WUS" and "jurisdictional waters" have a broad meaning that includes special aquatic sites, such as wetlands. WUS, as defined by regulation and refined by case law include: (1) the territorial seas; (2) coastal and inland waters, lakes, rivers, and streams that are navigable WUS, including their adjacent wetlands; (3) tributaries to navigable WUS, including adjacent wetlands; and (4) interstate waters and their tributaries, including adjacent isolated wetlands and lakes, intermittent and ephemeral streams, prairie potholes, and other waters that are not a part of a tributary system to interstate waters or navigable WUS, the degradation or destruction of which could affect interstate commerce.

Section 401 of the CWA requires that any applicant for a federal license or permit to conduct any activity that may result in a discharge to WUS must obtain a Water Quality Certification, or a waiver thereof, from the state in which the discharge originates. In California, the Regional Water Quality Control Board (RWQCB) issues Water Quality Certifications.

The entire project site is relatively level with no evidence of ponding water, flowing water, or drainage features of any kind on the site or along its boundaries. As such, no CWA permit would be required.

2.2 State of California

2.2.1 California Environmental Quality Act

Primary environmental legislation in California is found in the CEQA and its implementing guidelines (State CEQA Guidelines), requiring that projects with potential adverse effects or impacts on the environment undergo environmental review. Adverse impacts to the environment are typically mitigated as a result of the environmental review process in accordance with existing laws and regulations. The City is the Lead Agency under the CEQA for the project, and this report is part of that environmental review process.

2.2.2 California Endangered Species Act

The California Endangered Species Act (CESA) established that it is State policy to conserve, protect, restore, and enhance State endangered species and their habitats. Under State law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the California Fish and Game Commission. CESA authorizes private entities to "take" plant or wildlife species listed as endangered or threatened under the FESA and CESA, pursuant to a federal Incidental Take Permit if the California Department of Fish and Wildlife (CDFW) certifies that the incidental take is consistent with CESA (Fish and Game Code Section 2080.1[a]). For State-only listed species, Section 2081 of the CESA authorizes the CDFW to issue an Incidental Take Permit for State listed threatened and endangered species if specific criteria are met. No State-listed species was observed on the project site, and none is expected to occur (see Sections 4.6.3, 4.6.4, and 4.6.5 of this report).

2.2.3 Native Plant Protection Act

Sections 1900–1913 of the California Fish and Game Code (Native Plant Protection Act; NPPA) direct the CDFW to carry out the State Legislature's intent to "…preserve, protect and enhance endangered or rare native plants of this state." The NPPA gives the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take. No "endangered" or "rare" plants were observed on the project site, nor are any expected to occur (see Sections 4.6.3 and 4.6.5 of this report).

2.2.4 California Fish and Game Code

Pursuant to California Fish and Game Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Raptors and owls and their active nests are protected by California Fish and Game Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA. These regulations could require that construction activities (particularly vegetation removal or construction near nests) be reduced or eliminated during critical phases of the nesting cycle unless surveys by a qualified biologist demonstrate that nests, eggs, or nesting birds will not be disturbed, subject to approval by CDFW and/or USFWS. Birds that are regulated by California Fish and Game Code and the MBTA were observed on the project site.

2.2.5 Porter-Cologne Water Quality Control Act of 1970

The Porter-Cologne Water Quality Control Act of 1970 grants the State Water Resource Control Board (SWRCB) and its regional offices power to protect water quality and is the primary vehicle for implementation of the State's responsibilities under Section 401 of the CWA. The Porter-Cologne Act grants the SWRCB authority and responsibility to adopt plans and policies, regulate discharges to surface and groundwater, regulate waste disposal sites, and require cleanup of discharges of hazardous materials and other pollutants. Typically, the SWRCB and RWQCB act in concert with the Corps under Section 401 of the CWA in relation to permitting fill of federal jurisdictional waters. There are no jurisdictional waters on the project site.

2.3 City of Fontana

City of Fontana General Plan

Chapter 7 of the City's General Plan Update 2015-2035 (Conservation, Open Space, Parks, and Trails; City 2017) addresses goals and policies for Conservation, Habitat, and Urban Forest. How the goals and policies apply to the North Fontana Industrial Complex is addressed below.

GENERAL PLAN GOALS	GENERAL PLAN POLICIES	PROJECT APPLICABILITY
Continue to preserve sensitive natural open space in the foothills of the San Gabriel Mountains and Jurupa Hills.	Consider permanent protection for all these lands through acquisition and deed restrictions.	The project site is not within or adjacent to the foothills of the San Gabriel Mountains or Jurupa Hills.
Large city parks and open spaces include plantings and natural areas attractive to birds and other wildlife.	Use public open space to support wildlife habitat as appropriate.	The project site does not contain a city park or public open space.
Fontana has a healthy, drought-resistant urban forest, 25% tree canopy, and an urban forestry program.	Support tree conservation and planting that enhances shade and drought resistance.	Landscape plans for the project would be consistent with City requirements.

3.0 METHODS AND SURVEY LIMITATIONS

3.1 LITERATURE REVIEW

Prior to conducting field investigations, Alden Environmental, Inc. (Alden) performed searches of CDFW's California Natural Diversity Database (CNDDB) and the USFWS database for reports of sensitive species potentially on the project site or within one mile of the project site. The Web Soil Survey (U.S. Department of Agriculture, National Resource Conservation Service) as well as historical aerials (Nationwide Environmental Title, LLC 2022) also were reviewed for the site.

3.2 BIOLOGICAL SURVEYS

Biological surveys of the site included a general biological survey and habitat assessments for the San Bernardino kangaroo rat (federal Endangered, State Candidate Endangered, and State Species of Special Concern) and burrowing owl (*Athene cunicularia*; federal Bird of Conservation Concern and State Species of Special Concern). The biological surveys also included focused surveys for sensitive plant species, the burrowing owl, and San Bernardino kangaroo rat as described following Table 1.

Table 1 SURVEY INFORMATION		
Date	**Biologist**	**Survey Purpose**
1/14/22	Philippe Vergne	San Bernardino kangaroo rat habitat assessment/Phase 1 survey
1/25/22	Brian Leatherman	General biological survey, burrowing owl habitat assessment
3/3/22	Brian & Sandy Leatherman	Burrowing owl survey, sensitive plant survey
4/15/22	Brian & Sandy Leatherman, Taylor Beaulac	Burrowing owl survey, sensitive plant survey
5/19/22	Brian & Sandy Leatherman	Burrowing owl survey, sensitive plant survey
5/30/22	Philippe Vergne	San Bernardino kangaroo rat trapping survey
5/31/22	Philippe Vergne	San Bernardino kangaroo rat trapping survey
6/1/11	Philippe Vergne	San Bernardino kangaroo rat trapping survey
6/2/22	Philippe Vergne	San Bernardino kangaroo rat trapping survey
6/3/22	Philippe Vergne	San Bernardino kangaroo rat trapping survey
6/4/22	Philippe Vergne	San Bernardino kangaroo rat trapping survey
6/22/22	Brian Leatherman, Emilee Brink	Burrowing owl survey

3.2.1 General Biological Survey

During the general biological survey on January 25, 2022, vegetation communities were mapped, and lists of plant and animal species observed or detected were compiled. Species were added to the plant and animal lists, as encountered, during all subsequent surveys (Appendices A and B, respectively).
An assessment of the habitat on the project site was made for potential to support sensitive species and to determine what, if any, focused surveys should be conducted. Furthermore, the project site was searched for the presence of ponding water, wetland vegetation, and potential jurisdictional features (i.e., waters of the U.S. and/or State). Representative photographs of the project site were taken (Appendix C; Figure 3).

3.2.2 Habitat Assessment

Burrowing Owl

A habitat assessment for the burrowing owl was conducted during the general biological survey on January 25, 2022. During the assessment, the suitability of the habitat (e.g., its openness) was determined; locations of burrows that could be utilized by burrowing owls were recorded with the use of a Global Positioning System (GPS); and the project site was searched for perches that could be used by the burrowing owl. Due to the open nature of the habitat and the presence of California ground squirrel (*Otospermophilus beecheyi*) burrows that could be utilized by burrowing owls, the project site was considered to have some potential for the burrowing owl to be present even though the species has not been reported to the CNDDB within one mile of the project site. Therefore, a focused burrowing owl survey was conducted as explained in Section 3.2.5 of this report.

A habitat assessment/Phase 1 survey was conducted for the San Bernardino kangaroo rat as described in Section 3.2.4 of this report.

3.2.3 Sensitive Plant Surveys

Two sensitive plant species (Parry's spineflower [*Chorizanthe parryi* var. *parryi*] and Parish's desert-thorn [*Lycium parishii*]) have been reported to the CNDDB within one mile of the project site. Therefore, 3 focused, sensitive plant species surveys were conducted on the project site during the blooming period for most annual species (March to May). The surveys were conducted by walking transects across the project site. Sensitive plants observed along the transects were counted, and polygons were mapped (rather than individual plants) using a GPS because the plants were generally spread out over large areas on the project site.

3.2.4 San Bernardino Kangaroo Rat Survey

The San Bernardino kangaroo rat has been reported to the CNDDB within one mile of the project site, and kangaroo rat burrows were observed during the general biological survey. Therefore, a habitat assessment/Phase 1 survey was conducted on the project site on January 14, 2022, which included walking transects and more closely inspecting the habitat on site for kangaroo rat sign.

During the habitat assessment/Phase 1 survey, kangaroo rat sign (burrows, scat, and footprints/tail drags) was observed (ENVIRA 2022a; Appendix D); therefore, a presence/absence trapping survey was conducted on the project site (ENVIRA 2022b; Appendix E). The trapping survey was conducted according to USFWS protocol established for the San Bernardino kangaroo rat. Six nights of trapping were conducted from May 30 to June 4, 2022 in areas containing potential San Bernardino kangaroo rat habitat and small mammal sign.

3.2.5 Burrowing Owl Survey

A focused burrowing owl survey (4 total site visits) was initiated on March 3, 2022 according to the survey methods in the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012; Appendix F). Line transects across the project site and spaced approximately 10 meters apart were walked. At the start of each transect and at approximately every 100 meters, the project site was scanned for burrowing owls using binoculars. Particular attention was paid to areas of California ground squirrel activity and potential burrowing owl perches, and the biologists looked not only for burrowing owls but also sign/evidence of burrowing owl such as, but not necessarily limited to, excavated soil, whitewash (excrement), castings (pellets), and/or feathers.

3.3 SURVEY LIMITATIONS

Sensitive species surveys were conducted during appropriate times of year and covered the peak activity periods for most species. Noted animal species were identified by direct observation, vocalizations, or the observance of scat, tracks, or other sign. However, the lists of species identified in Appendices A and B are not necessarily a comprehensive account of all species that may occur on the project site as species that are nocturnal, secretive, or seasonally restricted may not have been observed/detected. The species that are sensitive and have been reported within one mile of the project site to the CNDDB and/or USFWS but were not observed/detected during the site surveys are addressed in this report in Section 4.6.5.

3.4 NOMENCLATURE

Nomenclature used in this report is drawn from Holland (1986); Hickman, ed. (1993); California Native Plant Society (CNPS; 2022); Crother (2008); American Ornithological Society (2021); Jones, et al. (1992); and CDFW (2022a).

4.0 SURVEY RESULTS

4.1 PHYSICAL CHARACTERISTICS

The soil on the site is mapped as Soboba stony loamy sand (2 to 9 percent slopes). Elevations range from approximately 1,784 to 1,814 feet above mean sea level.

As stated in Section 1.1 of this report, the project site has largely been undisturbed over time; however, the west side of the project site appears to have been mowed by a brush cutter within the last year or two, and illegal dumping is also present.

4.2 VEGETATION COMMUNITIES/LAND USE

Vegetation communities and developed land (a land use, which is not a biological resource) on the project site are listed in Table 2 and shown on Figure 3. Each is described following Table 2.

Table 2
VEGETATION COMMUNITIES/LAND USE[1]

Vegetation Community/Land Use	On Site	Off Site[2]
California buckwheat scrub	0.11	0.00
Disturbed California buckwheat scrub	4.32	0.00
California buckwheat scrub with scattered chamise chaparral	9.74	0.00
Chamise chaparral	3.64	0.00
Holly-leaved cherry stand	0.22	0.00
Disturbed	1.80	0.21
Developed	0.11	0.25
TOTAL	**19.94**	**0.46**

[1]In acres and rounded to the nearest 0.01 acre
[2]Area of off-site improvements

California Buckwheat Scrub

California buckwheat scrub is a near monoculture of California buckwheat (*Eriogonum fasciculatum*) that usually results from disturbance and that may transition (back) to coastal sage scrub or chaparral. California buckwheat scrub occurs within a larger area of chamise chaparral on the project site.

Disturbed California Buckwheat Scrub

Disturbed California buckwheat scrub has a sparser cover of California buckwheat than the undisturbed form of this community. Potential disturbance to this community may have been more extensive or have occurred more times than that of California buckwheat scrub.

California Buckwheat Scrub with Scattered Chamise Chaparral

This community may represent chamise chaparral that was once disturbed, became California buckwheat scrub, and is transitioning back to chamise chaparral.

Chamise Chaparral

Chamise chaparral is dominated by chamise (*Adenostoma fasiculatum*), and associated shrub species contribute little vegetative cover.

Holly-leaved Cherry Stand

Notable stands of holly-leaved cherry (*Prunus ilicifolia*) were mapped on the project site. Holly-leaved cherry is a characteristic species of chamise (and other) chaparral communities.

Disturbed

Disturbed is characterized by predominantly non-native species typically introduced and established through human activity. Characteristic species of disturbed habitat include Russian thistle (*Salsola tragus*), tree tobacco (*Nicotiana glauca*), and non-native grasses (e.g., *Avena* and *Bromus* spp.).

Developed

Developed land consisting of man-made features such as roadways and residential structures Developed on the project site includes Sierra Avenue and Duncan Canyon Road.

4.3 POTENTIAL JURISDICTIONAL FEATURES

The entire project site is relatively level with no evidence of ponding water, flowing water, or drainage features of any kind on the site or along its boundaries. No potential jurisdictional features (i.e., waters of the U.S. and/or State) were observed.

4.4 PLANT SPECIES OBSERVED

Fifty-seven species of plants were observed on the project site. Fifteen of the plants are non-native species. A list of these plant species is presented in Appendix A.

4.5 ANIMAL SPECIES OBSERVED OR DETECTED

Forty-two species of animals (4 reptile, 30 bird, and 8 mammal) were observed or detected on the project site (Appendix B).

4.6 SENSITIVE BIOLOGICAL RESOURCES

Sensitive biological resources include certain vegetation communities, jurisdictional resources, and certain plant and animal species as explained below.

4.6.1 Sensitive Vegetation Communities

Sensitive vegetation communities are those with State or Global ranks of 1 to 3 as included on the current list of California Sensitive Natural Communities (CDFW 2022b).

There are no sensitive vegetation communities on the project site. California buckwheat scrub, disturbed California buckwheat scrub, California buckwheat scrub with scattered chamise chaparral, chamise chaparral, and holly-leaved cherry stand (a characteristic species in chamise chaparral) are all State and Global rank 5. Disturbed is not on the list of California Sensitive Natural Communities; therefore, it is not sensitive. Developed land is considered a land use; it is not a vegetation community.

4.6.2 Potential Jurisdictional Features

There are no potential jurisdictional features on the project site.

4.6.3 Sensitive Plant Species

Sensitive plant species are those that are considered federal, State, or CNPS rare, threatened, or endangered and/or included in the CNPS Inventory of Rare and Endangered Plants (CNPS 2022). California Rare Plant Rank 1B includes plants that are rare, threatened or endangered in California. California Rare Plant Rank 2B includes plants that are rare, threatened or endangered in California but more common elsewhere. California Rare Plant Rank 3 includes plants that are eligible for State listing, but more information is needed. California Rare Plant Rank 4 plants are uncommon in California and of limited distribution; some are locally significant, but few, if any, are eligible for State listing.

Sensitive plant status is often based on one or more of three distributional attributes: geographic range, habitat specificity, and/or population size. A species that exhibits a small or restricted geographic range (such as those endemic to the region) is geographically rare. A species may be more or less abundant but occur only in very specific habitats. Lastly, a species may be widespread but exists naturally in small populations.

One sensitive plant species, Parry's spineflower, was observed on the project site as follows.

Parry's spineflower (*Chorizanthe parryi* var. *parryi*)
Sensitivity: California Rare Plant Rank 1B.1, which denotes a species that is rare, threatened, or endangered in California and elsewhere. Its Threat Rank (i.e., 0.1) denotes a species seriously threatened in California (i.e., more than 80 percent of occurrences are threatened and have a high degree and immediacy of threat).
Distribution: Riverside, Los Angeles, and San Bernardino counties.
Habitat(s): Sandy soil on flats and foothills in mixed grassland, coastal sage scrub, and chaparral communities.
Presence: 1,396 individual plants were counted on site. Figure 3 shows where Parry's spineflower was found (polygons were mapped because the plants were generally spread out).

4.6.4 Sensitive Animal Species

Sensitive animal species are those that are considered federal or State threatened or endangered (or candidates for such listing); protected under the Bald and Golden Eagle Protection Act; and/or on the CDFW Special Animals List (CDFW 2022) as a State Species of Special Concern, State Watch List species, State Fully Protected species, or as a federal Bird of Conservation Concern.

Generally, the principal reason an individual taxon (species or subspecies) is considered sensitive is the documented or perceived decline or limitations of its population size or geographical extent and/or distribution, resulting in most cases from habitat loss.

Avian species' nesting is also sensitive as it is protected by the MBTA (see Section 2.1.2 of this report) and California Fish and Game Code (see Section 2.2.4 of this report).

Five sensitive animal species were observed on the project site as described below and shown on Figure 3.

Coast horned lizard (*Phrynosoma blainvillii*)
Sensitivity: State Species of Special Concern (declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction).
Distribution: Ranges throughout most of west-central and southwestern California as well as northwestern Baja California, Mexico (Leaché, et al. 2009). While it is now absent from much of its former southern California range due to urbanization, agricultural development, and over-collecting (Jennings 1987, 1988), it is known from hundreds of collection sites in California and additional sites in Baja (Jennings 1988).
Habitat(s): Coastal sage scrub and open areas in chaparral, oak woodlands, and coniferous forests with sufficient basking sites, adequate scrub cover, and areas of loose soil; require native ants, especially harvester ants (*Pogonomyrmex* sp.), and are generally excluded from areas invaded by Argentine ants (*Linepithema humile*).
Presence: The coast horned lizard was observed on the project site during the general biological survey.

Coastal whiptail (*Aspidoscelis tigris stejnegeri*)
Sensitivity: State Species of Special Concern (declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction).
Distribution: Baja California, Mexico and coastal Southern California, mostly west of the Peninsular Ranges and south of the Transverse Ranges, and north into Ventura County.
Habitat(s): Open coastal sage scrub, chaparral, and woodlands. Frequently found along the edges of dirt roads traversing its habitats. Important habitat components include open, sunny areas, shrub cover with accumulated leaf litter, and an abundance of insects, spiders, or scorpions.
Presence: The coastal whiptail was observed on the project site during the general biological survey.

Bell's sage sparrow (*Artemisiospiza belli belli*)
Sensitivity: State Watch List (taxa that were previously designated as "Species of Special Concern" but no longer merit that status, or which do not yet meet Species of Special Concern criteria, but for which there is concern and a need for additional information to clarify status).
Distribution: Along the Coast Ranges of California and across the Sacramento Valley to the west slope of the Sierra Nevada Mountains south to northwestern Baja California, Mexico.
Habitat(s): Dry chaparral and coastal sage scrub, chamise chaparral, and big sagebrush. Less common in tall, dense chaparral.
Presence: The Bell's sage sparrow was observed on the project site during the general biological survey.

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)
Sensitivity: State Watch List (taxa that were previously designated as "Species of Special Concern" but no longer merit that status, or which do not yet meet Species of Special Concern criteria, but for which there is concern and a need for additional information to clarify status).
Distribution: Southwestern California (slopes of Transverse and Coastal ranges, north to Los Angeles County) and northwestern Baja California, Mexico.
Habitat(s): Coastal sage scrub and open chaparral as well as shrubby grasslands**.**
Presence: The southern California rufous-crowned sparrow was observed on the project site during the general biological survey.

Los Angeles pocket mouse (*Perognathus longimembris brevinasus*)
Sensitivity: State Species of Special Concern (declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction)
Distribution: Rancho Cucamonga east to Morongo Valley and south to the San Diego County border.
Habitat(s): Lower elevation grasslands and coast sage scrub habitats in areas with soils composed of fine sands.
Presence: The Los Angeles pocket mouse was trapped 8 times on the project site (Appendix E).

4.6.5 Sensitive Species Not Observed/Detected and Their Potential to Occur

Sensitive plant and animal species that were not observed or detected but that were evaluated for their potential to occur based on nearby CNDDB or USFWS records (or observation on the adjacent Sierra Business Center parcel) are listed in Table 3. The potential for these species to occur is considered low, or they are not expected to occur, with the exception of one species observed on the adjacent Sierra Business Center parcel.
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Table 3 SENSITIVE SPECIES NOT OBSERVED OR DETECTED AND THEIR POTENTIAL TO OCCUR		
SPECIES	**SENSITIVITY**[1]	**POTENTIAL TO OCCUR**
Plants		
Parish's desert-thorn (*Lycium parishii*)	2B.3	Not expected. The CNDDB record is from 1885, and the plants at the reported location are considered extirpated. This perennial shrub occurs in coastal scrub and Sonoran desert scrub and blooms from March to April. It was not observed during the 3 focused, sensitive plant species surveys on the project site, two of which occurred during its bloom period.
Reptiles		
Southern California legless lizard (*Anniella stebbinsi*)	SSC	Low. The species is "found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans" and "occurs in moist warm loose soil with plant cover. Moisture is essential." (CaliforniaHerps.com 2022). A lack of moisture is a limiting factor to the potential presence of this species on the project site.
Birds		
Burrowing owl (*Athene cunicularia*)	BCC SSC	Low. No burrowing owl or sign/evidence of the burrowing owl was observed during the 2022 breeding season survey for the species (Appendix F).
California horned lark (*Eremophila alpestris actia*)	WL	High. Was observed just south of the project site in 2022.
Coastal California gnatcatcher (*Polioptila californica californica*)	FT SSC	Not expected. The species was not observed or detected during any of the project site surveys. While there are two CNDDB records of the species near the project site; both are from the 1990s in Rialto. From 1990 to 1997 the species was recorded in 7 locations in San Bernardino County—all in Riversidean sage scrub or Riversidean alluvial fan-sage scrub (Davis, et al. 1998), which are not present on the project site.
Mammals		
Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)	SSC	Not expected. This species occupies habitat similar to the San Bernardino kangaroo rat and was not trapped during the 2022 trapping surveys for that species (Appendix E).
San Bernardino kangaroo rat (*Dipodomys merriami parvus*)	FE SCE, SSC	Not expected. Trapping surveys conducted in 2022 were negative (Appendix E).
San Diego desert woodrat (*Neotoma lepida intermedia*)	SSC	Low. Its shelters, which are typically visible, are constructed with twigs, sticks, cactus parts, rocks and usually built against a rock crevice or at the base of creosote or cactus. No woodrat shelters were observed on the project site.

[1] Rare Plant Rank 2B.3 = Rare, threatened, or endangered in California but common elsewhere. , FT = federal Threatened, BCC = federal Bird of Conservation Concern: , SCE = State candidate Endangered, SSC = State Species of Special Concern , WL= State Watch List

4.6.6 Wildlife Corridors

There are two types of wildlife corridors: local and regional. Local corridors provide animals with access to resources such as food, water, and shelter for survival and reproduction. Regional corridors allow for animal movement between large areas of habitat that are regionally important and allow for gene flow among populations of species. Regional corridors include major creeks and rivers, ridges, valleys, and large swaths of undeveloped land.

According to the City's General Plan 2015-2035, "Most of the City's natural habitat has been changed by urbanization, and remaining natural habitat lies predominantly in the foothills at the north and south of the City." (City 2017) The project site is not located in the foothills at the north or south end of the City. The project site is zoned for industrial uses and is surrounded by existing residences to the east and north, planned residential uses to the west, and planned industrial uses to the south. Therefore, the project site is not within or adjacent to a wildlife corridor.

5.0 PROJECT IMPACTS

This section analyzes project effects on sensitive biological resources in accordance with the CEQA Guidelines (i.e., Appendix G of the CEQA Guidelines).

5.1 CRITERIA FOR DETERMINING IMPACT SIGNIFICANCE

According to Appendix G of the CEQA Guidelines (Significance Criteria), a project will have a significant impact if it would:

1. 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 the California Department of Fish and Wildlife or USFWS;

2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or USFWS;

3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

4. 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;

5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or

6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.2 DIRECT IMPACTS

Direct impacts immediately alter the affected biological resources such that those resources are eliminated temporarily or permanently. All direct impacts associated with the North Fontana Industrial Complex would be permanent.

5.2.1 Direct Impacts to Vegetation Communities/Land Use

Construction of the project would result in the direct removal of 20.04 acres of vegetation communities/land use on site and 0.46 acre off site (Table 4).

Table 4
DIRECT IMPACTS TO VEGETATION COMMUNITIES/LAND USE[1]

Vegetation Community/Land Use	On Site	Off Site[2]
California buckwheat scrub	0.11	0.00
Disturbed California buckwheat scrub	4.32	0.00
California buckwheat scrub with scattered chamise chaparral	9.74	0.00
Chamise chaparral	3.64	0.00
Holly-leaved cherry stand	0.22	0.00
Disturbed	1.80	0.21
Developed	0.11	0.25
TOTAL	**19.94**	**0.46**

[1]In acres and rounded to the nearest 0.01 acre
[2]Area of off-site improvements

As explained in Section 4.6.1 of this report, all of the vegetation communities are State and Global rank 5, so they are not sensitive; disturbed habitat is not on the list of California Sensitive Natural Communities, so it is not sensitive; and developed land is considered a land use and not a vegetation community. Therefore, all of the impacts to vegetation communities and developed would be less than significant. That is, there would be no substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS (CEQA Significance Criterion 2).

5.2.2 Direct Impacts to Potential Jurisdictional Features

There are no potential jurisdictional features present on the project site. Therefore, there would be no effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (CEQA Significance Criterion 3).

5.2.3 Direct Impacts to Sensitive Plant Species

All plant species with a Rare Plant Rank of 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act), or Sections 2062 and 2067 (CESA) of California Fish and Game Code and are eligible for State listing, which includes Parry's spineflower. It is mandatory that such species be fully considered during preparation of environmental documents relating to CEQA. Therefore, impacts to Parry's spineflower are addressed below.

A population of 1,396 individual Parry's spineflower plants is present on the project site; all of which would be removed during project construction. Nearby (i.e., in the City of Fontana) occurrences of Parry's spineflower are included in 2 CNDDB records. One of the occurrence records is from 1903 and is possibly extirpated. The precise location of this record is unknown but is described as "west of Jurupa Peak on the border of Riverside and San Bernardino counties". The other occurrence record is from 2012 (with earlier dated observations), and the population is presumed extant. It is located in the "vicinity of Lytle Creek Wash, Sierra Ave, and Riverside Ave; north of Fontana and southeast of Highway 15". This record describes the plant as "common in widely scattered patches in 1999, seen in 2003-2007, & 2010…" with 5,000+ plants seen in 2005 in one of the polygons; approximately 15,750 plants seen in 2010 in the other polygons; and 54 plants in the two southernmost polygons in 2012. Therefore, there appear to be approximately 20,750 plants extant at this location.

The range of Parry's spineflower includes Los Angeles, Riverside, and San Bernardino counties. There are only 150 total occurrences of the species in the CNDDB among the three counties, and 137 of the occurrences are presumed extant (CNPS 2022). Therefore, 13 of the 150 occurrences (or 9 percent) are possibly or presumed extirpated, and 91 percent are presumed extant.

Based on the occurrence records, there appear to be approximately 20,750 plants extant at the one location in the City (i.e., in the "vicinity of Lytle Creek Wash…"). Based upon this known record in the City, the project's impacts to 1,396 individual plants out of approximately 20,750 plants would represent an impact to approximately 7 percent of the plants in the City, which would represent a potentially significant impact considering the limited range of the species and the number of extant occurrences within the City as well as within its overall range (CEQA Significance Criterion 1). Compensatory mitigation is proposed.

5.2.4 Direct Impacts to Sensitive Animal Species

Coast Horned Lizard

Potential injury or mortality to individual coast horned lizards could occur, and habitat loss would occur, from construction. Therefore, the project has potential to cause substantial adverse effects on this State Species of Special Concern (CEQA Significance Criterion 1). Compensatory mitigation is proposed.

Coastal Whiptail

Potential injury or mortality to individual coastal whiptails could occur, and habitat loss would occur, from construction. Therefore, the project has potential to cause substantial adverse effects on this State Species of Special Concern (CEQA Significance Criterion 1). Compensatory mitigation is proposed.

Bell's Sage Sparrow

The Bell's sage sparrow is a CDFW Watch List species, which means either it was previously designated as a "Species of Special Concern" (it was) but no longer merits that more sensitive status, or it does not yet meet Species of Special Concern criteria, but there is concern and a need for additional information to clarify its status. Therefore, this species is of lower sensitivity, and combined with its fairly wide range (along the Coast Ranges of California and across the Sacramento Valley to the west slope of the Sierra Nevada Mountains south to northwestern Baja California, Mexico), and the small area of total impact (20.4 acres; which would be less if disturbed and developed are subtracted), the project's impacts are unlikely to cause a substantial adverse effect on this species from habitat loss. Furthermore, the Bell's sage sparrow would be expected to fly away from construction activity and, therefore, not be injured or killed during construction (CEQA Significance Criterion 1). See Section 5.2.6 of this report for potential impacts to nesting sage sparrows.

Burrowing Owl

No burrowing owl or sign/evidence of the burrowing owl was observed during the 2022 breeding season survey for the species (Appendix F). Therefore, the species is considered to have low potential to occur, and impacts to the species are not anticipated.

Southern California Rufous-crowned Sparrow

The southern California rufous-crowned sparrow is another CDFW Watch List species that used to be a Species of Special Concern. Therefore, this species is of lower sensitivity, and combined with its fairly wide range (southwestern California [slopes of Transverse and Coastal ranges, north to Los Angeles County] and northwestern Baja California, Mexico) and the small area of total impact 20.4 acres; which would be less if disturbed and developed are subtracted), the project's impacts are unlikely to cause a substantial adverse effect on this species from habitat loss. Furthermore, the southern California rufous-crowned sparrow would be expected to fly away from construction activity and, therefore, not be injured or killed by construction (CEQA Significance Criterion 1). See Section 5.2.6 of this report for potential impacts to nesting sparrows.

San Bernardino Kangaroo Rat

A USFWS protocol-level trapping survey for the San Bernardino kangaroo rat determined that the species is absent from the project site (Appendix F). Therefore, there would be no impacts to it from construction (CEQA Significance Criterion 1).

Los Angeles Pocket Mouse

The Los Angeles pocket mouse is a Species of Special Concern that is present on the project site where it was trapped 8 times (Appendix E). Potential injury or mortality to this species could occur, and habitat loss would occur. Since this pocket mouse is a Species of Special Concern, the impacts may cause a substantial adverse effect on this species through potential injury or mortality and habitat loss (CEQA Significance Criterion 1). Therefore, mitigation is proposed.

5.2.5 Direct Impacts to Sensitive Species with Potential to Occur

Table 3 presented a list of the sensitive species not observed and their potential to occur on site. Most of the species are either not expected to occur or have low potential to occur. Impacts to these species are not anticipated. The California horned lark has high potential to occur; therefore, potential impacts to this species are addressed below.

California Horned Lark

The California horned lark was observed in 2022 just south of the project site and could also occur on the project site. The California horned lark a State Watch List species. Therefore, this species is of lower sensitivity, and combined with its fairly wide range (Northern Baja California, Mexico and northward through California in the Coast Range north to Humboldt County and in the San Joaquin Valley [except the extreme southern end of the valley]), and the small area of total project impact (20.4 acres; which would be less if disturbed and developed are subtracted), the project's impacts are unlikely to cause a substantial adverse effect on this species from habitat loss. Furthermore, the California horned lark would be expected to fly away from construction activity and, therefore, not be injured or killed by construction (CEQA Significance Criterion 1). See Section 5.2.6 of this report for potential impacts to nesting horned larks.

5.2.6 Nesting Birds

Most avian species' nesting in the U.S. is protected by the MBTA and California Fish and Game Code. Thirty avian species were observed/detected during the project site surveys, some of which could nest on site—including the Bell's sage sparrow, southern California rufous-crowned sparrow, and California horned lark (if present).

If construction was to occur during the general avian nesting season (generally February 1 through September 15), substantial adverse effects to avian nesting could occur that would not be in compliance with the MBTA and California Fish and Game Code (CEQA Significance Criterion 1). Therefore, mitigation is proposed.

5.2.7 Wildlife Corridors

The project site is not within or adjacent to a wildlife corridor; therefore, there would be no interference with wildlife movement (Significance Criterion 4).

5.2.8 Compliance with Local Policies or Ordinances

The project site is not within or adjacent to the foothills of the San Gabriel Mountains or Jurupa Hills, so the City's General Plan goal to preserve sensitive natural open space in the foothills of the San Gabriel Mountains and Jurupa Hills does not apply.

The project site does not contain a city park or public open space, so the City's General Plan's policy to use public open space to support wildlife habitat as appropriate does not apply.

Lastly, landscape plans for the project would be required to be consistent with City requirements, so the landscape plans would be in compliance with the City's General Plan policy of using drought-resistant species and potentially enhancing shade through tree planting (CEQA Significance Criterion 5).

5.2.9 Compliance with the Provisions of a Conservation Plan

The project site is not within the boundaries of a conservation plan; therefore, there would be no conflict with any conservation plan provisions (CEQA Significance Criterion 6).

5.3 INDIRECT IMPACTS

Indirect impacts consist of secondary effects of a project that can occur during construction or from a project once built. Potential indirect impacts may include those from human activity, fugitive dust, noise, invasive plant species, nuisance animals, and night lighting and may include indirect effects on water quality. Each of these indirect impacts may adversely affect natural communities and/or wildlife that occur adjacent to a project site.

The project site is bordered on the west by Sierra Avenue and a small, undeveloped parcel of land that, itself, is bordered by the project site to be developed and existing development (Duncan Canyon Road, Sierra Avenue, and new development west of Sierra Avenue). Based on aerial imagery, this small parcel of land appears to be biological similar to that of the project site (Figure 2).

East of the project site is a north-south trending Southern California Edison utility corridor, which also appears to support biological resources similar to the project site. The east side of the utility corridor has been developed into a large, residential area of tract homes. Most of the rest of the utility corridor in the vicinity of the project site is also bordered by existing development (Figure 2).

The land to the south of the project site is proposed for development because the other component of the Sierra Business Center, and that parcel is expected to be under construction beginning in 2023 concurrent with construction for the North Fontana Industrial Complex.

Indirect effects, therefore, have potential to occur on the adjacent, small, undeveloped parcel of land and the utility corridor as the rest of the surrounding lands are developed (or will be developed concurrent with the North Fontana Industrial Complex project). Indirect effects on adjacent natural communities and/or wildlife are expected to be less than significant for the following reasons.

Human Activity. Construction limits would be defined/delineated so that human activity during construction would be confined to the project impact footprint. The facility, once built, would be fenced and would have designated access points, thereby keeping project activity on site.

Fugitive Dust. Fugitive dust generated during construction would be controlled by implementation of best available dust control measures in accordance with the project's permit from the South Coast Air Pollution Control District.

Noise. No noise-sensitive species (i.e., federal- or State-listed species, whose nesting can be affected by excessive noise, such as the federal-listed threatened coastal California gnatcatcher) are expected to occur in the project site vicinity. No records for these species were returned in the database searches of a one-mile radius around the project site. Therefore, project construction and operation noise would not have substantial adverse effects on these species.

Invasive Plant Species. The project's proposed landscaping does not include invasive plant species, and nuisance animals (e.g., free-roaming domestic cats) that can prey upon native species are not associated with industrial facilities. So, no impacts would occur from invasive plant species or nuisance animals.

Night Lighting. The project would include night lighting for safety and security that would be focused on the facility. Similarly, new street lights would illuminate the paved roadways. The project's lighting would be in conformance with Section 30-476(g)(5) of the City's Municipal Code which states, "All exterior lighting shall be adequately controlled and shielded to prevent glare and undesirable illumination to adjacent properties and streets." Therefore, potential night lighting impacts on adjacent natural areas would be less than significant.

Water Quality. Project construction would be subject to a National Pollutant Discharge Elimination System permit, and the project must acquire approval of a Water Quality Management Plan that meets specified water quality standards set forth in the Water Quality Control Plan for The Santa Ana River Basin. Therefore, potentially adverse water quality impacts would be avoided or otherwise minimized to less-than-significant levels.

6.0 PROPOSED MITIGATION MEASURES

Successful implementation of the mitigation measures proposed in this section would reduce potential significant impacts to Parry's spineflower, coast horned lizard, coastal whiptail, Los Angeles pocket mouse, and avian nesting to less-than-significant levels.

6.1 MITIGATION FOR IMPACTS TO PARRY'S SPINEFLOWER

Prior to grading or construction, the applicant would mitigate for the loss of 1,396 Parry's spineflower plants through one or a combination of the following methods.

1. off-site acquisition and preservation of occupied habitat;
2. off-site acquisition and preservation of potential habitat within which seed and topsoil collected from on-site impacted plants would be salvaged and planted; and/or
3. payment of fees into a mitigation bank or in lieu fund as deemed appropriate by the City

For method 2, the applicant would develop a Parry's Spineflower Mitigation Plan (Plan). The Plan would be prepared by a qualified restoration ecologist with experience developing mitigation plans for sensitive plant species. The mitigation strategies would be developed in consultation with the Rancho Santa Ana Botanic Gardens or other qualified entity that has experience with Parry's spineflower. The Plan would provide, at a minimum: (1) collection/salvage methods for seed and topsoil; (2) details regarding the transfer and/or temporary storage of seed and topsoil; (3) schedule for salvage and seeding; (4) a suitable location to function as the recipient site; (5) detailed site preparation and introduction techniques; (6) a description of supplemental irrigation, if used; (7) success criteria; and (8) a detailed monitoring program, commensurate with the mitigation goals.

Any preserved habitat would be protected with a deed restriction or conservation easement recorded in favor of City or other local conservation entity approved by the City. The mitigation would be monitored and maintained by a qualified biologist for 5 years or until the goals of the mitigation have been met.

6.2 MITIGATION FOR IMPACTS TO COAST HORNED LIZARD AND COASTAL WHIPTAIL

A qualified biologist shall monitor the project site during grubbing, clearing, and grading for sensitive animal species including coast horned lizard and coastal whiptail and shall, if practicable, direct or move these animals out of harm's way (i.e., to a location of suitable habitat outside the impact footprint).

6.3 MITIGATION FOR IMPACTS TO LOS ANGELES POCKET MOUSE

A qualified biologist shall monitor the project site during grubbing, clearing, and grading for sensitive animal species including the Los Angeles pocket mouse and shall, if practicable, direct or move these animals out of harm's way (i.e., to a location of suitable habitat outside the impact footprint).

Additionally, habitat-based mitigation shall be implemented to compensate for impacts to Los Angeles pocket mouse. Since the Los Angeles pocket mouse occupies habitat with the same characteristics (e.g., vegetation, soils) as Parry's spineflower, and its range overlaps with that of Parry's spineflower, the mitigation for Parry's spineflower described in Section 6.1 of this report, when implemented, would compensate for impacts to the Los Angeles pocket mouse.

6.4 MITIGATION FOR IMPACTS TO AVIAN NESTING

In order to ensure compliance with the MBTA and California Fish and Game Code, the initial clearing, grubbing, and grading of land on the project site shall occur outside of the nesting season (i.e., outside of the period February 1 through September 15). If ground-disturbing activities must occur during the nesting season, a pre-construction nesting bird survey shall be conducted by a qualified biologist 3 days prior to the ground-disturbing activities. If birds are found to be nesting inside or within 250 feet (500 feet for raptors) of the impact area, construction shall be postponed at the discretion of a qualified biologist, until it is determined that the nest is no longer active.

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Appendix A
PLANT SPECIES OBSERVED – NORTH FONTANA INDUSTRIAL COMPLEX

FAMILY	SCIENTIFIC NAME	COMMON NAME
EUDICOTS		
ANACARDIACEAE - SUMAC FAMILY		
	Rhus aromatica	skunkbush
	Rhus trilobata	squaw bush
APOCYNACEAE - DOGBANE FAMILY		
	Asclepias eriocarpa	Indian milkweed
ASTERACEAE - SUNFLOWER FAMILY		
	Ambrosia acanthicarpa	bur-sage
	Ambrosia psilostachya	western ragweed
	Artemisia californica	California sagebrush
	Centaurea melitensis[1]	tocalote
	Cirsium occidentale	cobweb thistle
	Gutierrezia californica	California matchweed
	Helianthus annuus	annual sunflower
	Hypochaeris glabra[1]	smooth cat's-ear
	Lepidospartum squamatum	scale-broom
	Tetradymia comosa	cotton thorn
BORAGINACEAE - BORAGE FAMILY		
	Amsinckia menziesii	rigid fiddleneck
	Cryptantha intermedia	common cryptantha
	Pectocarya linearis ssp. *ferocula*	slender pectocarya
	Phacelia cicutaria	caterpillar phacelia
BRASSICACEAE - MUSTARD FAMILY		
	Brassica nigra[1]	black mustard
	Hirschfeldia incana[1]	shortpod mustard
	Salsola tragus[1]	Russian thistle
	Sisymbrium irio[1]	London rocket
CISTACEAE - ROCK-ROSE FAMILY		
	Crocanthemum scoparium	Bisbee peak rush-rose
CONVOLVULACEAE - MORNING-GLORY FAMILY		
	Cuscuta californica	chaparral dodder
CUCURBITACEAE - GOURD FAMILY		
	Marah macrocarpa	wild cucumber
EUPHORBIACEAE - SPURGE FAMILY		
	Chamaesyce albomarginata[1]	rattlesnake weed
	Croton californicus	California croton
	Croton setiger	doveweed
	Euphorbia nutans	spurge
FABACEAE - LEGUME FAMILY		
	Acmispon glaber	coastal deerweed
	Lupinus truncatus	truncate lupine

Appendix A (cont.)
PLANT SPECIES OBSERVED – SIERRA BUSINESS CENTER

GERANIACEAE - GERANIUM FAMILY		
	Eriodictyon trichocalyx	yerba santa
	Erodium botrys[1]	long-beaked filaree
	Erodium cicutarium[1]	red-stemmed filaree
	Phacelia ramosissima	branching phacelia
LAMIACEAE - MINT FAMILY		
	Marrubium vulgare[1]	common horehound
	Salvia apiana	white sage
	Salvia columbariae	chia
	Salvia mellifera	black sage
ONAGRACEAE - EVENING PRIMROSE FAMILY		
	Camissonia sp. (vegetative)	suncup
PLANTAGINACEAE - PLANTAIN FAMILY		
	Penstemon spectabilis	royal penstemon
	Navarretia hamata	hooked navarretia
POLYGONACEAE - BUCKWHEAT FAMILY		
	Chorizanthe parryi var. *parryi*[2]	Parry's spineflower
	Eriogonum elongatum var. *elongatum*	long-stemmed wild buckwheat
	Eriogonum fasciculatum	California buckwheat
	Eriogonum fasciculatum var. *polifolium*	rosemary flat-topped buckwheat
	Eriogonum gracile	graceful buckwheat
	Lastarriaea coriacea	leather-spineflower
ROSACEAE - ROSE FAMILY		
	Adenostoma fasciculatum	chamise
	Prunus ilicifolia	holly-leaved cherry
SOLANACEAE - NIGHTSHADE FAMILY		
	Datura wrightii	pale-flowered thorn-apple
	Nicotiana glauca[1]	tree tobacco
	Solanum xanti	chaparral nightshade
MONOCOTS		
POACEAE - GRASS FAMILY		
	Avena barbata[1]	slender wild oat
	Bromus diandrus[1]	ripgut grass
	Bromus rubens[1]	red brome
	Schismus barbatus[1]	Mediterranean schismus
THEMIDACEAE - BRODIAEA FAMILY		
	Dipterostemon capitatus	blue dicks

[1]Non-native species
[2]Sensitive species

Appendix B
ANIMAL SPECIES OBSERVED OR DETECTED
NORTH FONTANA INDUSTRIAL COMPLEX

SCIENTIFIC NAME	COMMON NAME
Birds	
Aeronautes saxatalis	white-throated swift
Aimophila ruficeps canescens[2]	So. California rufous-crowned sparrow
Artemisiospiza belli belli[2]	Bell's sage sparrow
Buteo jamaicensis	red-tailed hawk
Callipepla californica	California quail
Calypte anna	Anna's hummingbird
Calypte costae	Costa's hummingbird
Cathartes aura	turkey vulture
Chondestes grammacus	lark sparrow
Colaptes auratus	northern flicker
Columba livia[1]	rock dove
Corvus brachyrhynchos	American crow
Corvus corax	common raven
Falco sparverius	American kestrel
Haemorhous mexicanus	house finch
Icterus cucullatus	hooded oriole
Melozone crissalis	California towhee
Mimus polyglottos	northern mockingbird
Myiarchus cinerascens	ash-throated flycatcher
Passer domesticus[1]	house sparrow
Psaltriparus minimus	bushtit
Sayornis saya	Say's phoebe
Spinus psaltria	lesser goldfinch
Sturnella neglecta	western meadowlark
Thryomanes bewickii	Bewick's wren
Toxostoma redivivum	California thrasher
Tyrannus verticaulis	western kingbird
Tyrannus vociferans	Cassin's kingbird
Zenaida macroura	mourning dove
Zonotrichia leucophrys	white-crowned sparrow
Reptiles	
Aspidoscelis tigris stejnegeri[2]	coastal whiptail
Phrynosoma blainvillii[2]	coast horned lizard
Sceloporus occidentalis	western fence lizard
Uta stansburiana	common side-blotched lizard

Appendix B (cont.)
ANIMAL SPECIES OBSERVED OR DETECTED–SIERRA BUSINESS CENTER

Mammals

Canis latrans	coyote (scat, tracks)
Dipodomys simulans	Dulzura kangaroo rat
Ostospermophilus beecheyi	California ground squirrel
Perognathus longimembris brevinasus[2]	Los Angeles pocket mouse
Peromyscus eremicus	cactus mouse
Peromyscus maniculatus	deer mouse
Sylvilagus audubonii	desert cottontail
Thomomys bottae	Botta's pocket gopher

[1]Non-native species
[2]Sensitive species

Appendix C

Fontana Photo Pages

Representative Photographs

Photo Point 1. View facing south-southwest.

Photo Point 2. View facing south-southeast.

Photo Point 3. View facing southeast.

Photo Point 4. View facing northwest.

Photo Point 5. View facing southwest.

Photo Point 6. View facing northwest.

Photo Point 7. View facing southwest.

Photo Point 8. View facing northwest.

Appendix D

San Bernardino Kangaroo Rat Habitat Assessment/Phase 1 Survey

ENVIRA
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Subject: Results of a field assessment for the federally endangered San Bernardino Kangaroo rat (Dipodomys merriami parvus)-SBKR on two adjacent but separate parcels referred to Sierra Industrial Acacia project site and Shea project site in the city of Fontana, San Bernardino County (Figure 1).

Figure One Sierra Industrial Acacia and Shea Project Boundaries

Phase one surveys were conducted on the two sites on January 14, 2022. Transects were walked in an east west direction over the two sites.

Several listed and sensitive small mammal species are listed as potentially occurring in the project vicinity. They are:

San Bernardino Kangaroo Rat

The San Bernardino kangaroo rat (*Dipodomys merriami parvus*)- SBKR is one of several kangaroo rat species in its range. The Dulzura kangaroo rat (*Dipodomys simulans*), the Pacific kangaroo rat (*Dipodomys agilis*) and the Stephens kangaroo rat (*Dipodomys stephensi*) occur in areas occupied by the SBKR, but these other species have a wider habitat range. The habitat of the SBKR is confined to primary and secondary alluvial fan scrub habitats, with sandy soils deposited by fluvial (water) rather than aeolian (wind) processes. Burrows are dug in loose soil, usually near or beneath shrubs.

The SBKR is one of three subspecies of the Merriam's kangaroo rat. The Merriam's kangaroo rat is a widespread species that can be found from the inland valleys to the deserts. The subspecies known as the SBKR, however, is confined to inland valley scrub communities, and more particularly, to scrub communities occurring along rivers, streams, and drainages. Most of these drainages have been historically altered as a result of flood control efforts and the resulting increased use of river resources, including mining, off-road vehicle use, and road and housing development. This increased use of river resources has resulted in a reduction in both the amount and quality of habitat available for the SBKR. The past habitat losses and potential future losses prompted the emergency listing of the SBKR as an endangered species on January 27 of 1998 (U.S. Fish and Wildlife Service, 1998a).

Northwestern San Diego Pocket Mouse

The NWSPM (*Chaetodypus fallax palidus*) prefers habitat similar to that preferred by the SBKR. The NWSPM occurs in open, sandy areas in the valleys and foothills of southwestern California.

The range of this species extends from Orange County to San Diego County and includes Riverside and San Bernardino counties. This mouse is a California Species of Special Concern (SSC) whose historical range has been reduced first by agriculture, but also urban development.

SSC designation of species is based on a series of publications prepared by the CDFW on declining species of mammals, birds, fishes, amphibians and reptiles. These publications were intended to focus attention on declining wildlife in California, species that are not currently listed but may merit listing under the California Endangered Species Act (CESA). Some of the species identified in these documents have been subsequently listed, or are provided protection under provisions in CESA. Others have remained on the SSC list, and have not been elevated to a greater status of protection.

Los Angeles Pocket Mouse

The LAPM is one of two pocket mice found in this area of San Bernardino County. Both the LAPM and the NWSPM occupy similar habitats, but the NWSPM has a wider range, extending south into San Diego County. The habitat of the LAPM is confined to lower elevation grasslands and coast sage scrub habitats, in areas with soils composed of fine sands (Williams, 1986). The present known distribution of this species extends from Rancho Cucamonga east to Morongo and south to the San Diego County border.

LAPM forages in open ground and underneath shrubs. Generally, pocket mice dig burrows in loose soil, although this has not been completely documented for this subspecies.

The LAPM is listed as a SSC by the CDFW.

San Diego Desert Woodrat

The San Diego desert woodrat (*Neotoma lepida*)NELE is a relatively wide-ranging species extending along the coast of California from south of San Francisco through to the border with Baja California. This species also occurs in the Central Valley and the deserts of southern California and extends along the desert side of the Sierra Nevada into southeastern Oregon. The coastal species of desert woodrat, the NELE, prefers scrub habitats such as coastal sage scrub, chaparral, and alluvial fan sage scrub. It is more common in areas with rock piles and coarse sandy to rocky soils throughout coastal southern California. The range of this species extends from just south of Sacramento and the San Francisco area to the border with Baja California. The coastal subspecies (*Neotoma lepida intermedia*) is listed as a SSC; however, the NELE is not listed.

Other species which occur on the site or its vicinity are shown in Figure 2.

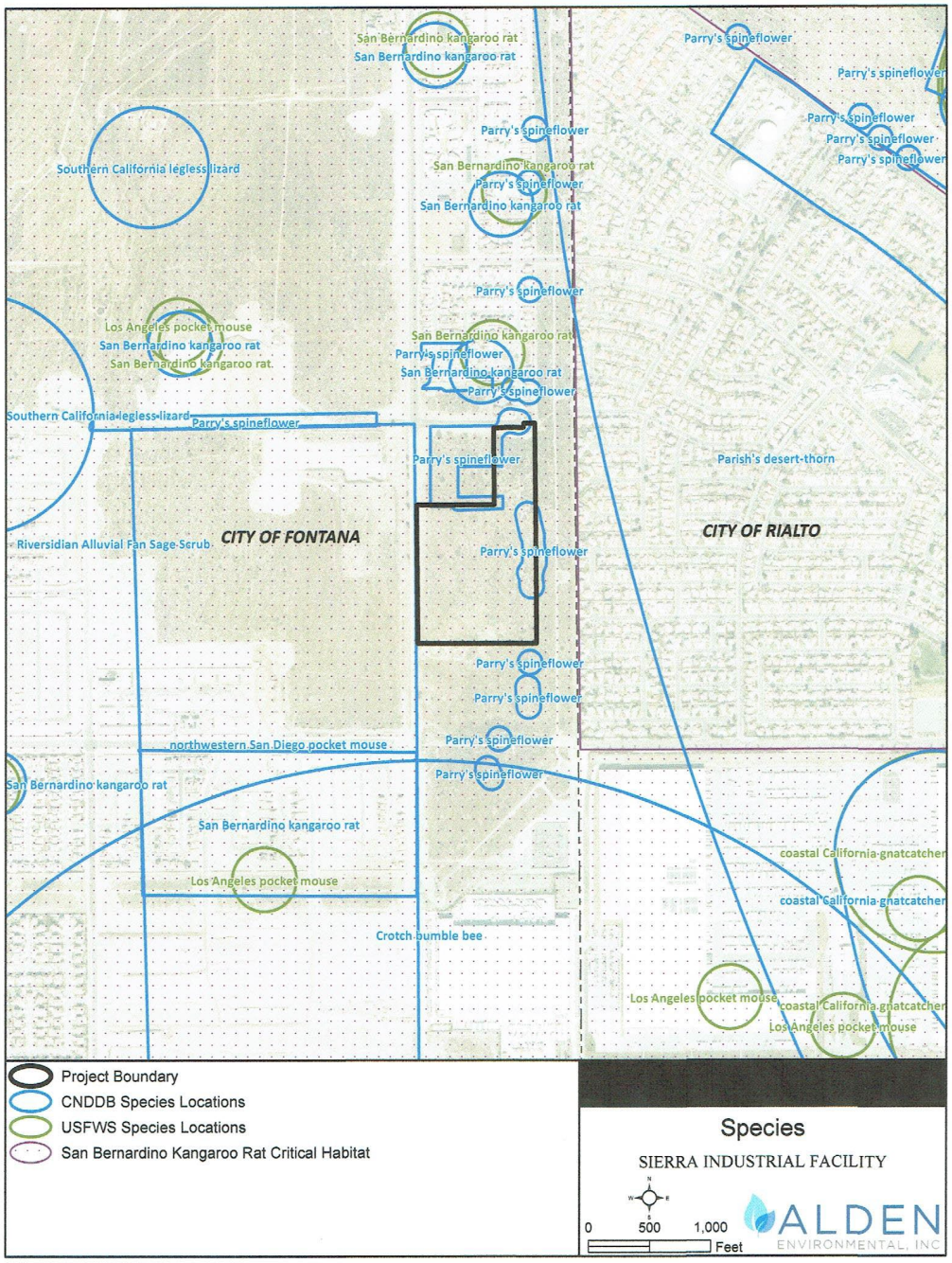

Figure 2 Sensitive or listed Species On or Near Proposed Projects

Vegetation on both sites is mature alluvial fan with chaparral components.

Acacia Site

The vegetation on the Acacia site is fairly undisturbed alluvial fan with chaparral components. Soils are sandy with some areas having river rock. Open less vegetated areas occur within the site.

Low density Kangaroo rat sign in the form of burrows, scat, and footprints/tail drags were observed within the site. K-rat sign was found in trace to low quantities (less than 5 burrows per acre).

Based on vegetation and burrow size it appears that the kangaroo rat species occurring on this site is probably the Dulzura kangaroo rat (*Dipodomys simulans*). Although based on historical occurrence, and the power easement open space to the east there is a small probability that the endangered San Bernardino kangaroo rat *(Dipodomys merriami parvus)* could also be present.

Open Vegetation on Acacia Site

Disturbed Open Sandy Areas on Acacia Site

Kangaroo rat burrow and scat on Acacia Site

Shea Site

The vegetation on the Shea site is mostly disturbed and impacted alluvial fan with remnant chaparral components. Portions of the site have been grubbed in the past. Soils are sandy with some areas having river rock.

Trace density Kangaroo rat sign in the form of burrows, scat, and footprints/tail drags were observed within the site. K-rat sign was found in trace quantities (less than 1 burrows per acre).

Based on vegetation and burrow size it appears that the kangaroo rat species occurring on this site is probably the Dulzura kangaroo rat (*Dipodomys simulans*). Although based on historical occurrence, and the power easement open space to the east there is a small probability that the endangered San Bernardino kangaroo rat *(Dipodomys merriami parvus)* could also be present.

Grubbed and Disturbed Areas on Shea Site

K-rat Burrow Observed on Shea Site

Southern Border of Shea Site. House is NAP.

Conclusions

Based on the phase one surveys there appears to be a very low potential for the San Bernardino Kangaroo rat to occur on site. There is a good potential for the Los Angeles pocket mouse and the northwestern San Diego pocket mouse to also occur. The identity of the kangaroo rat on site and the presence or absence of the other species can not be determined accurately without a focused trapping survey.

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.

This report was prepared in accordance with professional requirements and recommended protocols for small mammal phase one studies.

Philippe Vergne *Philippe Jean Vergne* March 20, 2022

Appendix E

San Bernardino Kangaroo Rat Trapping Studies

San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*)-SBKR
Presence/Absence Trapping Studies
Sierra Business Center (Acacia Project) in the city of Fontana, San Bernardino County, Ca

Acacia Project Site: North Fontana Industrial Complex
Acreage: 19.0
APNs: 0239-151-19, -25, -26, and -36

Prepared by:

ENVIRA
P. O. Box 2612
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Trapping Surveys Conducted On:
May 30 to June 4, 2022

Report Date:

June 9, 2022

Prepared For :

Alden Environmental

This report was prepared in accordance with professional requirements and recommended protocols for small mammal trapping studies (USFWS Permit TE068072-4).

Philippe Vergne

Philippe Jean Vergne, Field Biologist and Author

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Executive Summary

ENVIRA was contracted by Alden Environmental to conduct a live-trapping effort for the federally listed endangered San Bernardino kangaroo rat (*Dipodomys merriami parvus*). The study was conducted on an 11.1-acre site located at the corner of Sierra Avenue and Duncan Canyon Road, San Bernardino County, California (Figure 1).

A literature review and records check was conducted for sensitive resources within the vicinity of the proposed project. In addition to the literature review, a general field survey of the project area was conducted. The field survey provided information on the existing conditions of the site and the potential for sensitive resources to be present.

Four sensitive mammal species were identified as potentially present in the vicinity of the project site: the SBKR, northwestern San Diego pocket mouse (Chaetodipus fallax fallax),LAPM, and San Diego desert woodrat (Neotoma lepida intermedia)-NELE. Focused trapping surveys are only required for the San Bernardino kangaroo rat (SBKR). Since kangaroo rat burrows were found during the phase one site survey (January 14, 2022) a focused trapping survey was scheduled by the Developer.

SBKR were previously captured adjacent and north of the site in an area that is now in houses (CNDDB) (Figure 2).

Trapping surveys for SBKR were conducted according to U.S. Fish and Wildlife Service (USFWS) protocols established for SBKR. The current protocol calls for five nights of trapping. One trapping session was conducted from May 30 to June 4 of 2022. Focused trapping was conducted on the property in areas containing potential SBKR habitat and small mammal sign.

SBKR were not captured during the current survey. The kangaroo rat species that occurs on site is the Dulzura kangaroo rat (*Dipodomys simulans*)-DKR

One other sensitive mammal species, the Los Angeles pocket mouse , was captured during the focused survey. Impacts to this species are probably not considered to be significantunder CEQA due to project size and location.

It should be noted that the USFWS considers small mammal trapping surveys as valid for one year from the date of the trapping.

1.0 Introduction

ENVIRA was contracted by Alden Environmental to conduct a live-trapping effort for the federally listed endangered San Bernardino kangaroo rat (*Dipodomys merriami parvus*). The study was conducted on an 11.1-acre site located at the corner of Sierra Avenue and Duncan Canyon Road, San Bernardino County, California (Figure 1).

This report describes the existing conditions of the project site, the general biological resources observed on site, and the results of the trapping studies. The assessment and trapping work were required to determine the presence or absence of the San Bernardino kangaroo rat (SBKR) on the property.

2.0 Site Location and Project Description

The property is located to the east and adjacent to Sierra Avenue and to the south of Duncan Canyon Road (Figure 1).

The proposed project is for a commercial development.

Figure One Project Location.

3.0 Methods

A literature review and records check was conducted for sensitive resources within the vicinity of the proposed project. In addition to the literature review, a general field survey of the project area was conducted. The field survey provided information on the existing conditions of the site and the potential for sensitive resources to be present. Trapping surveys for SBKR were conducted in areas with potential SBKR habitat and small mammal sign (scat, burrows, tail-drags, footprint, diggings and dust bath areas.

3.1 Literature Review and Records Check

The literature review and records check included a review of standard field guides and texts on sensitive and non-sensitive biological resources potentially onsite, as well as the following sources:

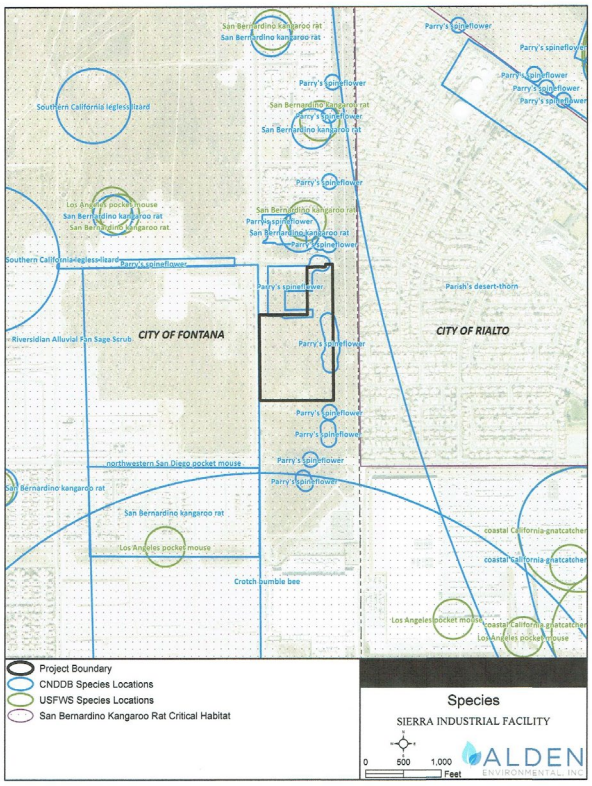
- List of sensitive biological resources provided by the California Natural Diversity Data Base (CNDDB).
- The Status and Known Distribution of the San Bernardino Kangaroo Rat (Dipodomys merriami parvus). Field surveys conducted between 1987 and 1996 (McKernan 1997).
- Endangered and Threatened Wildlife and Plants; Final Rule to List the San Bernardino Kangaroo Rat as Endangered; and Notice of Public Hearing (U. S. Fish and Wildlife Service 1998).
- Previous trapping reports for the area

3.2 Habitat Evaluation Surveys

Mr. Philippe Vergne, a certified kangaroo rat biologist holding U.S. Fish and Wildlife Permit No. TE831207-4 and current California Department of Fish and Wildlife (CDFW) Memorandum of Understanding, inventoried and evaluated the condition of the soils and plant communities on site in order to assess the potential trapping locations for SBKR or other sensitive species. Mr. Vergne took notes during the surveys of all plant and animal species observed.

SBKR were previously captured adjacent and north of the site in an area that is now in houses (CNDDB) (Figure 2).

Figure Two. CNDDB Results Acacia Site



An intensive search was conducted on the property and immediately adjacent areas for such diagnostic kangaroo rat sign as habitat, scat, tracks, dust bowls and burrows. All species identified by sight, call or sign (burrows, scat, tracks, etc.) and visual observation were recorded.

In addition, site characteristics such as soils, topography, the condition of the plant communities, and evidence of human use of the site were noted. A list of plant and wildlife species observed during the survey is included in Appendix A.

3.3 San Bernardino Kangaroo Rat Trapping Surveys

Trapping surveys for SBKR were conducted according to U.S. Fish and Wildlife Service (USFWS) protocols established for SBKR. The current protocol calls for five nights of trapping. One trapping session was conducted from May 30 to June 4, 2022.

Four trapping lines of 30 traps, set 12 meters apart, were set in trapping areas A through D (Figure 3) for the Acacia portion of the site. Traps were placed in areas containing sandy loam soils showing sign of small mammal use.

Each trap was baited with birdseed placed at the back of the traps. The traps were left in place each day. Each trap was set at dusk each night and inspected once during the night and at dawn each morning. All animals were identified and released at the point of capture.

Notes were taken on the habitat conditions where the traps were placed. Weather conditions at the time of the trapping were also noted.

4.0 Results

Four sensitive mammal species were identified as potentially present in the vicinity of the project site. They are the San Bernardino kangaroo rat, the northwestern San Diego pocket mouse (Chaetodipus fallax fallax), the Los Angeles pocket mouse (Perognathus longimembris brevinasus), and the San Diego desert woodrat (*Neotoma lepida intermedia*).

Of the animal species potentially present, only the San Bernardino kangaroo rat requires specific survey protocols to establish presence or absence. These specific survey protocols are required for areas where impacts may occur to the sensitive species or their occupied habitat. The remaining species are usually identified through casual observation or as part of the overall trapping effort.

4.1 Sensitive Biological Resources

4.1.1 San Bernardino Kangaroo Rat

The San Bernardino kangaroo rat is primarily associated with a variety of sage scrub vegetation, where the common elements are the presence of sandy soils and relatively open vegetation structure (McKernan 1997). Flood events break out of the main river channel in a complex pattern, resulting in a braided appearance to the flood plain. This dynamic nature to the habitat leads to a situation where not all the alluvial scrub habitat is suitable for the kangaroo rat at any point in time.

The SBKR prefers open habitat characterized by a low stature open scrub canopy cover of less than 22 percent. Occupied SBKR habitat also typically exhibits a reduced herbaceous cover with a low abundance of European grasses, such as brome species. This type of habitat is best described as early to intermediate phase alluvial sage scrub communities that are subject to frequent flooding/scouring. The open vegetation structure in these communities support the highest densities of SBKR.

Mature phase alluvial chaparral, which are usually located above the active channel or on higher benches are not usually occupied by SBKR, although individuals have been trapped in dense upland scrub adjacent to open habitat and SBKR populations (Vergne 2008).

4.1.2 Northwestern San Diego Pocket Mouse

The northwestern San Diego pocket mouse (Chaetodippus fallax fallax) prefers habitat similar to that preferred by the SBKR. The northwestern San Diego pocket mouse occurs in open, sandy areas in the valleys and foothills of southwestern California.

The range of this species extends from Orange County to San Diego County, and includes Riverside and San Bernardino counties. This mouse is a California Species of Concern (CSC) whose historical range has been reduced by urban development and agriculture.`

4.1.3 Los Angeles Pocket Mouse

The Los Angeles pocket mouse (Perognathus longimembris brevinasus) is one of two pocket mice found in this area of San Bernardino County. Both the Los Angeles pocket mouse and the San Diego pocket mouse occupy similar habitats, but the San Diego pocket mouse has a wider range extending south into San Diego County. The habitat of the Los Angeles pocket mouse is described as being confined to lower elevation grasslands and coast sage scrub habitats, in areas with soils composed of fine sands (Williams, 1986). The present known distribution of this species extends from Rancho Cucamonga east to Morongo Valley and south to the San Diego County border.

Los Angeles pocket mouse forages in open ground and underneath shrubs. Pocket mice dig burrows in loose soil, although this has not been completely documented for this subspecies.

The L.A. pocket mouse is listed as a California Species of Concern (CSC) by the California Department of Fish and Wildlife (CDFW).

4.1.4 San Diego Desert Woodrat

The desert woodrat (*Neotoma lepida*) is a relatively wide-ranging species extending along the coast of California from south of San Francisco through to the border with Baja California. This species also occurs in the Central Valley and the deserts of southern California and extends along the desert side of the Sierra Nevada into southeastern Oregon.

The coastal race of the desert woodrat, the San Diego desert woodrat, prefers scrub habitats such as coastal sage scrub, chaparral and alluvial fan sage scrub. It is more common in areas with rock piles and coarse sandy to rocky soils throughout coastal southern California. The range of this species extends from just south of Sacramento and the San Francisco area to the border with Baja California. The coastal subspecies of the widespread *Neotoma lepida* is listed as a CSC; its historical range has been impacted by the conversion of scrub habitats into residential, commercial and industrial use.

4.2 Soils and Topography

Soils on site are characterized as Soboba, and Tujunga loamy sand (Soil Survey Staff 2016). Cobbles are abundant on site. The topography is flat to gently sloping to the south.

4.3 Land Uses

The property is located adjacent and to the east of Sierra Avenue. It is bordered on the North by Duncan Canyon Road and a residential development. Open space and the Shea site is located to the south. A SCE power line easement is located on the eastern boundary.

4.4 Plant Communities

The vegetation on the Acacia site is fairly undisturbed alluvial fan with chaparral components. Soils are sandy with some areas having river rock. Open less vegetated areas occur within the site.

Disturbed Open Sandy Areas on Acacia Site

Kangaroo rat burrow and scat on Acacia Site

4.5 Wildlife

Wildlife activity was low during the trapping surveys. One reptile species, the side-blotched lizard (Uta stansburiana) was observed. Bird species observed included mourning dove (Zenaida macroura) and American kestrel (Falco sparverius).

A list of species observed is given in Appendix A.

4.6. San Bernardino Kangaroo Rat Trapping Surveys

4.6.1 Weather Conditions

Weather conditions during the trapping surveys included morning temperatures in the high sixties to low seventies degrees Fahrenheit, with clear to partly cloudy skies and winds of less than three miles per hour. The moon was new during the protocol survey. Daily weather conditions for each day are summarized in Table 1 below.

Table 1. Weather Summary

Date	Cloud Cover	Morning Temperatures (F)	Wind Speed (miles per hour)
May 30	Clear	69	0
May 31	Clear	68	0
June 1	Clear	71	0
June 2	Clear	72	0-3
June 3	Clear	72	0-3
June 4	Clear	73	0-3

4.6.2 Trap Site Descriptions

Traps were set within open areas on sites that had small fossorial mammal sign or that were near undisturbed areas adjacent to the property.

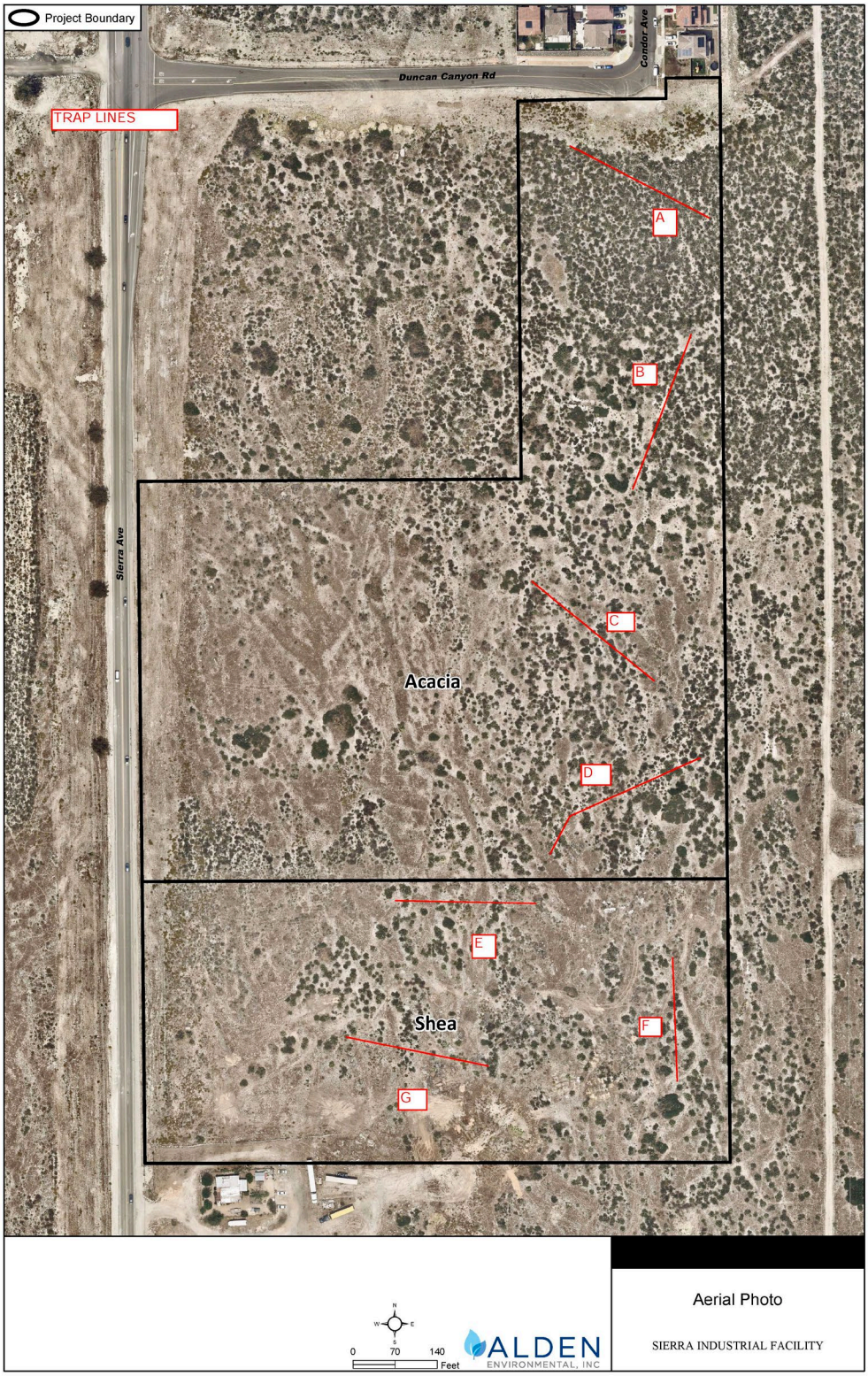
4.6.3 Trapping Survey Results

Trapping success was low over the entire trapping period. A total of four small mammal species, were trapped during the survey period. Table 2 provides summary information on the species trapped per trapping location.

Table 2. Trapping Results Sierra Business Center Acacia Portion

Trap Site	Number of Trap Nights	Dulzura Kangaroo Rat Dipodomys simulans	Cactus Mouse Peromyscus eremicus	Deer Mouse Peromyscus maniculatus	Los Angeles Pocket Mouse Perognathus longimembris brevinasus
A	150	3	4	2	2
B	150	2	3	3	4
C	150	2	3	1	1
D	150	1	4	2	1
Totals	600	8	14	8	8

Figure 3. Sierra Business Center Trap Lines



5.0 Discussion

Based on the trapping survey the San Bernardino does not occur on the property. No impacts to SBKR will occur due to project implementation.

The LAPM a CDFW CSC occurs on the property. Regionally impact to this species due to project implementation might not be considered as significant under CEQA.

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Appendix A - Plant and Animal Species Observed

* denotes non-native plant species

Plants

ANGIOSPERMAE: DICOTYLEDONES	**DICOT FLOWERING PLANTS**
Anacardiaceae	**Sumac family**
Rhus trilobata	Squaw bush
Asteraceae	**Sunflower family**
Ambrosia psilostachya	Western ragweed
Artemisia californica	California sagebrush
Helianthus annuus	Annual sunflower
Lepidospartum squamatum	Scale-broom
Boraginaceae	Borage family
Amsinckia menziesii	Fiddleneck
Cryptantha intermedia	Popcorn flower
Brassicaceae	**Mustard family**
**Brassica nigra*	Black mustard
**Hirschfeldia incana*	Short-podded mustard
**Sisymbrium irio*	London rocket
Euphorbiaceae	**Spurge family**
Chamaesyce albomarginata	Rattlesnake weed
Croton californica	Croton
Eremocarpus setigerus	Doveweed
Euphorbia nutans	Spurge
Geraniaceae	**Geranium family**
**Erodium cicutarium*	Red-stemmed filaree
Eriodictyon trichocalyx	Yerba santa
Phacelia ramosissima	Branching phacelia
Lamiaceae	**Mint family**
Salvia mellifera	Black sage
Polygonaceae	**Buckwheat family**
Eriogonum fasciculatum	California buckwheat
Eriogonum gracile	Graceful buckwheat

ANGIOSPERMAE:MONOCOTYLEDONAE	**MONOCOT FLOWERING PLANTS**
Poaceae	**Grass family**
**Avena barbata*	Slender wild oats
**Bromus diandrus*	Ripgut brome
**Bromus madritensis*	Red brome
**Schismus barbatus*	Mediterranean grass

Taxonomy and nomenclature follow Hickman 1993 and Munz 1974.

Animals

REPTILIA	**REPTILES**
Iguanidae	**Iguanas and their allies**
Uta stansburiana	Side-blotched lizard
AVES	**BIRDS**
Cathartidae	**Vultures**
Cathartes aura	Turkey vulture
Accipitridae	**Kites, hawks and eagles**
Buteo jamaicensis	Red-tailed hawk
Falconidae	**Caracaras and falcons**
Falco sparverius	American kestrel
Columbidae	**Pigeons and doves**
Zenaida macroura	Mourning dove
Tyrannidae	**Tyrant flycatchers**
Tyrannus verticaulis	Western kingbird
Corvidae	**Crows and ravens**
Corvus brachyrhynchos	American crow
Mimidae	**Mimic thrushes**
Mimus polyglottos	Northern mockingbird

MAMALIA	**MAMMALS**
Leporidae	**Rabbits and hares**
Sylvilagus audubonii	Audubon's cottontail
Sciuridae	**Squirrels, chipmunks and marmots**
Spermophilus beecheyi	California ground squirrel
Geomyidae	**Pocket gophers**
Thomomys bottae	Botta's pocket gopher
Heteromyidae	**Pocket mice and kangaroo rats**
Dipodomys simulans	Dulzura kangaroo rat
Perognathus longimembris brevinasus	Los Angeles pocket mouse
Cricetidae	**Cricetine mice and rats**
Peromyscus eremicus	Cactus mouse
Peromyscus maniculatus	Deer mouse
Canidae	**Foxes, wolves and relatives**
Canis latrans	Coyote

Nomenclature follows Hall 1981, Laudenslayer et al. 1991, and Stebbins 1966.

San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*)-SBKR
Presence/Absence Trapping Studies
Sierra Business Center (Shea Project) in the city of Fontana, San Bernardino County, Ca

Shea Project: Sierra Industrial Facility
Acreage: 11.1
APNs: 0239-151-09 and -38

Prepared by:

ENVIRA
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Trapping Surveys Conducted On:
May 30 to June 4, 2022

Report Date:

June 10, 2022

Prepared For :
Alden Environmental

This report was prepared in accordance with professional requirements and recommended protocols for small mammal trapping studies (USFWS Permit TE068072-4).
Philippe Vergne

Philippe Jean Vergne, Field Biologist and Author

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Executive Summary

ENVIRA was contracted by Alden Environmental to conduct a live-trapping effort for the federally listed endangered San Bernardino kangaroo rat (*Dipodomys merriami parvus*). The study was conducted on an 11.1-acre site located east of Sierra Avenue and south and adjacent to the Acacia Site Bernardino County, California (Figure 1).

A literature review and records check was conducted for sensitive resources within the vicinity of the proposed project. In addition to the literature review, a general field survey of the project area was conducted. The field survey provided information on the existing conditions of the site and the potential for sensitive resources to be present.

Four sensitive mammal species were identified as potentially present in the vicinity of the project site: the SBKR, northwestern San Diego pocket mouse (Chaetodipus fallax fallax),LAPM, and San Diego desert woodrat (Neotoma lepida intermedia)-NELE. Focused trapping surveys are only required for the San Bernardino kangaroo rat (SBKR). Since kangaroo rat burrows were found during the phase one site survey (January 14, 2022) a focused trapping survey was scheduled by the Developer.

SBKR were previously captured adjacent and north of the site in an area that is now in houses (CNDDB) (Figure 2).

Trapping surveys for SBKR were conducted according to U.S. Fish and Wildlife Service (USFWS) protocols established for SBKR. The current protocol calls for five nights of trapping. One trapping session was conducted from May 30 to June 4 of 2022. Focused trapping was conducted on the property in areas containing potential SBKR habitat and small mammal sign.

SBKR were not captured during the current survey. The kangaroo rat species that occurs on site is the Dulzura kangaroo rat (*Dipodomys simulans*)-DKR

One other sensitive mammal species, the Los Angeles pocket mouse , was captured during the focused survey. Impacts to this species are probably not considered to be significantunder CEQA due to project size and location.

It should be noted that the USFWS considers small mammal trapping surveys as valid for one year from the date of the trapping.

1.0 Introduction

ENVIRA was contracted by Alden Environmental to conduct a live-trapping effort for the federally listed endangered San Bernardino kangaroo rat (*Dipodomys merriami parvus*). The study was conducted on an 11.1-acre site located at the corner of Sierra Avenue and Duncan Canyon Road, San Bernardino County, California (Figure 1).

This report describes the existing conditions of the project site, the general biological resources observed on site, and the results of the trapping studies. The assessment and trapping work were required to determine the presence or absence of the San Bernardino kangaroo rat (SBKR) on the property.

2.0 Site Location and Project Description

The property is located to the east and adjacent to Sierra Avenue and south of the Acacia Site which is bordered on the North by Duncan Canyon Road (Figure 1).

The proposed project is for a commercial development.

Figure One Project Location.

3.0 Methods

A literature review and records check was conducted for sensitive resources within the vicinity of the proposed project. In addition to the literature review, a general field survey of the project area was conducted. The field survey provided information on the existing conditions of the site and the potential for sensitive resources to be present. Trapping surveys for SBKR were conducted in areas with potential SBKR habitat and small mammal sign (scat, burrows, tail-drags, footprint, diggings and dust bath areas.

3.1 Literature Review and Records Check

The literature review and records check included a review of standard field guides and texts on sensitive and non-sensitive biological resources potentially onsite, as well as the following sources:

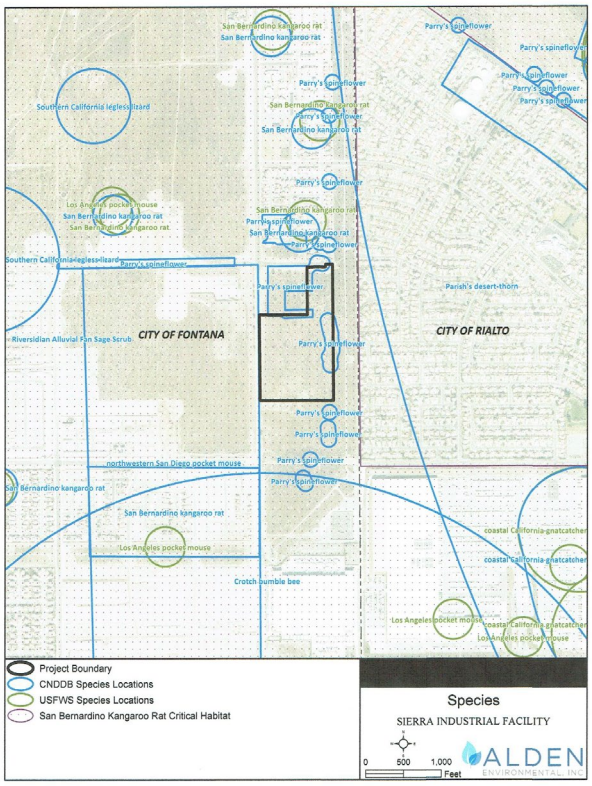
- List of sensitive biological resources provided by the California Natural Diversity Data Base (CNDDB).
- The Status and Known Distribution of the San Bernardino Kangaroo Rat (Dipodomys merriami parvus). Field surveys conducted between 1987 and 1996 (McKernan 1997).
- Endangered and Threatened Wildlife and Plants; Final Rule to List the San Bernardino Kangaroo Rat as Endangered; and Notice of Public Hearing (U. S. Fish and Wildlife Service 1998).
- Previous trapping reports for the area

3.2 Habitat Evaluation Surveys

Mr. Philippe Vergne, a certified kangaroo rat biologist holding U.S. Fish and Wildlife Permit No. TE831207-4 and current California Department of Fish and Wildlife (CDFW) Memorandum of Understanding, inventoried and evaluated the condition of the soils and plant communities on site in order to assess the potential trapping locations for SBKR or other sensitive species. Mr. Vergne took notes during the surveys of all plant and animal species observed.

SBKR were previously captured adjacent and north of the site in an area that is now in houses (CNDDB) (Figure 2).

Figure Two. CNDDB Results Shea Site



An intensive search was conducted on the property and immediately adjacent areas for such diagnostic kangaroo rat sign as habitat, scat, tracks, dust bowls and burrows. All species identified by sight, call or sign (burrows, scat, tracks, etc.) and visual observation were recorded.

In addition, site characteristics such as soils, topography, the condition of the plant communities, and evidence of human use of the site were noted. A list of plant and wildlife species observed during the survey is included in Appendix A.

3.3 San Bernardino Kangaroo Rat Trapping Surveys

Trapping surveys for SBKR were conducted according to U.S. Fish and Wildlife Service (USFWS) protocols established for SBKR. The current protocol calls for five nights of trapping. One trapping session was conducted from May 30 to June 4, 2022.

Four trapping lines of 30 traps, set 12 meters apart, were set in trapping areas A through D (Figure 3) for the Shea portion of the site. Traps were placed in areas containing sandy loam soils showing sign of small mammal use.

Each trap was baited with birdseed placed at the back of the traps. The traps were left in place each day. Each trap was set at dusk each night and inspected once during the night and at dawn each morning. All animals were identified and released at the point of capture.

Notes were taken on the habitat conditions where the traps were placed. Weather conditions at the time of the trapping were also noted.

4.0 Results

Four sensitive mammal species were identified as potentially present in the vicinity of the project site. They are the San Bernardino kangaroo rat, the northwestern San Diego pocket mouse (Chaetodipus fallax fallax), the Los Angeles pocket mouse (Perognathus longimembris brevinasus), and the San Diego desert woodrat (*Neotoma lepida intermedia*).

Of the animal species potentially present, only the San Bernardino kangaroo rat requires specific survey protocols to establish presence or absence. These specific survey protocols are required for areas where impacts may occur to the sensitive species or their occupied habitat. The remaining species are usually identified through casual observation or as part of the overall trapping effort.

4.1 Sensitive Biological Resources

4.1.1 San Bernardino Kangaroo Rat

The San Bernardino kangaroo rat is primarily associated with a variety of sage scrub vegetation, where the common elements are the presence of sandy soils and relatively open vegetation structure (McKernan 1997). Flood events break out of the main river channel in a complex pattern, resulting in a braided appearance to the flood plain. This dynamic nature to the habitat leads to a situation where not all the alluvial scrub habitat is suitable for the kangaroo rat at any point in time.

The SBKR prefers open habitat characterized by a low stature open scrub canopy cover of less than 22 percent. Occupied SBKR habitat also typically exhibits a reduced herbaceous cover with a low abundance of European grasses, such as brome species. This type of habitat is best described as early to intermediate phase alluvial sage scrub communities that are subject to frequent flooding/scouring. The open vegetation structure in these communities support the highest densities of SBKR.

Mature phase alluvial chaparral, which are usually located above the active channel or on higher benches are not usually occupied by SBKR, although individuals have been trapped in dense upland scrub adjacent to open habitat and SBKR populations (Vergne 2008).

4.1.2 Northwestern San Diego Pocket Mouse

The northwestern San Diego pocket mouse (Chaetodippus fallax fallax) prefers habitat similar to that preferred by the SBKR. The northwestern San Diego pocket mouse occurs in open, sandy areas in the valleys and foothills of southwestern California.

The range of this species extends from Orange County to San Diego County, and includes Riverside and San Bernardino counties. This mouse is a California Species of Concern (CSC) whose historical range has been reduced by urban development and agriculture.`

4.1.3 Los Angeles Pocket Mouse

The Los Angeles pocket mouse (Perognathus longimembris brevinasus) is one of two pocket mice found in this area of San Bernardino County. Both the Los Angeles pocket mouse and the San Diego pocket mouse occupy similar habitats, but the San Diego pocket mouse has a wider range extending south into San Diego County. The habitat of the Los Angeles pocket mouse is described as being confined to lower elevation grasslands and coast sage scrub habitats, in areas with soils composed of fine sands (Williams, 1986). The present known distribution of this species extends from Rancho Cucamonga east to Morongo Valley and south to the San Diego County border.

Los Angeles pocket mouse forages in open ground and underneath shrubs. Pocket mice dig burrows in loose soil, although this has not been completely documented for this subspecies.

The L.A. pocket mouse is listed as a California Species of Concern (CSC) by the California Department of Fish and Wildlife (CDFW).

4.1.4 San Diego Desert Woodrat

The desert woodrat (*Neotoma lepida*) is a relatively wide-ranging species extending along the coast of California from south of San Francisco through to the border with Baja California. This species also occurs in the Central Valley and the deserts of southern California and extends along the desert side of the Sierra Nevada into southeastern Oregon.

The coastal race of the desert woodrat, the San Diego desert woodrat, prefers scrub habitats such as coastal sage scrub, chaparral and alluvial fan sage scrub. It is more common in areas with rock piles and coarse sandy to rocky soils throughout coastal southern California. The range of this species extends from just south of Sacramento and the San Francisco area to the border with Baja California. The coastal subspecies of the widespread *Neotoma lepida* is listed as a CSC; its historical range has been impacted by the conversion of scrub habitats into residential, commercial and industrial use.

4.2 Soils and Topography

Soils on site are characterized as Soboba, and Tujunga loamy sand (Soil Survey Staff 2016). Cobbles are abundant on site. The topography is flat to gently sloping to the south.

4.3 Land Uses

The property is located adjacent and to the east of Sierra Avenue. A rural house and graded lot are located to the south. A SCE power line easement is located on the eastern boundary. Grubbing has occurred on portions of the site, probably for fire suppression.

4.4 Plant Communities

The vegetation on the Shea site is highly disturbed alluvial fan with chaparral components. Soils are sandy with some areas having river rock. Open areas occur within the site due to grubbing.

Disturbed Grubbed Areas on Shea Site

Kangaroo rat burrow and scat on Shea Site

4.5 Wildlife

Wildlife activity was low during the trapping surveys. One reptile species, the side-blotched lizard (Uta stansburiana) was observed. Bird species observed included mourning dove (Zenaida macroura) and American kestrel (Falco sparverius).

A list of species observed is given in Appendix A.

4.6. San Bernardino Kangaroo Rat Trapping Surveys

4.6.1 Weather Conditions

Weather conditions during the trapping surveys included morning temperatures in the high sixties to low seventies degrees Fahrenheit, with clear to partly cloudy skies and winds of less than three miles per hour. The moon was new during the protocol survey. Daily weather conditions for each day are summarized in Table 1 below.

Table 1. Weather Summary

Date	Cloud Cover	Morning Temperatures (F)	Wind Speed (miles per hour)
May 30	Clear	69	0
May 31	Clear	68	0
June 1	Clear	71	0
June 2	Clear	72	0-3
June 3	Clear	72	0-3
June 4	Clear	73	0-3

4.6.2 Trap Site Descriptions

Traps were set within open areas on sites that had small fossorial mammal sign or that were near undisturbed areas adjacent to the property.

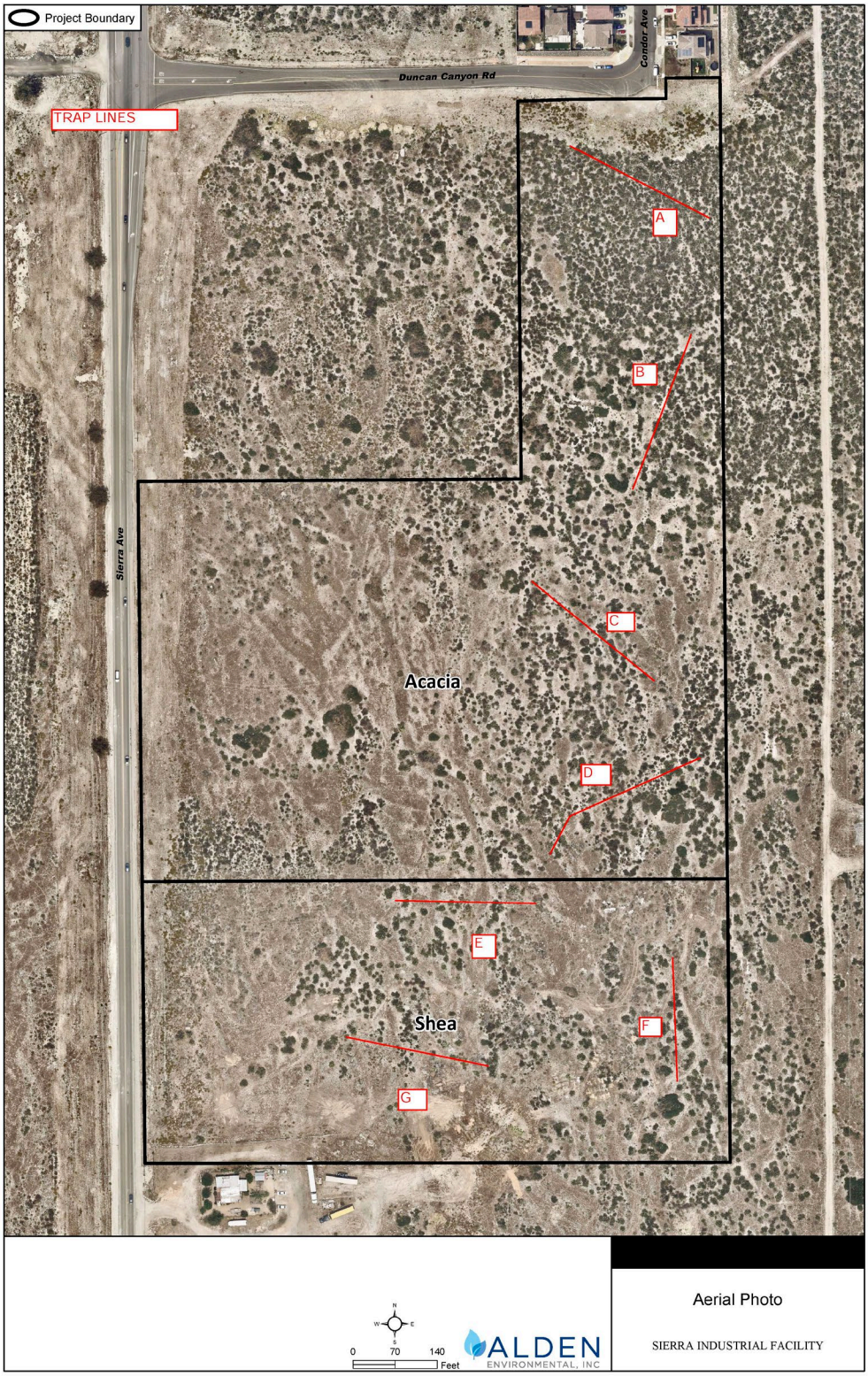
4.6.3 Trapping Survey Results

Trapping success was low over the entire trapping period. A total of four small mammal species, were trapped during the survey period. Table 2 provides summary information on the species trapped per trapping location.

Table 2. Trapping Results Sierra Business Center Shea Portion

Trap Site	Number of Trap Nights	Dulzura Kangaroo Rat Dipodomys simulans	Cactus Mouse Peromyscus eremicus	Deer Mouse Peromyscus maniculatus	Los Angeles Pocket Mouse Perognathus longimembris brevinasus
E	150	3	4	1	1
F	150	2	3	0	0
G	150	0	4	2	0
Totals	450	5	11	3	1

Figure 3. Sierra Business Center Trap Lines



5.0 Discussion

Based on the trapping survey the San Bernardino does not occur on the property. No impacts to SBKR will occur due to project implementation.

The LAPM a CDFW CSC occurs on the property. Regionally impact to this species due to project implementation might not be considered as significant under CEQA.

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Appendix A - Plant and Animal Species Observed

* denotes non-native plant species

Plants

ANGIOSPERMAE: DICOTYLEDONES	**DICOT FLOWERING PLANTS**
Anacardiaceae	**Sumac family**
Rhus trilobata	Squaw bush
Asteraceae	**Sunflower family**
Ambrosia psilostachya	Western ragweed
Artemisia californica	California sagebrush
Helianthus annuus	Annual sunflower
Lepidospartum squamatum	Scale-broom
Boraginaceae	Borage family
Amsinckia menziesii	Fiddleneck
Cryptantha intermedia	Popcorn flower
Brassicaceae	**Mustard family**
**Brassica nigra*	Black mustard
**Hirschfeldia incana*	Short-podded mustard
**Sisymbrium irio*	London rocket
Euphorbiaceae	**Spurge family**
Chamaesyce albomarginata	Rattlesnake weed
Croton californica	Croton
Eremocarpus setigerus	Doveweed
Euphorbia nutans	Spurge
Geraniaceae	**Geranium family**
**Erodium cicutarium*	Red-stemmed filaree
Eriodictyon trichocalyx	Yerba santa
Phacelia ramosissima	Branching phacelia
Lamiaceae	**Mint family**
Salvia mellifera	Black sage
Polygonaceae	**Buckwheat family**
Eriogonum fasciculatum	California buckwheat
Eriogonum gracile	Graceful buckwheat

ANGIOSPERMAE:MONOCOTYLEDONAE	**MONOCOT FLOWERING PLANTS**
Poaceae	**Grass family**
**Avena barbata*	Slender wild oats
**Bromus diandrus*	Ripgut brome
**Bromus madritensis*	Red brome
**Schismus barbatus*	Mediterranean grass

Taxonomy and nomenclature follow Hickman 1993 and Munz 1974.

Animals

REPTILIA	**REPTILES**
Iguanidae	**Iguanas and their allies**
Uta stansburiana	Side-blotched lizard
AVES	**BIRDS**
Cathartidae	**Vultures**
Cathartes aura	Turkey vulture
Accipitridae	**Kites, hawks and eagles**
Buteo jamaicensis	Red-tailed hawk
Falconidae	**Caracaras and falcons**
Falco sparverius	American kestrel
Columbidae	**Pigeons and doves**
Zenaida macroura	Mourning dove
Tyrannidae	**Tyrant flycatchers**
Tyrannus verticaulis	Western kingbird
Corvidae	**Crows and ravens**
Corvus brachyrhynchos	American crow
Mimidae	**Mimic thrushes**
Mimus polyglottos	Northern mockingbird

Mamalia	**Mammals**
Leporidae	**Rabbits and hares**
Sylvilagus audubonii	Audubon's cottontail
Sciuridae	**Squirrels, chipmunks and marmots**
Spermophilus beecheyi	California ground squirrel
Geomyidae	**Pocket gophers**
Thomomys bottae	Botta's pocket gopher
Heteromyidae	**Pocket mice and kangaroo rats**
Dipodomys simulans	Dulzura kangaroo rat
Perognathus longimembris brevinasus	Los Angeles pocket mouse
Cricetidae	**Cricetine mice and rats**
Peromyscus eremicus	Cactus mouse
Peromyscus maniculatus	Deer mouse
Canidae	**Foxes, wolves and relatives**
Canis latrans	Coyote

Nomenclature follows Hall 1981, Laudenslayer et al. 1991, and Stebbins 1966.

Appendix F

Burrowing Owl Survey Report

ALDEN ENVIRONMENTAL, INC
3245 University Ave, #1188 | San Diego, CA 92104 | **Phone/Fax:** 619.284.3815

July 25, 2022

Ms. Tracy Zinn
T&B Planning, Inc.
3200 El Camino Real, Ste.100
Irvine, CA 92602

Subject: Burrowing Owl Survey Report for the Sierra Business Center Project Site

Dear Ms. Zinn:

This letter presents the results of the 2022 breeding season survey for the burrowing owl (*Athene cunicularia*) conducted on the approximately 30.1 combined-acre site known as the Sierra Business Center project site.

LOCATION AND SITE DESCRIPTION

The Sierra Business Center project site is in the City of Fontana in San Bernardino County. Sierra Avenue borders the site to the west. The site consists of two parcels: the Shea project site known as the Sierra Industrial Facility (11.1 acres; APNs 0239-151-09 and -38) and the Acacia project site known as the North Fontana Industrial Complex (19 acres; APNs: 0239-151-19, -25, -26, and -36). The Sierra Business Center project site is on the Devore U.S. Geological Survey 7.5-minute series topographic map in the northwest corner of Section 20 in Township 1 North, Range 5 West.

METHODS

A general site assessment for the burrowing owl was conducted by Leatherman BioConsulting, Inc. on January 25, 2022. During the assessment, vegetation was mapped; locations of burrows that could be utilized by burrowing owls were recorded with the use of a Global Positioning System; and the site was searched for perches that could be used by the burrowing owl.

Due to the open nature of the habitat and the presence of California ground squirrel (*Otospermophilus beecheyi*) burrows that could be utilized by burrowing owls, the site was considered to have some potential for the burrowing owl to be present. Therefore, a focused burrowing owl survey (4 total site visits) was initiated on March 3, 2022 according to the survey methods in the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012; Table 1; Attachment A).

Table 1 Burrowing Owl Survey Information				
Site Visit Number	**Date**	**Biologist**	**Time**	**Weather Conditions[1]** (start/stop)
1	3/3/22	BL, SL	0615-0945	50%, 55°F, wind 0-1 mph/ 75%, 68°F, wind 2-4 mph
2	4/15/22	BL, TB, SL	0600-0930	clear, 46°F, 4-6 mph/ clear, 67°F, 2-4 mph
3	5/19/22	BL, SL	0615-1030	100%, 57°F, 0-1 mph/ clear, 64°F, 3-5 mph
4	6/22/22	BL, EB	0545-0900	60%, 75°F, 0-1 mph/ 50%, 81°F, 1-3 mph

[1]Temperature was taken on the ground in the shade. Percentages indicate cloud cover.

The Sierra Business Center project site was surveyed for the burrowing owl by walking line transects spaced approximately 10 meters apart. At the start of each transect and at approximately every 100 meters, the site was scanned for burrowing owls using binoculars. Particular attention was paid to areas of California ground squirrel activity, including the aforementioned squirrel burrows, and potential perches. Determination of owl presence is made by direct owl observation or by owl sign/evidence such as, but not necessarily limited to, excavated soil, whitewash (excrement), castings (pellets), and/or feathers.

SURVEY RESULTS

No burrowing owl or potential burrowing owl sign/evidence was observed during any of the site visits. Based on the negative results of the 2022 field survey, the project site is not anticipated to be occupied by the burrowing owl.

Please contact me if you have any questions.

Sincerely,

Greg Mason
Senior Biologist

Enclosures:

Figure 1	Regional Location Map
Figure 2	Project Location Map
Figure 3	Burrowing Owl Survey Results
Attachment A	Field Notes

Reference:

California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. March 17.

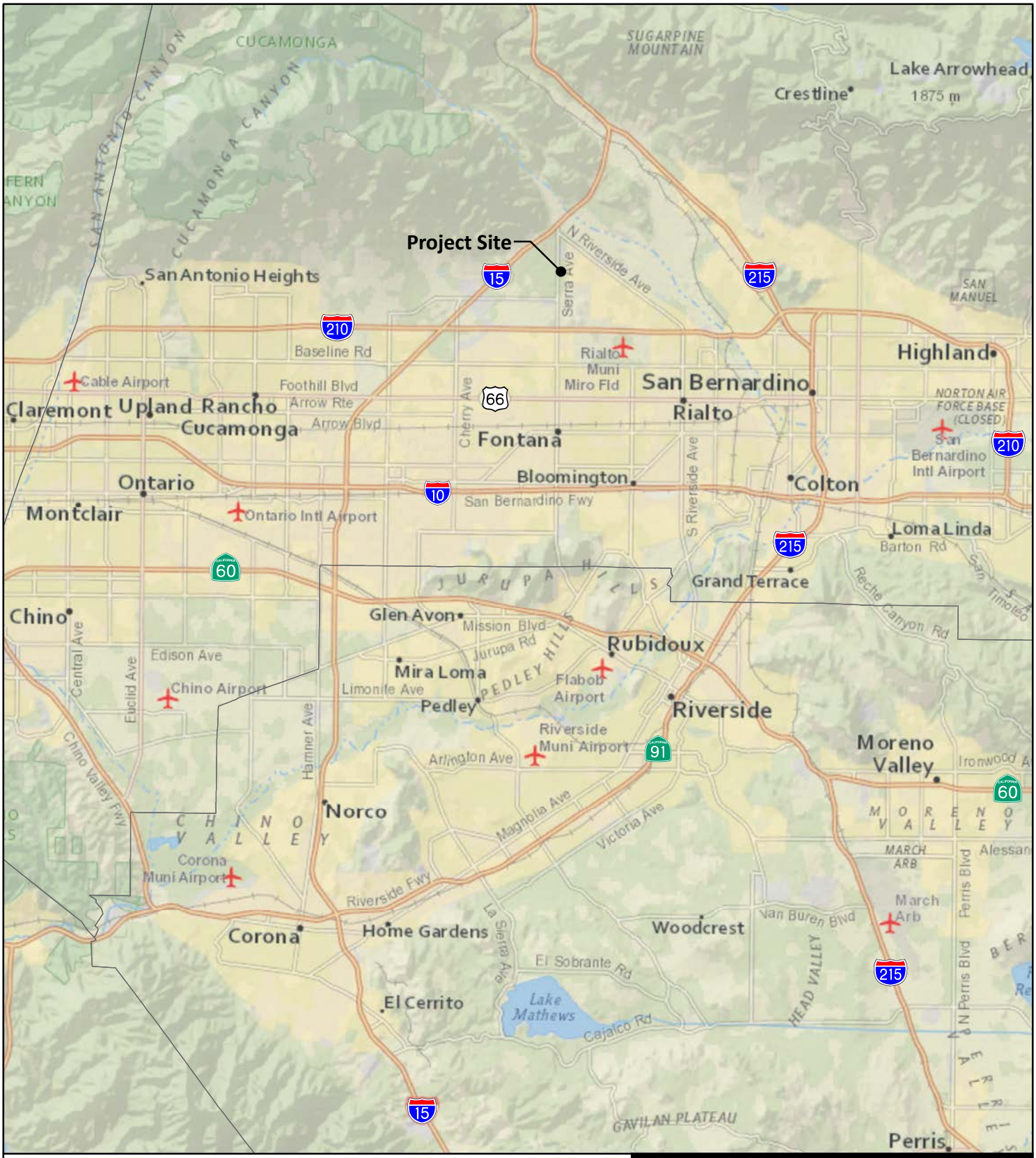

Figure 1

Regional Location

SIERRA BUSINESS CENTER

ALDEN ENVIRONMENTAL, INC

Project Boundary

North Fontana Industrial Complex

Sierra Industrial Facility

N
W E
S

0 1,000 2,000 Feet

ALDEN ENVIRONMENTAL, INC

Figure 2

Project Location

SIERRA BUSINESS CENTER

Project Boundary

Potential Burrowing Owl Burrow

Vegetation

- Holly-leaved Cherry Stand
- California Buckwheat Scrub
- Disturbed California Buckwheat Scrub
- California Buckwheat Scrub with Scattered Chamise Chaparral
- Chamise Chaparral
- Disturbed
- Developed

Duncan Canyon Rd

Condor Ave

Sierra Ave

North Fontana
Industrial Complex

Sierra Industrial
Facility

N
W E
S

0 70 140
Feet

ALDEN
ENVIRONMENTAL, INC

Figure 3

Burrowing Owl Survey Results

SIERRA BUSINESS CENTER

Appendix A

Field Notes

3 March 2022 Sierra Industrial South of 15, Fontana, San Bernardino County CA. 0615 Tair = 55°F, 0-1 mph breeze 50% high cirrus clouds. BUOW #1 w/ Sandy
WCST, THOMBOTT, KRAT - burrows
CALT, NOMO, WEME, CANILATR, CAQU,
SIERRA LILY 1 - 11 lilies TBD
SIERRA B1 - Artificial refugia consisting of pile of discarded bricks,
NOFL, SAGSP!, CATH, ANHU, SAPH,
CANILATR - 2 adults,
SIERRA LILY 2 - one lily
CORA, AMCR, BUSH, SYLU AUDU,
PEFA, ROPI, SPERBEEC, LEGO,
SIERRA B2 - natural burrow suitable for BUOW but occupied by squirrel
0830 Tair = 70°F, 1-3mph breeze
50% high cirrus - completed Acacia site No BUOW or Sign

0840 Tair = 70, 1-3, 50%
Starting # Shea site.
NOMO, WCST, CORA, WEME, BCRH,
CALT, THOMBOTT, KRAT - burrows,

3 March 2022 Shea Cout,
ANHU, CAKI, LEGO, MODO, AMCR,
SIERRA B3 - Natural squirrel burr
SIERRA LILY 4 on shea (1)
SIERRA B4 - Burrow in rocks
on dumped soil pile.
BEWR, WHASTA, CATH, SYLVANDU,
CAQU, RITH, ROPI,
SIERRA B5 - Natural active squ.
burrow, maybe a bit too small.
0945 Ta, = 68°F, 2-4 mph
75% high cirrus, NO BUOW
observed or detected on shea.

15 April 2022 Sierra Industrial
Sierra Ave, Fontana San Bernardino
County CA. 0600 Tair = 46°F,
5 mph breeze, clear, BLOW #2.
NOMO, AMCR, CALT, THOMBOTT - banded
End Point ~~3780175~~ 3780175
SBI - Grey banded, LEGO, CAKI, CORA,
BUSH, BEWR, AMCR, RCSP, WCSP, COTH,
CASP, ANHU, CATH, BUSH, MODO
0900 Finished Acacia, starting Slover
NOMO, RTHA, CORA, AMCR, ANHU,
HOLA, MODO, CAQU, THOMBOTT, DOWOO
SPERBZEC, HOLA, HOFI, LEGO, WCSP,
CALT, ANHU, 0930 BLOW done

Rite in the Rain

19 May 2022 Sierra Industrial
Sierra St. by the Creek, Fontana
San Bernardino County CA. 0615
Tair = 57°F, 100% overcast, 0-1
mph breeze. Burrow Survey #3
North end Acacia first.

MODO, NOMO, CALT, HOOR, LEGO,
Chorizanthe wypts start at 003,
HOFI, ROPI, SPERBEEC, AORA,
SIERRA B20 - occupied SPERBEEC suitable
for use/size of BUOW, LEPUCALI,
Entire central area recently mowed/cut,
SIERRA B21 - Near road, occup. SPERBEEC,
SIERRA B22 - xlnt size - occupied SPER,
BEWR, ASPTIG, HOSP, SAGS, SAPH,
Last transect east on Acacia w/
Grinds misc. scrubs, BUSH, RTHA,
WAKI, ATFL, Finished Acacia starting Sheen,
Easting at 460100 Northing 130
Down to Northing 070, COHU,
1030 No Burrow, Tair = 64°F
Clear, 3-5 mph breeze
1215 75°F, 5 mph, clear.

22 June 2022 Sierra Industrial
Fontana, San Bernardino Co.
CA. 0545 Tair ≈ 73°F,
60% cloud cover 0-1 mph breeze
Conducting BUOW #4
NOMO, HOFI, LEGO, CORA, CALT,
CATH, HOOR, Dipodomys burrows,
Thom burrows, BESP-SAGS, MODO,
CoRA, ANHU, HOSP,
0900 Tair = 81°F, 50% cloud cover,
1-3 mph breeze, no BUOW.

Rite in the Rain