NATURAL RESOURCES ASSESSMENT, INC.

General Biological Assessment Goodman Block III Fontana, California

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June 6, 2019

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Appendices

Appendix A - Plant and Animal Species Observed Appendix B - Definitions of Species Status Classification

i

CERTIFICATION

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

K. tull	June 6, 2019
Karen Kirtland	Date
Natural Resources Assessment, Inc.	

1.0 Introduction

Natural Resources Assessment, Inc. (NRAI) was contracted by T&B Planning, Inc. on behalf of the City of Fontana to provide biological services for a proposed industrial warehouse project in Fontana, San Bernardino County (Figure 1). The assessment was completed as part of environmental approvals for the project.

2.0 Site Location and Project Description

The property consists of several parcels totaling approximately 50 acres in southwestern Fontana. Santa Ana Avenue is located approximately 670 feet from the northern border of the property. Cypress Avenue is on the western border and Juniper Avenue is on the eastern border. Jurupa Avenue is along the southern border. Light industrial development is on the west, a mix of rural residential on agricultural is on the north and east, and residential on the south side of Jurupa Avenue (Figure 2). A church is located to the immediate south and west of the property, on the northeast corner of Cypress Avenue and Jurupa Avenue (Figure 2).

The proposed project is will be an industrial warehouse buildings. Tenants of those buildings have not been identified.

3.0 Methods

3.1 Data Review

NRAI conducted a data search for information on plant and wildlife species known occurrences within the vicinity of the project. This review included biological texts on general and specific biological resources, and those resources considered to be sensitive by various wildlife agencies, local governmental agencies and interest groups. Information sources included but are not limited to the following:

- U.S. Army Corps 404 requirements, State Water Resources Control Board requirements, California Department of Fish and Wildlife 1602 requirements.
- Calflora website for data on plant species
- California Native Plant Society (CNPS) Inventory
- Information, Planning, and Conservation System (IPAC)
- Biogeographic Information & Observation System (BIOS)
- U.S. Army Corps 404 requirements, State Water Resources Control Board requirements, California Department of Fish and Wildlife 1602 requirements
- Natural Resources Conservation Services (NRCS 2019)
- General texts and other documents identifying potential resources on the property and adjacent properties.

NRAI used the information to focus our survey efforts in the field.

Please see Section 5.0 for a complete listing of documents reviewed.

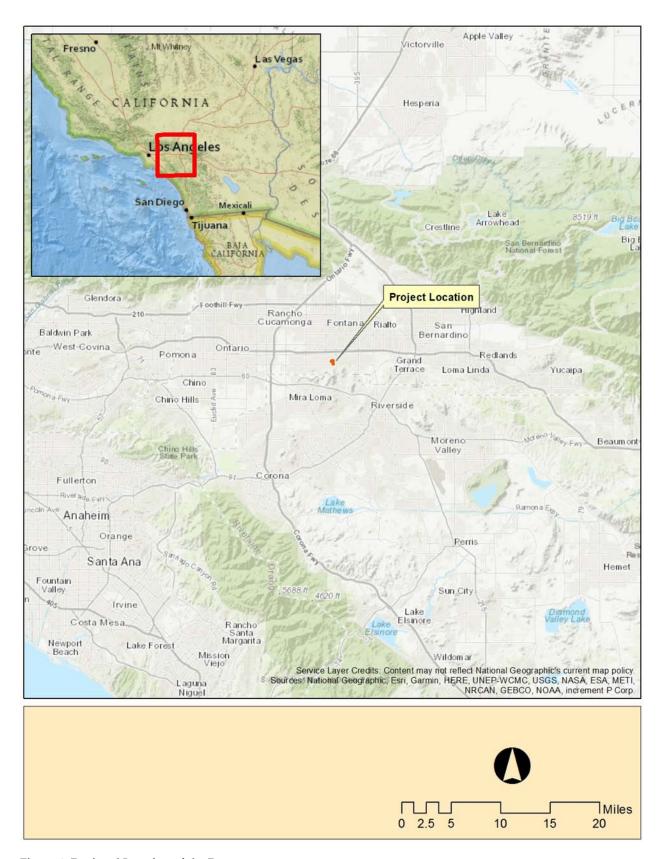


Figure 1. Regional Location of the Property

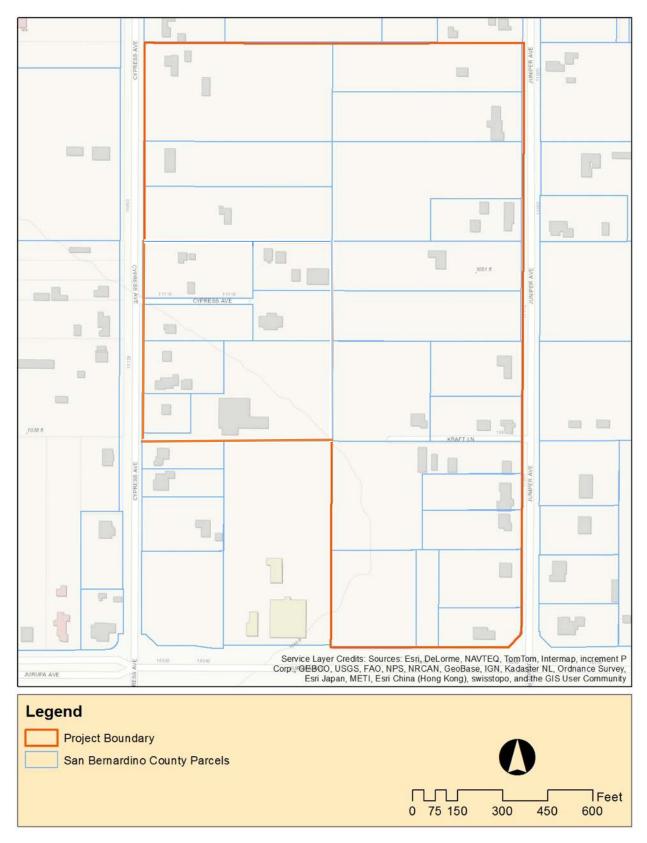


Figure 2. Lot Layout of the Property Site

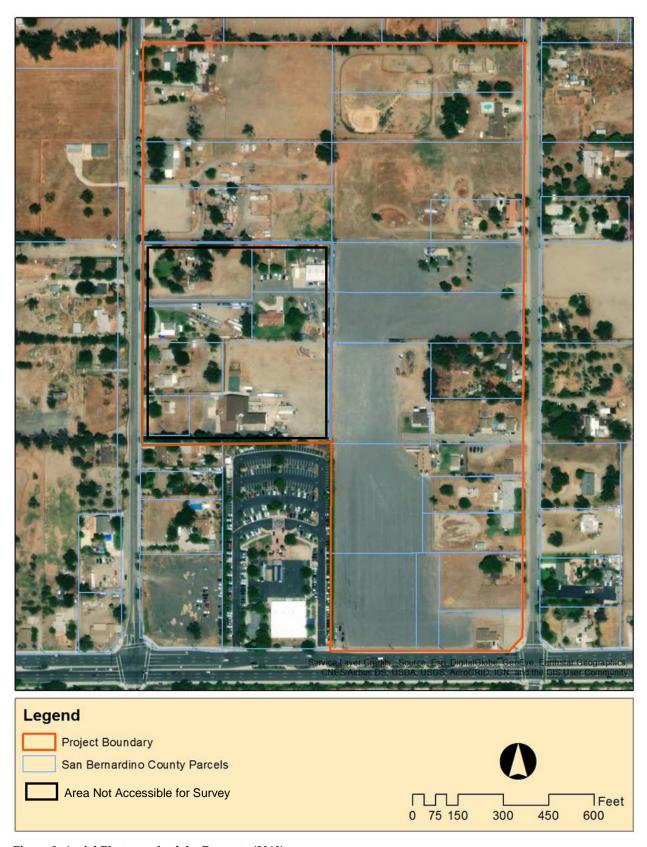


Figure 3. Aerial Photograph of the Property (2018)

3.2 Field Assessment

Ms. Karen Kirtland of NRAI and Mr. Ricardo Montijo, subconsultant to NRAI, conducted a biological assessment of the property on March 16, 2019. The field team evaluated the property habitats, making notes on the general and sensitive biological resources present and taking representative photographs. The survey included habitat assessment surveys for sensitive resources.

There was one limitation to our survey. The area outlined in black on Figures 3 and 4 still has the homeowner in residence and we did not have permission to access this area. We reviewed aerial photographs and looked at the area from outside the fence. It is our professional opinion that this area is similar to the rest of the property and does not have any substantially different habitats. Aany information provided by a field survey of this area would not substantially change our report findings and

4.0 Results

4.1 Weather, Topography and Soils

Weather at the beginning of the survey was 51 degrees Fahrenheit, thirty percent cloud cover and winds of five miles per hour from the northeast. By the end of the survey, the temperature was 69 degrees Fahrenheit, ten percent cloud cover and winds five to ten miles per hour from the northeast.

The property is flat, with a very gentle slope to the northeast (Figure 4).

Delhi fine sand is the only soil found within the property boundaries (Figure 5, Natural Resources Conservation Service 2019). Delhi fine sand (DB) is a fine sandy soil formed from sandy alluvium derived from granite. It occurs on alluvial fans. It is a non-hydric soil, somewhat excessively drained that never ponds or floods.

4.2 Land Uses

A review of aerial imagery from Google Earth indicates that that property has remained mostly as rural residential or small family agricultural from at least 1996 to the time of our survey. By December 2003, the southern section of the property was partially graded. At the time of the next aerial photograph in September 2004, this graded area was graveled over. This area has remained graveled to the time of our survey. Most of the rest of the property has undergone only minor changes (Photo 1).

4.3 Plant Communities

In our mapping of the property, we found the vegetation over the property to be composed of ruderal (weedy) and landscape plant communities.

4.3.1 Ruderal

Ruderal vegetation is generally composed primarily of a mix of non-native grasses such Mediterranean grass (*Schismus barbatus*), red brome (*Bromus madritensis* ssp. *rubens*), slender wild oats (*Avena barbata*) and ripgut brome (*Bromus diandrus*) (Photos 2 and 3).

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There are also non-native herbaceous weeds such as red-stemmed filaree (*Erodium cicutarium*), whitestem filaree (*Erodium moschatum*), Sahara mustard (*Brassica tournefortii*) and tansy mustard (*Descurrainia pinnata*).



Figure 4. Topography of the Property

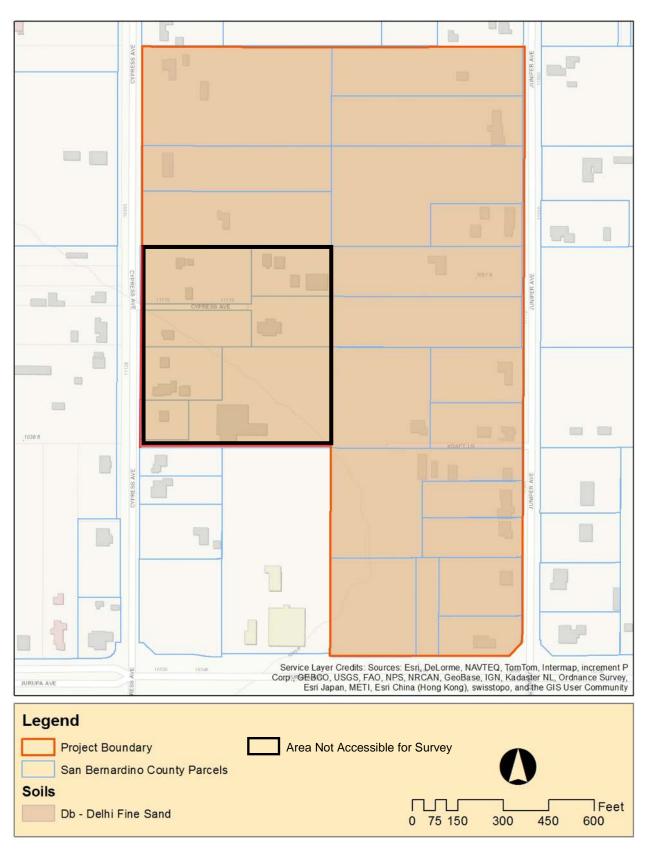


Figure 5. Soil Map of the Property



Photo 1. Graveled area of the property looking south.



Photo 2. Ruderal plants sprouting in response to winter rainfall.



Photo 3. Growth ruderal vegetation growing after winter rains in the disked area of the property.

Ruderal occurs in most of the previously disturbed areas of the site, including disked sites, grazing and farming operations, dirt parking lots, storage areas and unmaintained yards and fields.

4.3.2 Landscape

Landscape vegetation is generally limited to areas around houses, yards and maintained areas. Species found in this plant community includes landscape trees such as Mexican fan palm (*Washingtonia robusta*), river red gum (*Eucalyptus camalduensis*), Canary pine (*Pinus canariensis*) and Peruvian pepper tree (*Schinus molle*) (Photos 4 and 5).

Landscape shrubs include lantana (*Lantana camara*), paperflower (*Bougainvilla glabra*) and cultivated rose (*Rose* spp.). Lawn grasses such as Bermuda grass (*Cynodon dactylon*) is also found in these areas.

Landscape species such as Peruvian pepper tree, Brazilian pepper tree (*Schinus terebenthifolius*), lantana and other species on site have occasionally escaped from cultivation and are growing wild in the ruderal plant community.

The dominant landscape plant community on site is the windrow of red eucalyptus along the northern boundary of the site (Photo 6).

A list of all plant species observed is provided in Appendix A.



Photo 4. Landscape tree in the foreground, with additional landscaping in the background.



Photo 5. Landscaping around the home of a former resident.



Photo 6. Eucalyptus row along the northern boundary.

4.4 Wildlife

No amphibian or reptile species were observed. Side-blotched lizard (*Uta stansburiana*), western fence lizard (*Sceloporus occidentalis*) and alligator lizard (*Elgaria multicarinata*) are reptile species that may occur on site.

Bird species observed included common species such as Ana's hummingbird (*Calypte anna*), Say's phoebe (*Sayornis saya*), Brewer's blackbird (*Euphagus cyanocephalus*), and house finch (*Haemorhous mexicanus*).

A single red-tailed hawk (*Buteo jamaicensis*) was observed flying around the eucalyptus windrow along the northern boundary of the property. There is an existing hawk nest in one of the trees.

Mammal species observed included Botta's gopher (*Thomomys bottae*) and California ground squirrel (*Spermophilus beecheyi*).

A list of all wildlife species observed is provided in Appendix A.

4.5 Sensitive Biological Resources

Sensitive species potentially present include but are not limited to those listed, or candidates for listing by the U. S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW) and California Native Plant Society (CNPS). Our review included the following sources:

- California Natural Diversity Data Base report for the Fontana South U.S. Geological Survey (USGS)
 7.5 topographic quadrangles (CDFW 2019).
- Calflora website for information on plant species.
- CNPS Inventory for information on plant species.
- Information, Planning, and Conservation System (IPAC) data (USFWS 2019).
- Biogeographic Information & Observation System (BIOS) data (CDFW 2019).

Please see Appendix B for a definition of the various status designations.

The USFWS identified 8 federal resources of concern in the vicinity of the project, and the BIOS website identified 58 resources for the Fontana 7.5 USGS topographic map (with several of the same resources occurring on both lists).

Species identified by the USFWS as federally listed are the coastal California gnatcatcher (*Polioptila californica californica*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), San Bernardino kangaroo rat (*Dipodomys merriami parvus*), Delhi sands flower-loving (*Raphiomidas terminatus abdominalis*), Santa Ana River woolly star (*Eriastrum densifolium* var. *sanctorum*), and San Diego ambrosia (*Ambrosia pumila*).

The San Bernardino kangaroo rat and Delhi sands flower-loving fly, and Santa Ana River woolly star may have potentially been present in the vicinity of the project.

The USFWS also identified eight migratory bird species as potentially present or using the site during migration.

Of the 58 species identified by the CNDDB as occurring on the Fontana 7.5 topographic map, six are statelisted. None are potentially present in the vicinity of the project.

The remaining resources that may occur in the vicinity of the property or on the property include:

- Species of special concern, such as the northwestern San Diego pocket mouse (Chaetodipus fallax fallax), that are not formally listed;
- Fully protected species such as the golden eagle (*Aquila chrysaetos*);
- Watch list species (for plants) such as Robinson's peppergrass (Lepidium virginicum var. robinsonii);
- Migratory species such as Costa's hummingbird (Calypte costae), and;

• Species of no special status. These latter species are included in the CNDDB printout because they were observed and recorded on Fontana 7.5 USGS topographic quadrangles, not because of any particular legal status. They include such relatively common species as San Bernardino ring-necked snake (*Diadophis punctatus modestus*) and great egret (*Ardea alba*).

Many of the sensitive resources identified by the agencies include either species for which habitat does not exist on site (such as the western spadefoot, *Spea hammondii*) or they are species such as golden eagle that may forage or move over the site but would not be resident.

NRAI includes in our field surveys and analyses such species and resources based on their current known habitat distributions and locations, their past historical distribution, their likelihood of occurrence on the project site and our professional knowledge regarding these resources.

We have limited the discussion to the three listed species that may be present on site. We have also included a discussion of the burrowing owl (*Athene cunicularia*) because this species is of sufficient local concern to merit inclusion in this report, as well as the northwestern San Diego pocket mouse, San Diego desert woodrat and Los Angeles pocket mouse. All four species might have been present on site.

Impacts to sensitive but non-listed species that may be present, such as the coast horned lizard, (*Phrynosoma blainvillii*), are not considered significant because of 1) Prior impacts to the area have already reduced suitable habitat; 2) Ongoing disturbances (such as traffic along adjacent streets) continue to deny use of or degrade the project area habitat; and 3) The status of the species is such that the loss of any remaining suitable habitat is small relative to the overall distribution and available habitat for that species.

4.5.1 Santa Ana River Woolly Star

The Santa Ana River woolly star is a short-lived perennial subspecies that only occurs along the Santa Ana River drainage in San Bernardino County (Wheeler 1988). It is found in chaparral, coastal sage scrub, and Riversidian alluvial fan scrub. Shrub cover in these areas is typically very open; woolly star generally occurs where there are few or nor shrubs and little herbaceous cover. The elevation range is from 150 to 610 meters (490 to 2000 feet).

The woolly star prefers recently scoured areas above main watercourses, in areas that are infrequently flooded, allowing for the establishment of shrubs (Zembal and Kramer 1984, Wheeler 1988), but may also occupy sandy patches on older benches. Soil types include sandy soils on the floodplains and fluvial terraces (California Native Plant Society 1985).

The historical range of the woolly star is believed to include the Santa Ana River, its tributaries and the bordering river plain from Rancho Santa Ana in Orange County to Highland in San Bernardino County (Zembal and Kramer 1984). The historical elevation range was from 152 meters (500 feet) to approximately 457 meters (1500 feet).

The species apparently has been extirpated in Orange and Riverside counties, persisting only in San Bernardino County. In the original study by Zembal and Kramer (1984), known populations in San Bernardino County extended from the mouth of the Santa Ana Canyon off Greenspot Road (elevation 579)

meters, 1900 feet), west to Lytle Creek, just south of Highland Avenue, at an elevation of 381 to 396 meters (1250 - 1300 feet). An update by Wheeler in 1988 found no populations west of the former Norton Air Force Base. As a result of his findings, the historical range of this species has been reduced from 60 miles to approximately eight linear miles (Wheeler 1988).

One individual was found in 1997 west of the former Norton Air Force Base, between Tippecanoe and Waterman Avenues by Kirtland Biological Services (personal communication).

The principal threats to the woolly star include the loss of upper floodplain habitat to development and agriculture, and the loss of scouring action due to the control of flood waters. Other activities affecting the plant and its habitat include sand and gravel mining, groundwater recharge facilities and grazing (Zembal and Kramer 1984). Additional threats that are relatively recent, but becoming commonplace are off-road vehicle use, camping, and trash dumping (Wheeler 1988; Karen Kirtland, personal observation).

The woolly star was listed as an endangered species in 1987 by the USFWS and the CDFW.

Findings

The Santa Ana River woolly star is a biennial to perennial species, and would have been visible during the surveys. In addition, the ongoing farming and weed control practices on the site makes it highly unlikely that any plants that my have been present would have survived. No plants were seen and none are expected to occur. No impacts to this species are expected.

4.5.2 San Bernardino Kangaroo Rat

The San Bernardino kangaroo rat (SBKR) 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).

The property is not within a USFWS Critical Habitat area for the SBKR.

Findings

The site has been disked in the past and lacks the sparse to moderate shrub cover preferred by this species. No kangaroo rat burrows were seen and the site is not in close proximity to known populations of SBKR.

The project site is physically isolated from the other populations of SBKR. It is our professional judgment that no SBKR occur on the property and no impacts are expected.

4.5.3 Delhi Sands Flower-loving Fly

The Delhi sands flower-loving is found primarily on fine, sandy soils, often with wholly or partially consolidated dunes. These soil types are generally classified as the "Delhi" series (primarily Delhi fine sand). The habitat for this species is restricted to western Riverside and San Bernardino Counties, along the former floodplains of Lytle Creek and the Santa Ana River.

This species is present year-round, but is only visible above ground when it emerges as an adult for foraging and mating in August and September. The remainder of the year is spent as an egg, pupae and subsequent molt stages until adulthood.

The habitat for this species has historically been limited, and agriculture practices and ongoing development of the San Bernardino Valley area has resulted in Delhi sands being further reduced. The species is listed as endangered by the USFWS. The CDFW has not formally designated this species.

Findings

Delhi sands are the only soil found on site. Although the site has been significantly disturbed at least since 1996, recent surveys for the Delhi sands flower-loving fly have found them in areas with higher levels of disturbance than was expected (Amanda Swaller personal communication).

Mr. Scott Cameron of who is a qualified Delhi sands flower-loving fly biologist, conducted a habitat assessment for Delhi sands flowering-loving fly according to the requirements of the USFWS. He did not find suitable habitat for this species.

4.5.4 Burrowing Owl

The burrowing owl is a resident species in lowland areas of southern California (Garrett & Dunn 1980). It prefers open areas for foraging and burrowing, and is found widely scattered in open desert scrub. This species is scarce in coastal areas, being found mainly in agricultural and grassland habitats. The largest remaining numbers are in the Imperial Valley, where it is common in suitable habitat adjacent to the agricultural fields.

The burrowing owl prefers large flat open areas for nesting and hunting (Garrett & Dunn 1981). This species lives in burrows constructed by other ground-dwelling species in grassy or sparse shrubby habitat. Burrowing owls also take over other types of burrows, including manmade objects such as pipes. This species forages low over the ground surface for insect prey, and seldom flies very high in the air.

As a result of coastal development, the burrowing owl is declining in coastal habitats. The CDFW has designated the burrowing owl as a California Species of Special Concern (SSC). These species are so designated because "declining population levels, limited ranges and/or continuing threats have made them vulnerable to extinction." (California Department of Fish and Wildlife 2012a).

Findings

Burrowing owls need sparse shrubby habitat (such as grasslands and desert scrub) to provide food for their insect and other small prey items. Although shrubby habitat is limited on site, there are sufficient open areas suitable for use by this species. In addition, we found California ground squirrels onsite, debris piles and other sites which could potentially provide burrow sites for owls.

No sign of active burrowing owl use was observed (burrows, feathers, whitewash, etc.), but suitable nesting habitat exists. NRAI recommends that the project proponent conduct a take avoidance survey no less than 14 days prior to initiating construction on the project area to determine if burrowing owl are nesting on site (California Department of Fish and Game 2012a).

"Construction" includes selection of staging areas, demolition, tree, trash and debris removal, placement of equipment and machinery on to the site preparatory to grading, and any other project-related activity that increases noise and human activity on the project site beyond existing levels. Emergency measures are exempt from this definition.

If burrowing owls are found nesting on site, the following measures shall be implemented:

- Occupied burrows will not be disturbed unless a qualified biologist approved by the CDFW
 verifies through non-invasive methods that either (a) the adult birds have not begun egg-laying
 and incubation; or (b) the juveniles from the occupied burrows are foraging independently and are
 capable of independent survival.
- If the biologist is not able to verify one of the above conditions, then no disturbance shall occur within 500 meters of a burrowing owl nest during the breeding season to avoid abandonment of the young (California Department of Fish and Wildlife 2012a).

Compensation for the permanent loss of burrowing owl burrows and foraging habitat has changed. As of 2012, the CDFW has determined that mitigation for permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat is such that the habitat acreage, number of burrows and burrowing owls impacted are replaced based on the information gathered for each project. At a minimum, the Department requires that mitigation for permanent impacts to nesting, occupied and satellite burrows and burrowing owl habitat requires:

If impacts will occur, the project proponent shall prepare a Burrowing Owl Mitigation and Monitoring Plan according to the 2012 Staff Report on Burrowing Owl Mitigation and submit it to the CDFW. The Burrowing Owl Mitigation and Monitoring Plan will be developed to describe the proposed relocation site and follow-up monitoring. The plan shall include the number and location of any occupied burrow sites and details on adjacent or nearby suitable habitat available to the owls for relocation.

- Permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area;
- Sufficiently large acreage, and presence of fossorial mammals. The mitigation lands may require
 habitat enhancements including enhancement or expansion of burrows for breeding, shelter and

dispersal opportunity, and removal or control of population stressors. If the mitigation lands are located adjacent to the impacted burrow site, ensure the nearest neighboring artificial or natural burrow clusters are at least within 210 meters.

• The project proponent shall prepare a Burrowing Owl Mitigation and Monitoring Plan according to the 2012 Staff Report on Burrowing Owl Mitigation and submit it to the CDFW if owls will be significantly impacted by the project. A Burrowing Owl Mitigation and Monitoring Plan will not be required if survey determines no burrows are present that will be impacted). The Burrowing Owl Mitigation and Monitoring Plan will be developed to describe the proposed relocation site and follow-up monitoring. The plan shall include the number and location of any occupied burrow sites and details on adjacent or nearby suitable habitat available to the owls for relocation.

NRAI recognizes that these factors will not be known until the survey takes place. If no owls are found within the project area, the above compensation will not have to occur. If the survey determines birds occupy the area, compensation will have to be discussed with the CDFW.

4.5.5 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 an SSC whose historical range has been reduced by urban development and agriculture.

Findings

The site does provide open, sandy areas, but there is no dense scrub habitat. The condition and location of the site is such that the northwestern San Diego pocket mouse is not expected to be present and no impacts are expected.

4.5.6 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 SSC by the CDFW.

Findings

The site does provide sandy areas. However, the lack of native grassland cover and the disturbed nature of the site makes it highly unlikely that the Los Angeles pocket mouse is present on site. No significant impacts to this species are expected.

4.5.7 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 (*Neotoma lepida intermedia*), 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 an SSC; its historical range has been impacted by the conversion of scrub habitats into residential, commercial and industrial use.

Findings

The site lacks the appropriate dense scrub habitat preferred by this species. San Diego desert woodrat is not expected to be present. No impacts to this species will occur.

4.6 Jurisdictional Waters

4.6.1 Army Corps of Engineers

The Corps regulates discharges of dredged or fill material into waters of the United States. These watersheds include wetlands and non-wetland bodies of water that meet specific criteria. The lateral limit of Corps jurisdiction extends to the Ordinary High-Water Mark (OHWM) and to any wetland areas extending beyond the OHWM; thus, the maximum jurisdictional area is represented by the OHWM or wetland limit, whichever is greater.

Corps regulatory jurisdiction pursuant to Section 404 of the Clean Water Act is founded on a connection or nexus between the water body in question and interstate (waterway) commerce. This connection may be direct, through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the Corps regulations.

Findings

There are no drainages, no flow patterns and no obvious ponding of water on the site. It is our professional judgement that there are no waters that fall under the jurisdiction of the Corps.

4.6.2 Regional Water Quality Control Board

The Corps has delegated the authority for use of 404 permits to each individual state. The use of a 404 permit in California is regulated by the State Water Resources Control Board (SWRCB) under Section 401 of the Clean Water Act regulations. The Board has authority to issue a 401 permit that allows the use of a 404 permit in the state, with the authority in the state being vested in regional offices known as Regional Water Quality Control Boards (RWQCB).

Under the Porter-Cologne Act of 2003, the SWRCB has extended its responsibilities to include impacts to water quality from non-point source pollution.

In addition, the SWRCB has the responsibility to require that projects address ground water and water quality issues, which would be evaluated as part of the geotechnical and hydrology studies. Their authority extends to all waters of the State of California.

Findings

There are no drainages, no flow patterns and no obvious ponding of water on the site. It is our professional judgement that there are not waters that would come under the jurisdiction of the Santa Ana RWQCB and provide one or more Beneficial Uses (BUs) that might come under RWQCB protection.

4.6.3 California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW), through provisions of the State of California Administrative Code, is empowered to issue agreements for any alteration of a river, stream or lake where fish or wildlife resources may adversely be affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. Lateral limits of jurisdiction are not clearly defined, but generally include any riparian resources associated with a stream or lake, CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream or lake as defined by CDFW.

Findings

There are no drainages, no flow patterns, no lakes and no obvious ponding of water on the site. It is our professional judgement that there are no streams that will come under the jurisdiction of the CDFW.

4.7 Raptors, Migratory Birds, and Habitat

Most of the raptor species (eagles, hawks, falcons and owls) are experiencing population declines because of habitat loss. Some, such as the peregrine falcon, have also experienced population losses because of environmental toxins affecting reproductive success, animals destroyed as pests or collected for falconry, and other direct impacts on individuals. Only a few species, such as the red-tailed hawk and barn owl, have expanded their range despite or a result of human modifications to the environment. As a group, raptors are of concern to state and federal agencies.

Raptors and all migratory bird species, whether listed or not, receive protection under the Migratory Bird Treaty Act (MBTA) of 1918¹. The MBTA prohibits individuals to kill, take, possess or sell any migratory bird, or bird parts (including nests and eggs) except in accordance with regulations prescribed by the Secretary of the Interior Department (16 U. S. Code 703)².

Additional protection is provided to all bald and golden eagles under the Bald and Golden Eagle Protection Act of 1940, as amended³. State protection is extended to all birds of prey by the California Fish and Game Code, Section 2503.5⁴. No take is allowed under these provisions except through the approval of the agencies or their designated representatives.

Findings

At the time of the survey, the parcel had suitable nesting habitat for migratory bird species protected under the MBTA, Bald and Golden Eagle Protection Act and the CDFW code. The list of migratory bird species potentially present includes birds that nest on the ground, such as killdeer and western meadowlark (*Sturnella neglecta*), species that nest in shrubs such as northern mockingbird (*Mimus polyglottos*) and tree nesters such as red-tailed hawk. The following measures shall be implemented to address potential impacts.

- If start of construction occurs between February 1 and August 31, then a qualified biologist shall conduct a breeding bird survey no more than three days prior to the start of construction to determine if nesting is occurring. This survey can be conducted as part of the burrowing owl surveys.
- "Construction" includes selection of staging areas, demolition, tree, trash and debris removal, placement of equipment and machinery on to the site preparatory to grading, and any other project-related activity that increases noise and human activity on the project site beyond existing levels. Emergency measures are exempt from this definition.
- If occupied nests are found, they shall not be disturbed unless the qualified biologist verifies through non-invasive methods that either (a) the adult birds have not begun egg-laying and incubation; or (b) the juveniles from the occupied nests are capable of independent survival.
- If the biologist is not able to verify one of the above conditions, then no disturbance shall occur within a distance specified by the qualified biologist for each nest or nesting site. The qualified

https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php

² https://www.fws.gov/le/USStatutes/MBTA.pdf

³ https://www.fws.gov/le/USStatutes/BEPA.pdf

⁴

https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=FGC&tocTitle=+Fish+and+Game+Code++FGC

biologist will determine the appropriate distance in consultation with the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service.

4.8 Habitat Fragmentation and Wildlife Movement

Wildlife movement and the fragmentation of wildlife habitat are recognized as critical issues that must be considered in assessing impacts to wildlife. In summary, habitat fragmentation is the division or breaking up of larger habitat areas into smaller areas that may or may not be capable of independently sustaining wildlife and plant populations. Wildlife movement (more properly recognized as species movement) is the temporal movement of individuals (plants and animals) along diverse types of corridors. Wildlife corridors are especially important for connecting fragmented habitat areas.

Findings

The project site is in area that is surrounded by existing development. The proposed project will not add significantly to additional fragmentation of habitat or affects to wildlife movement.

4.9 Indirect Impacts

Indirect impacts to plants and wildlife, as well as sensitive habitats and jurisdictional waters, can occur when conditions such noise, night lighting, invasive plant materials, domestic pets, and human activities are introduced adjacent to natural habitats that can stress sensitive resources.

Minimization or elimination of indirect impacts is resource- and site-dependent, and must include all local agency requirements in addition to state and federal requirements. Setback or buffer differences will vary based on these factors and cannot be estimated on a single basis for all resources

Findings

The project site is in area that is surrounded by existing development. With the exception of the raptor nest in the eucalyptus grove along the northern border of the property, the proposed project will not add significantly to indirect impacts on adjacent sensitive habitat or affects to wildlife.

If the raptor nest remains after project completion, there is a potential for indirect impacts to nesting activity and successful nesting by raptors or other migratory birds that might use the nest. Although there is some human activity in this area, the development of industrial warehousing will result in a substantial increase in truck traffic, both in numbers and as a result of the presumably 24-hour activity typically associated with warehousing. This impact could be considered significant if the disturbance causes nest failure.

We recommend either removal of the nest after the conclusion of nesting, or an agency-determined permanent quiet zone setback that eliminates truck and human activity in the area around the nest.

4.10 Cumulative Impacts

The combination of multiple development projects in the same geographic region result in cumulative impacts to biological resources. Depending upon the region and resources involved, these impacts may be significant.

The cumulative impacts of the project include the potential loss of occupied burrowing owl habitat and the known loss of nesting bird habitat (both migratory and raptor).

Findings

If occupied burrowing owl habitat is found during the nesting surveys, the contribution of this project to the cumulative loss of this habitat in the South Fontana region would be significant. Implementation of proposed mitigation measures discussed in the findings for this species would mitigate the cumulative impact.

The loss of nesting habitat for other bird species is ongoing in the region and began with the original development of this area for farming and rural residential living. In one respect farming has actually augmented nesting for raptors by the introduction of eucalyptus windrows and other tall trees in an area where they were not formerly present.

Nevertheless, the loss of nesting habitat for most bird species is declining in the South Fontana region and this project will add to the cumulative loss. At the present time, while this loss is acknowledged by the resource agencies, the cumulative loss has not yet been considered significant.

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Appendix A - Plant and Animal Species Observed

Plants

*denotes non-native plants

GYMNOSPERMS - GYMNOSPERMAE

CUPRESSACEAE	CYPRESS FAMILY	
Cupressus sempervirens	Italian cypress	*
PINACEAE	PINE FAMILY	
Pinus caneriensis	Canary Island pine	*
Pinus halapensis	Aleppo pine	

ANGIOSPERMS - ANGIOSPERMAE

	DICOTS	
	DICOTYLEDONS	
AMARANTHACEAE	AMARANTHS	
Amaranthus albus	Tumbleweed	*
ANACARDIACEAE	CASHEW FAMILY	
Schinus molle	Peruvian pepper tree	*
Schinus terebenthifolius	brazman pepper nee	*
ASTERACEAE	SUNFLOWERS	
Ambrosia acanthicarpa	Annual burrweed	
Helmintotheca echioides	Bristly ox-tongue	*
Heterotheca grandiflora	Telegraph weed	
Oncosiphon piluliferum	Globe Chamonine	*
Helianthus annuus	Hairy leaved sunflower	
Hedypnois cretica	Crete weed	*
Carduus pycnocephalus	Italian thistle	*
Centaurea benedicta	Blessed thistle	*
Senecio vulgaris	Common groundsel	*
BIGNONIACEAE	BIGNONIAS	
Jacaranda mimosifolia	Jacaranda	*
BORAGINACEAE	BORAGE FAMILY	
Amsinckia intermedia	Common fiddleneck	
BRASSICACEAE	MUSTARD FAMILY	
Descurainia pinnata	Tansy mustard	*
Capsella bursa-pastorius	Shepherd's purse	*
Hirschfeldia incana	Mustard	*
Brassica tournefortii	Sahara mustard	*
CACTACEAE	CACTUS FAMILY	
Opuntia ficus-indica	Prickly Pear	*
CARYOPHYLLACEAE	PINK FAMILY	
Stellaria media	Chickweed	*
FABACEAE	PEA FAMILY	
Bauhinia variegata	Kachnar orchid tree	*
Ceratonia siliqua	Carob	*
Parkinsonia aculeata	Jerusalem thorn	*
GERANIACEAE	GERANIUM FAMILY	
Erodium cicutarium	Red-stemmed filaree	*
Erodium moschatum	Whitestem filaree	
JUGLANDACEAE	WALNUT FAMILY	
Juglans californica	Southern California black walnut	

LAMIACEAE	MINT FAMILY	
Lamium amplexicaule	Henbit	*
Rosmarinus officinalis	Rosemary	*
LYTHRACEAE	LOOSESTRIFE FAMILY	
Punica granatum	Pomegranate	*
MALVACEAE	MALLOW FAMILY	
Malva parviflora	Cheeseweed	*
MELIACEAE	CHINABERRY FAMILY	
Melia azederach	Chinaberry	*
MORACEAE	MULBERRY FAMILY	
Morus alba	Mulberry Tree	*
MYRTACEAE	MYRTLE FAMILY	
Eucalyptus camaldulensis	River red gum	*
Eucalyptus polyphemus	Silver dollar gum	*
NYCTAGINACEAE	FOUR O'CLOCK FAMILY	
Bougainvillea glabra	Paperflower	*
OLEACEAE	OLIVE FAMILY	
Olea europea	European olive	*
Fraxinus uhdei	Shamel ash	*
PAPAVERACEAE	POPPY FAMILY	
Romneya coulteri	Matilija poppy	
ROSACEAE	ROSE FAMILY	
Rosa sp.	Rose	*
RUTACEAE	CITRUS FAMILY	
Citrus sp.	Citrus	*
SIMAROUBACEAE	QUASSIA FAMILY	
Ailanthus altissima	Tree of heaven	*
SOLANACEAE	NIGHTSHADE FAMILY	
Solanum umbelliferum	Blue witch	
Nicotiana glauca	Tree tobacco	*
THEACEAE	CAMELIA FAMILY	
Camellia aurea	Camelia	*
URTICACEAE	NETTLES	
Urtica dioica ssp. holosericea	Stinging nettle	
VERBENACEAE	VERVAIN FAMILY	
Lantana camara	Lantana	*
	MONOCOTS	
N	MONOCOTYLEDONS	
AGAVACEAE	AGAVE FAMILY	
Yucca aloifolia	Yucca	*
ARACEAE	WATER PLANTAINS	
Zantedeschia aethiopica	Calla lily	*
ARECACEAE	PALM FAMILY	
Phoenix dactylifera	Date Palm	*
Washingtonia robusta	Mexican fan palm	*
Calamus sp.	Rattan Palm	*
ASPHODELACEAE	ALOE FAMILY	
Hemerocallis sp.	Daylily	*
CYPERACEAE	SEDGES	

Umbrella sedge	*
BANANA AND PLANTAIN FAMILY	
Banana palm	*
GRASS FAMILY	
Fountain grass	*
Goldentop	*
Bermuda grass	*
Mediterranean grass	*
Ripgut brome	*
Red brome	*
Common barley	*
Pine bluegrass	
Slender wild oats	*
BIRDS OF PARADISE	
Bird of paradise	*
	BANANA AND PLANTAIN FAMILY Banana palm GRASS FAMILY Fountain grass Goldentop Bermuda grass Mediterranean grass Ripgut brome Red brome Common barley Pine bluegrass Slender wild oats BIRDS OF PARADISE

Taxonomy and nomenclature follow Baldwin et al. 2012.

Birds Class Aves

LARKS	ALAUDIDAE
Horned Lark	Eremophila alpestris
NEW WORLD VULTURES	CATHARTIDAE
Turkey Vulture	Cathartes aura
PIGEONS AND DOVES	COLUMBIDAE
Eurasian Collared-dove*	Streptopelia decaocto*
Rock Pigeon*	Columba livia*
CROWS AND JAYS	CORVIDAE
Common Raven	Corvus corax
American Crow	Corvus brachyrhynchos
NEW WORLD SPARROWS	EMBERIZIDAE
White-crowned Sparrow	Zonotrichia leucophrys
FALCONS	FALCONIDAE
American Kestrel	Falco sparverius
FINCHES	FRINGILIDAE
House Finch	Haemorhous mexicanus
Lesser Goldfinch	Spinus psaltria
BLACKBIRDS	ICTERIDAE
Western Meadowlark	Sturnella neglecta
GULLS	LARIDAE
Ring-billed Gull	Larus delawarensis
MIMIC	THRASHERS AND MOCKINGBIRDS
Northern Mockingbird	Mimus polyglottos
WAGTAILS AND PIPITS	MOTACILLIDAE
American Pipit	Anthus rubescens
NEW WORLD WARBLERS	PARULIDAE

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Yellow-rumped Warbler Setophaga coronata **OLD WORLD SPARROWS PASSERIDAE** House Sparrow Passer domesticus STARLINGS STURNIDAE European Starling* Sturnus vulgaris* **HUMMINGBIRDS TROCHILIDAE** Anna's Hummingbird Calypte anna Selasphorus hummingbird Selasphorus sp.

WRENS

Bewick's Wren

Thryomanes bewickii

FLYCATCHERS

Say's Phoebe

Sayornis saya

Ask threated Electrical

Ash-throated Flycatcher Myiarchus cinerascens
Cassin's Kingbird Tyrannus vociferans
Black Phoebe Sayornis nigricans

Mammals Class Mammalia

Squirrels Sciuridae

California Ground Squirrel Spermophilus beecheyi

Cattle and Cows Bovidae
Cattle Bos sp.

Asterisks (*) indicate non-native species

Nomenclature follows Hall 1981, Grenfell et al. 2003, and Sibley 2003.

Appendix B – Definitions of Species Status Classification

FED: Federal Classifications

- END Taxa listed as endangered THR Taxa listed as threatened
- PE Taxa proposed to be listed as endangered
- PT Taxa proposed to be listed as threatened
- C2* The U.S. Fish and Wildlife Service (USFWS) revised its classifications of candidate taxa (species, subspecies, and other taxonomic designations). Species formerly designated as "Category 1 Candidate for listing" are now known simply as "Candidate". The former designation of "Category 2 Candidate for listing" has been discontinued. The USFWS will continue to assess the need for protection of these taxa and may, in the future, designate such taxa as Candidates. NRAI has noted the change in species status by marking with an asterisk (*) those C2 candidates that were removed from the list.
- C Candidate for listing. Refers to taxa for which the USFWS has sufficient information to support a proposal to list as Endangered or Threatened and issuance of the proposal is anticipated but precluded at this time.
- BCC Bird of Conservation Concern
- ND Not designated as a sensitive species

STATE: State Classifications

- END Taxa listed as endangered
- THR Taxa listed as threatened
- CE Candidate for endangered listing
- CT Candidate for threatened listing
- CFP California Fully Protected. Species legally protected under special legislation enacted prior to the California Endangered Species Act.
- SSC Species of Special Concern. Taxa with declining population levels, limited ranges and/or continuing threats have made them vulnerable to extinction.
- SA Special Animal. Taxa of concern to the California Natural Diversity Data Base regardless of their current legal or protected status.
- WL Watch list.
- ND Not designated as a sensitive species

CNPS: California Native Plant Society Classifications

- 1A Plants presumed by CNPS to be extinct in California
- 1B Plants considered by CNPS to be rare or endangered in California and elsewhere
- 2P Plants considered by CNPS to be rare, threatened or endangered in California, but which are more common elsewhere.
- 3 Review list of plants suggested by CNPS for consideration as endangered but about which more information is needed.
- 4 Watch list of plants of limited distribution whose status should be monitored

CNPS: Threat Codes

.1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

- .2 Fairly endangered in California (20-80% occurrences threatened)
- .3 Not very endangered in California (<20% of occurrences threatened or no current threats known)