June 1, 2023

EPD SOLUTIONS INC.
Contact: Heather Roberts
2355 Main Street, Suite 100
Irvine, California 92614

SUBJECT: Habitat Assessment for the Proposed Project Locate at 5705 Industrial Parkway, San Bernadino County, California

Introduction
This report contains the findings of ELMT Consulting’s (ELMT) habitat assessment for the proposed project located at 5705 Industrial Parkway (project site or site) located in unincorporated San Bernardino County, California. The habitat assessment was conducted by biologists Jacob H. Lloyd Davies and Rachael A. Lyons on July 6, 2022 to document baseline conditions and assess the potential for special-status1 plant and wildlife species to occur within the project site that could pose a constraint to implementation of the proposed project. Special attention was given to the suitability of the project site to support burrowing owl (Athene cunicularia) and San Bernardino kangaroo rat (Dipodomys merriami parvus), and other special-status plant and wildlife species identified by the California Department of Fish and Wildlife’s (CDFW) California Natural Diversity Database (CNDDB), and other electronic databases as potentially occurring in the general vicinity of the project. Additionally, the report also addresses resources protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (FGC), federal Clean Water Act (CWA) regulated by the United States Army Corps of Engineers (Corps) and Regional Water Quality Control Board (Regional Board) respectively, and Section 1602 of the FGC administered by CDFW.

Project Location
The project site is located generally south and west of Interstate 215, and north and east of Historic Route 66 in unincorporated San Bernardino County, California. The site is depicted on the San Bernadino North quadrangle of the United States Geological Survey’s (USGS) 7.5-minute map series within an unsectioned portion of Township 1 North, Range 5 West. Specifically, the site is bounded to the east by Interstate 215, to the west by Industrial Parkway (Hallmark Parkway) and lies approximately 0.42 mile southeast of Palm Avenue within Assessor Parcel Number (APN) 0266-041-74. Refer to Exhibits 1-3 in Attachment A.

Methodology
A literature review and records search were conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the project site. In addition to the literature review, a general habitat assessment or field investigation of the project site was conducted to

---

1 As used in this report, “special-status” refers to plant and wildlife species that are federally and State listed, proposed, or candidates; plant species that have been designated with a California Native Plant Society Rare Plant Rank; wildlife species that are designated by the CDFW as fully protected, species of special concern, or watch list species; and specially protected natural vegetation communities as designated by the CDFW.
document existing conditions and assess the potential for special-status biological resources to occur within the project site.

**Literature Review**

Prior to conducting the field investigation, a literature review and records search was conducted for special-status biological resources potentially occurring on or within the vicinity of the project site. Previously recorded occurrences of special-status plant and wildlife species and their proximity to the project site was determined through a query of the CDFW’s QuickView Tool in the Biogeographic Information and Observation System (BIOS), CNNDDB Rarefind 5, the California Native Plant Society’s (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, Calflora Database, compendia of special-status species published by CDFW, and the United States Fish and Wildlife Service (USFWS) species listings.

All available reports, survey results, and literature detailing the biological resources previously observed on or within the vicinity of the project site was reviewed to understand existing site conditions and note the extent of any disturbances that have occurred within the project site that would otherwise limit the distribution of special-status biological resources. Standard field guides and texts were reviewed for specific habitat requirements of special-status and non-special-status biological resources, as well as the following resources:

- Google Earth Pro historic aerial imagery (1985-2021);
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), Soil Survey;
- USFWS Critical Habitat designations for Threatened and Endangered Species; and
- USFWS Endangered Species Profiles.

The literature review provided a baseline from which to inventory the biological resources potentially occurring within the project site. The CNNDDB database was used, in conjunction with ArcGIS software, to locate the nearest recorded occurrences of special-status species and determine the distance from the project site.

**Field Investigation**

Following the literature review, biologists Jacob H. Lloyd Davies and Rachael A. Lyons inventoried and evaluated the condition of the habitat within the project site on July 6, 2022. Plant communities and land cover types identified on aerial photographs during the literature review were verified by walking meandering transects throughout the project site. In addition, aerial photography was reviewed prior to the site investigation to locate potential natural corridors and linkages that may support the movement of wildlife through the area. These areas identified on aerial photography were then walked during the field investigation.

---

2 A soil series is defined as a group of soils with similar profiles developed from similar parent materials under comparable climatic and vegetation conditions. These profiles include major horizons with similar thickness, arrangement, and other important characteristics, which may promote favorable conditions for certain biological resources.
Soil Series Assessment

On-site and adjoining soils were researched prior to the field investigation using the USDA NRCS Soil Survey for San Bernardino County, California. In addition, a review of the local geological conditions and historical aerial photographs was conducted to assess the ecological changes that the project site has undergone.

Plant Communities

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography. The plant communities were classified in accordance with Sawyer, Keeler-Wolf and Evens (2009), delineated on an aerial photograph, and then digitized into GIS Arcview. The Arcview application was used to compute the area of each plant community and/or land cover type in acres.

Plants

Common plant species observed during the field investigation were identified by visual characteristics and morphology in the field and recorded in a field notebook. Unusual and less-familiar plants were photographed in the field and identified in the laboratory using taxonomic guides. Taxonomic nomenclature used in this study follows the 2012 Jepson Manual (Hickman 2012). In this report, scientific names are provided immediately following common names of plant species (first reference only).

Wildlife

Wildlife species detected during the field investigation by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook. Field guides used to assist with identification of wildlife species during the survey included The Sibley Field Guide to the Birds of Western North America (Sibley 2003), A Field Guide to Western Reptiles and Amphibians (Stebbins 2003), and A Field Guide to Mammals of North America (Reid 2006). Although common names of wildlife species are well standardized, scientific names are provided immediately following common names in this report (first reference only).

Jurisdictional Drainages and Wetlands

Aerial photography was reviewed prior to conducting a field investigation in order to locate and inspect any potential natural drainage features, ponded areas, or water bodies that may fall under the jurisdiction of the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), or CDFW. In general, surface drainage features indicated as blue-line streams on USGS maps that are observed or expected to exhibit evidence of flow are considered potential riparian/riverine habitat and are also subject to state and federal regulatory jurisdiction. In addition, ELMT reviewed jurisdictional waters information through examining historical aerial photographs to gain an understanding of the impact of land-use on natural drainage patterns in the area. The USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program “My Waters” data layers were also reviewed to determine whether any hydrologic features and wetland areas have been documented on or within the vicinity of the project site.

Existing Site Conditions

The proposed project site is located in San Bernadino, north of the Cajon Wash. The site is bounded by
Interstate 215 to the east, Industrial Parkway (Hallmark Parkway) to the west, and existing industrial lots to the north and south. The majority of the site is undeveloped with human disturbance from vehicle access and illegal dumping occurring primarily on the northern and easternmost boundaries. The site also supports a large industrial structure along the southeastern boundary with ornamental landscaping.

Based on a review of historic aerials, the entire project site was graded/cleared of vegetation in the mid-1990s when the industrial developments in the immediate area began being installed. Then in the 2002 aerial, the building onsite is first observed, and the remainder of the site continued to be maintained free of vegetation, until 2009. From 2009 to present the area northwest of the existing onsite building was no longer subject to routine grading/mowing activities and a buckwheat scrub plant community was able to establish onsite.

**Topography and Soils**

On-site elevation ranges from approximately 1,615 to 1,641 feet above mean sea level and the site generally slopes from north to south. On-site topography is relatively flat with the exception of the southeast corner and eastern boundaries, which slopes away from the middle portion. Based on the NRCS USDA Web Soil Survey, the project site is historically underlain by Friant-Rock Outcrop complex, and the Tujunga gravelly loamy sand. Refer to Exhibit 4, *Soils*, in Attachment A. In certain areas of the site, soils have been mechanically disturbed and compacted from grading activities and on-site and surrounding development.

**Vegetation**

The project site supports one (1) plant community, California buckwheat scrub (*Eriogonum fasciculatum* alliance), and two (2) land cover types that would be classified as disturbed and developed (refer to Exhibit 5, *Vegetation*, in Attachment A). Refer to Attachment B, *Site Photographs*, for representative site photographs.

The California buckwheat scrub plant community onsite is dominated by California buckwheat (*Eriogonum fasciculatum*) and commonly occurs when an area is subject to significant de-vegetation from anthropogenic disturbance and revegetates with other plant species that were once commonplace, but in unnatural diversity and species distribution. Other common plant species observed in this plant community include horseweed (*Conyza canadensis*), tree of heaven (*Ailanthus altissima*), Brazilian peppertree (*Schinus terebinthifolia*), cottonwood (*Populus deltoides*), elderberry (*Sambucus mexicana*), deerweed (*Acmispon glaber*), California sagebrush (*Artemisia californica*), brittlebush (*Encelia farinosa*), tree tobacco (*Nicotiana glauca*), scale broom (*Lepidospartum squamatum*), salt cedar (*Tamarix aphylla*), and mule fat (*Baccharis salicifolia*). Non-native weedy/early successional species such as Russian thistle (*Salsola tragus*), Mediterranean mustard (*Hirschfeldia incana*), mouse barley (*Hordeum murinum*), red brome (*Bromus madritensis*), ripgut (*Bromus diandrus*), Mediterranean grass (*Schismus barbatus*), and wild oat (*Avena fatua*).

Disturbed areas are generally those that are minimally vegetated or support primarily weedy/early successional species adapted to routine disturbances. Surface soils within these areas have been heavily disturbed/compacted from anthropogenic disturbances. Plant species observed in disturbed portions of the project site include deerweed, telegraph weed, California croton, Russian thistle, Mediterranean mustard, mouse barley, red brome, ripgut, Mediterranean grass, and wild oat.
Developed areas generally encompass all buildings/structures or any paved or otherwise impervious surfaces. Developed portions of the site include paved and landscaped areas associated with the existing industrial building on the southeast corner of the project site.

**Wildlife**

Plant communities provide foraging habitat, nesting/denning sites, and shelter from adverse weather or predation. This section provides a discussion of those wildlife species that were observed or are expected to occur within the project site. The discussion is to be used as a general reference and is limited by the season, time of day, and weather conditions in which the field investigation was conducted. Wildlife detections were based on calls, songs, scat, tracks, burrows, and direct observation. The project site provides some suitable habitat for wildlife species, especially those adapted to a high degree of anthropogenic disturbances and development.

**Fish**

No fish or hydrogeomorphic features (e.g., creeks, ponds, lakes, reservoirs) with frequent sources of water that would support populations of fish were observed on or within the vicinity of the project site. Therefore, no fish are expected to occur and are presumed absent from the project site.

**Amphibians**

No amphibians or hydrogeomorphic features (e.g., creeks, ponds, lakes, reservoirs) with frequent sources of water that would support populations of amphibians were observed on or within the vicinity of the project site. Therefore, no amphibians are expected to occur and are presumed absent from the project site.

**Reptiles**

The project site provides suitable foraging and cover habitat for local reptile species, especially those adapted to a high degree of routine anthropogenic disturbance. The only reptile species observed during the field investigation were western side-blotched lizard (*Uta stansburiana elegans*) and great basin fence lizard (*Sceloporus occidentalis longipes*). Other reptilian species that could be expected to occur include southern alligator lizard (*Elgaria multicarinata webbi*), southern Pacific rattlesnake (*Crotalus oreganus helleri*), and San Diego gophersnake (*Pituophis catenifer annectens*).

**Birds**

The project site provides suitable foraging and nesting habitat for a variety of local bird species, especially those adapted to a high degree of routine anthropogenic disturbance. Bird species detected during the field investigation include Cassin’s kingbird (*Tyrannus vociferans*), northern rough-winged swallow (*Stelgidopteryx ruficollis*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), house finch (*Haemorhous mexicanus*), California towhee (*Melozone crissalis*) and lesser goldfinch (*Spinus psaltria*).

**Mammals**

The project site provides foraging and cover habitat for a mammalian species adapted to a high degree of anthropogenic disturbance. The only mammalian species detected during the field investigation were
California ground squirrel (*Otospermophilus beecheyi*). Common mammalian species adapted to a high degree of human disturbance that could be expected to occur on-site include desert cottontail (*Sylvilagus audubonii*), domestic dog (*Canis lupis familiaris*), and domestic cat (*Felis catus*), opossum (*Didelphis virginiana*), coyote (*Canis latrans*), and raccoon (*Procyon lotor*). In addition, common bat species such as western red bat (*Lasiurus blossevillii*) and Mexican free-tailed bat (*Tadarida brasiliensis*) are likely to occur on-site as these species are adapted to roosting in man-made structures routinely impacted by anthropogenic disturbance.

**Nesting Birds**

An active Cassin’s kingbird (*Tyrannus vociferans*) nest was observed in a tree of heaven (*Ailanthus altissima*) along the northern boundary during the field investigation. In addition to the active nest observed on-site, the project site provides moderate foraging and nesting habitat for year-round and seasonal avian residents, as well as migrating songbirds that could occur in the area. The project site has the potential to provide suitable nesting opportunities for birds that nest in scrubland and those acclimated to routine disturbances (e.g. killdeer (*Charadrius vociferus*)). Further, structures and trees that surround the project site within adjacent development provide suitable nesting opportunities.

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). In order to ensure no impacts occur to birds protected under the MBTA, a nesting bird clearance survey is recommended to be conducted prior to any ground disturbance or vegetation removal activities.

**Migratory Corridors and Linkages**

Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The proposed project will be confined to existing disturbed and developed areas and is surrounded by development, which has removed most natural plant communities from the surrounding area. The nearest wildlife corridor occurs within the Cajon Creek Wash, approximately 0.9 mile west of the site. However, the site is isolated from the wash by existing development including Cajon Boulevard, which is the main thoroughfare in the immediate area for both domestic and freight traffic. As a result, implementation of the proposed project will not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area.

**Jurisdictional Areas**

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in
California. The Corps Regulatory Branch regulates discharge of dredge or fill materials into “waters of the United States” pursuant to Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFW regulates alterations to streambed and bank under Fish and Wildlife Code Sections 1600 et seq., and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

No jurisdictional drainage and/or wetland features were observed on the project site during the field investigation. Further no blueline streams, have been recorded on the project site. Therefore, development of the project will not result in impacts to Corps, Regional Board, or CDFW jurisdiction and regulatory approvals will not be required.

**Special-Status Biological Resources**

The CNDDB Rarefind 5 and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the San Bernardino North USGS 7.5-minute quadrangle. Only one quadrangle was queried since the project site is surrounded by existing development, and does not connect with any natural areas or native plant communities in the region. The habitat assessment evaluated the conditions of the habitat(s) within the boundaries of the project site to determine if the existing plant communities, at the time of the survey, have the potential to provide suitable habitat(s) for special-status plant and wildlife species.

The literature search identified twenty-eight (28) special-status plant species, fifty-one (51) special-status wildlife species, and two (2) special-status plant communities as having the potential to occur within the Devore 7.5-minute quadrangle. Special-status plant and wildlife species were evaluated for their potential to occur within the project site based on habitat requirements, availability and quality of suitable habitat, and known distributions. Species determined to have the potential to occur within the general vicinity of the project site is presented in Attachment C: Potentially Occurring Special-Status Biological Resources.

**Special-Status Plants**

According to the CNDDB and CNPS, twenty (20) special-status plant species have been recorded in the San Bernardino North quadrangle (refer to Attachment C). No special-status plant species were observed on-site during the field investigation. The project site has been subject to decades of anthropogenic disturbances from previous land uses and grading activities, and surrounding development. These disturbances have reduced, the suitability of the habitat to support special-status plant species known to occur in the general vicinity of the project site. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it was determined that the project site does not provide suitable habitat for any of the special-status plant species known to occur in the area are presumed to be absent from the project site. No focused surveys are recommended.

**Special-Status Wildlife**

According to the CNDDB, fifty-one (51) special-status wildlife species have been reported in the San Bernardino North quadrangle (refer to Attachment C). No special-status wildlife species were observed on-site during the field investigation. However, San Diego desert woodrat (*Neotoma lepida intermedia*; a
California Species of Special Concern, and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*: a California Species of Special Concern) were captured during the small mammal trapping study (refer to Attachment D). Based on habitat requirements for specific species and the availability and quality of on-site habitats, it was determined that the project site has a moderate potential to support Cooper’s hawk (*Accipiter cooperii*), San Bernardino kangaroo rat (*Dipodomys smerriami parvus*), and loggerhead shrike (*Lanius ludovicianus*); and a low potential to support Costa’s hummingbird (*Calypte costae*), and California horned lark (*Eremophila alpestris actia*). All remaining special-status wildlife species are presumed to be absent from the project site due to a lack of quality habitat.

Based on regional significance and results of the small mammal trapping study, the suitability of the project site to support burrowing owl, San Bernardino kangaroo rat, Los Angeles pocket mouse, and San Diego desert woodrat are described in further detail below.

**Burrowing Owl**

The burrowing owl is currently listed as a California Species of Special Concern. It is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with well-drained, level to gently-sloping areas characterized by sparse vegetation and bare ground (Haug and Didiuk 1993; Dechant et al. 1999). Burrowing owls are dependent upon the presence of burrowing mammals (such as ground squirrels) whose burrows are used for roosting and nesting (Haug and Didiuk 1993). The presence or absence of colonial mammal burrows is often a major factor that limits the presence or absence of burrowing owls. Where mammal burrows are scarce, burrowing owls have been found occupying man-made cavities, such as buried and non-functioning drainpipes, stand-pipes, and dry culverts. Burrowing mammals may burrow beneath rocks and debris or large, heavy objects such as abandoned cars, concrete blocks, or concrete pads. They also require open vegetation allowing line-of-sight observation of the surrounding habitat to forage as well as watch for predators.

No burrowing owls or recent sign (i.e., pellets, feathers, castings, or whitewash) was observed during the field investigation. Portions of the project site are unvegetated and/or vegetated with a variety of low-growing plant species that allow for line-of-sight observation favored by burrowing owls. However, no suitable burrows (>4 inches in diameter) were observed during the field investigation. In addition, the site is surrounded by power poles, overhead power lines, ornamental trees, and buildings, which decrease the likelihood that burrowing owls would occur on the project site as these features provide perching opportunities for larger raptor species (i.e., red-tailed hawk [*Buteo jamaicensis*]) that prey on burrowing owls.

Based on the results of the field investigation, it was determined that the project site does not have potential to support burrowing owls and focused surveys are not recommended.

**San Bernardino Kangaroo Rat**

The San Bernardino kangaroo rat, federally listed as endangered, is one of several kangaroo rat species in its range. The Dulzura, the Pacific kangaroo rat (*Dipodomys agilis*) and the Stephens kangaroo rat (*Dipodomys stephensi*) occur in areas occupied by the San Bernardino kangaroo rat, but these other species have a wider habitat range. The habitat of the San Bernardino kangaroo rat is described as being confined
to pioneer and intermediate Riversidean Alluvial Fan Sage Scrub (RAFSS) 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 San Bernardino kangaroo rat 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 San Bernardino kangaroo, however, is confined to inland valley scrub communities, and more particularly, to scrub communities occurring along rivers, streams and drainages. Most of the 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 San Bernardino kangaroo rat. The past habitat losses and potential future losses prompted the emergency listing of the San Bernardino kangaroo rat as an endangered species (USFWS, 1998a). PCE’s are physical or biological features essential to the conservation of a species for which its designated critical habitat is based on. Examples of PCE’s include food, water, space for individual and population growth, cover or shelter, etc. The PCEs essential to support the biological needs of foraging, reproducing, rearing of young, intra-specific communication, dispersal, genetic exchange, or sheltering for San Bernardino kangaroo rat are:

1. River, creek, stream, and wash channels; alluvial fans, flood plains, flood benches and terraces; and historic braided channels that are subject to dynamic geomorphological and hydrological processes;
2. Alluvial sage scrub and associated vegetation such as coastal sage scrub and chamise chaparral with a moderately open canopy;
3. Soil series consisting of sand, sandy loam, or loam within its geographical range; and
4. Upland areas proximal to flood plains containing suitable habitat (land adjacent to alluvial fan that provides Refugia).

As noted above, the project site and surrounding areas have not been exposed to fluvial processes associated with the Cajon Wash since the mid-1950s when the Interstate-15 Freeway was constructed. The project site is not subject to dynamic geomorphological and hydrological processes needed to scour and reset the onsite habitats back to pioneer or intermediate RAFSS habitats. Further, the project site no longer receives sand or sandy loam soils from scouring events needed by San Bernardino kangaroo rat for burrowing. However, the since the project site abuts Cable Creek, which connects to Lytle Creek, the project site was determined to have a moderate potential to support San Bernardino kangaroo rat.

A small mammal trapping study was conducted on the project site from July 25 thru July 29, 2022, for a total of 475 trap night. No San Bernardino kangaroo rats were captured onsite and are presumed absent.

Los Angeles Pocket Mouse

The Los Angeles pocket mouse is designated by the CDFW as a California species of special concern. Its current range has changed little from its historic distribution, as it is still known from the Etiwanda Wash east to Cabazon and south through the San Jacinto and Temecula Valleys to Aguanga, Warner Pass, Vail, and Temecula; historically it was also known in the San Fernando Valley and may still occur in un-surveyed areas. It has been recorded from 548 to 2,651 feet in elevation. It is believed to be primarily nocturnal and
most active just after sunset, although during the warmer seasons it may be active just before sunrise as well (Riverside County 2003).

The Los Angeles pocket mouse occurs in low elevation grasslands, Riversidean sage scrub, Riversidean alluvial fan sage scrub, chaparral, and redshank chaparral, particularly in areas with fine, sandy soils (Riverside County 2003). It is believed that sparse vegetation cover is preferred for ease of movement and foraging. It spends most of its life underground, with soil temperature, food availability, and air temperature being some of the primary determining factors in its surface activity periods. The Los Angeles pocket mouse hibernates between October and February (Brylski 1998). The breeding period generally extends throughout the non-dormant period.

A small mammal trapping study was conducted on the project site from July 25 thru July 29, 2022, for a total of 475 trap night. A total of 39 Los Angeles pocket mice were captured on-site during the 2022 trapping study (refer to Attachment D).

San Diego Desert Woodrat

The San Diego desert woodrat is designated by the CDFW as a California species of special concern. In southeastern California, woodrats are found from southern Mono County south throughout the Mojave Desert and from north-central Tulare County south through the Tehachapi and San Bernardino Mountains. Common to abundant in Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, sagebrush, and most desert habitats. The most common natural habitats for records are chaparral, coastal sage scrub (including Riversidean sage scrub and Diegan coastal sage scrub) and grassland. Where substantial patches of these habitats are still intact, desert woodrats should still occur.

A small mammal trapping study was conducted on the project site from July 25 thru July 29, 2022, for a total of 475 trap night. One San Diego desert woodrat was captured onsite.

Special-Status Plant Communities

According to the CNDB, two (2) special-status plant communities have been reported in the San Bernardino North USGS 7.5-minute quadrangle: Riversidian Alluvial Fan Sage Scrub, and Southern Sycamore Alder Riparian Woodland. No special-status plant communities were observed onsite.

Critical Habitats

Under the federal Endangered Species Act, “Critical Habitat” is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the USFWS regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a
Clean Water Act Permit from the United States Army Corps of Engineers). If there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The project site is not located within federally designated Critical Habitat for any species. Refer to Exhibit 6, Critical Habitat in Attachment A. Portions of the site and adjacent areas have been converted from natural habitats into commercial land uses. The nearest federally designated Critical Habitat is located approximately 0.76 mile west of the project site in association with Cajon Creek for San Bernardino kangaroo rat. Therefore, the loss or adverse modification of Critical Habitat from site development will not occur and consultation with the USFWS for impacts to Critical Habitat will not be required for implementation of the proposed project.

Conclusion

The project site has been heavily disturbed from historic anthropogenic disturbances and is primarily isolated by surrounding development, with the exception of a portion of Cable Creek that extends along a portion of the eastern boundary of the site. The buckwheat scrub plant community onsite has reestablished following decades of grading/mowing activities. It was determined that implementation of the project will have “no effect” on federally or State listed endangered or threatened species known to occur in the general vicinity of the project site. Additionally, the development of the project will not impact designated Critical Habitats, regional wildlife movement corridors/linkages, or jurisdictional drainage features.

Both Los Angeles pocket mouse and San Diego desert woodrat were documented onsite during the 2022 trapping study. Impacts to state sensitive species, such as San Diego pocket mouse and San Diego desert woodrat are not typically considered significant under CEQA due to their abundance on a local and regional level. Furthermore, the site is isolated due to surrounding development, and consequently the onsite habitat has been cut off from other natural habitats in the area, as well as essential ecological processes such as fluvial transport and scouring needed to maintain open/sandy habitat, thereby reducing its long-term conservation value. Additionally, the buckwheat scrub plant community onsite, that has established following significant anthropogenic disturbances, and routine weed abatement activities further reduces the long-term conservation value of the site. Therefore, impacts to the Los Angeles pocket mouse and San Diego desert woodrat will likely be not considered significant and mitigation would not be required.

Additionally, to ensure no impacts to Cooper’s hawk, loggerhead shrike, Costa’s hummingbird, and California horned lark occur during the breeding season, the following avoidance and minimization measure will need to be implemented, as a condition of approval.

Migratory Bird Treaty Act and Fish and Game Code

In order to ensure impacts to Cooper’s hawk, loggerhead shrike, Costa’s hummingbird (*Calypte costae*), and California horned lark, a pre-construction nesting bird clearance survey shall be conducted prior to ground disturbance. With implementation of mitigation through the pre-construction nesting bird clearance survey, impacts to these species will be less than significant.

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513 prohibit the take, possession, or
destruction of birds, their nests or eggs). In order to protect migratory bird species, a nesting bird clearance survey should be conducted prior to any ground disturbance or vegetation removal activities that may disrupt the birds during the nesting season.

If construction occurs between February 1st and August 31st, a pre-construction clearance survey for nesting birds should be conducted within three (3) days of the start of any vegetation removal or ground disturbing activities to ensure that no nesting birds will be disturbed during construction. The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests will occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities should stay outside of a no-disturbance buffer. The size of the no-disturbance buffer will be determined by the wildlife biologist and will depend on the level of noise and/or surrounding anthropogenic disturbances, line of sight between the nest and the construction activity, type and duration of construction activity, ambient noise, species habituation, and topographical barriers. These factors will be evaluated on a case-by-case basis when developing buffer distances. Limits of construction to avoid an active nest will be established in the field with flagging, fencing, or other appropriate barriers; and construction personnel will be instructed on the sensitivity of nest areas. A biological monitor should be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, construction activities within the buffer area can occur.

Please do not hesitate to contact Tom McGill at (951) 285-6014 or tmcgill@elmtconsulting.com or Travis McGill at (909) 816-1646 or travismcgill@elmtconsulting.com should you have any questions this report.

Sincerely,

Thomas J. McGill, Ph.D. Travis J. McGill
Managing Director Director

Attachments:

A. Project Exhibits
B. Site Photographs
C. Potentially Occurring Special-Status Biological Resources
D. Presence/Absence Trapping Study – San Bernardino Kangaroo Rat and Other Sensitive Small Mammals
E. Regulations
Attachment A

Project Exhibits
Legend

- Project Site
- Friant-Rock outcrop complex (Fr)
- Tujunga gravelly loamy sand, 0 to 9% slopes (TvC)

Source: ESRI Aerial Imagery, Soil Survey Geographic Database, San Bernardino County
Critical Habitat

5705 INDUSTRIAL PARKWAY
HABITAT ASSESSMENT

Legend

- Project Site
- San Bernardino Merriam's kangaroo rat

Source: ESRI Aerial Imagery, USFWS Critical Habitat, San Bernardino County

Exhibit 6
Attachment B

Site Photographs
Photograph 1: From the northwest corner of the project site looking southeast along the western boundary.

Photograph 2: From the middle of the northern boundary looking southeast across the site.
Photograph 3: From the northeast corner of the project site looking southwest along the northern boundary.

Photograph 4: From the northeast corner of the project site looking southeast along the eastern boundary.
Photograph 5: From the southeast corner of the project site looking northwest.

Photograph 6: Looking at the disturbed area west of the existing onsite building.
Photograph 7: From the middle of the southern boundary looking north.

Photograph 8: From the middle of the project site looking east at the existing industrial building.
Attachment C

Potentially Occurring Special-Status Biological Resources
<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Status</th>
<th>Habitat</th>
<th>Observed On-site</th>
<th>Potential to Occur</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPECIAL-STATUS WILDLIFE SPECIES</strong></td>
<td></td>
<td></td>
<td></td>
<td>No</td>
<td>Moderate</td>
</tr>
<tr>
<td>Accipiter cooperii</td>
<td>Cooper’s hawk</td>
<td>Fed: None</td>
<td>Generally found in forested areas up to 3,000 feet in elevation, especially near edges and rivers. Prefers hardwood stands and mature forests, but can be found in urban and suburban areas where there are tall trees for nesting. Common in open areas during nesting season.</td>
<td>No</td>
<td>There is marginal foraging habitat on the site, but no suitable nesting opportunities onsite. This species is adapted to urban environments and occurs commonly.</td>
</tr>
<tr>
<td>Aimophila ruficeps canescens</td>
<td>southern California rufous-crowned sparrow</td>
<td>Fed: None</td>
<td>Typically found between 3,000 and 6,000 feet in elevation. Breed in sparsely vegetated shrublands on hillsides and canyons. Prefers coastal sage scrub dominated by California sagebrush (Ariemisia californica), but can also be found breeding in coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats.</td>
<td>No</td>
<td>PresumedAbsent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Anniella stebbinsi</td>
<td>southern California legless lizard</td>
<td>Fed: None</td>
<td>Occurs primarily in areas with sandy or loose loamy soils under sparse vegetation of beaches, chaparral, or pine-oak woodland; or near sycamores, oaks, or cottonwoods that grow on stream terraces. Often found under or in the close vicinity of logs, rocks, old boards, and the compacted debris of woodrat nests.</td>
<td>No</td>
<td>PresumedAbsent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Aquila chrysaetos</td>
<td>golden eagle</td>
<td>Fed: None</td>
<td>Occupies nearly all terrestrial habitats of the western states except densely forested areas. Favors secluded cliffs with overhanging ledges and large trees for nesting and cover. Hilly or mountainous country where takeoff and soaring are supported by updrafts is generally preferred to flat habitats. Deeply cut canyons rising to open mountain slopes and crags are ideal habitat.</td>
<td>No</td>
<td>PresumedAbsent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Arizona elegans occidentalis</td>
<td>California glossy snake</td>
<td>Fed: None</td>
<td>Occurs in a wide variety of habitat types including open desert, grasslands, shrublands, chaparral, and woodlands. Prefers areas where the soil is loose and sandy which allows for burrowing.</td>
<td>No</td>
<td>PresumedAbsent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Artemisia bellis bellis</td>
<td>Bell's sage sparrow</td>
<td>Fed: None</td>
<td>Occurs in chaparral dominated by fairly dense stands of chamise. Also found in coastal sage scrub in south of range.</td>
<td>No</td>
<td>PresumedAbsent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Asio otus</td>
<td>long-eared owl</td>
<td>Fed: None</td>
<td>Inhabits forests with extensive meadows, groves of conifers or deciduous trees and streamside groves. Favors dense trees for nesting and roosting and open country for hunting.</td>
<td>No</td>
<td>PresumedAbsent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Aspidoscelis hyperythra</td>
<td>orangethroat whiptail</td>
<td>Fed: None</td>
<td>Inhabits low-elevations coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats. Semi-arid brushy areas typically with loose soil and rocks, including washes, stream sides, rocky hillside, and coastal chaparral.</td>
<td>No</td>
<td>PresumedAbsent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Status</td>
<td>Habitat</td>
<td>Observed On-site</td>
<td>Potential to Occur</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
<td>--------</td>
<td>---------</td>
<td>------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td><em>Aspidoscelis tigris stejnegeri</em>&lt;br&gt;coastal whiptail</td>
<td></td>
<td>Fed: None&lt;br&gt;CA: SSC</td>
<td>Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage such as chaparral, woodland, and riparian areas.</td>
<td>No</td>
<td>Presumed Absent&lt;br&gt;No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td><em>Batrachoseps gabrieli</em>&lt;br&gt;San Gabriel slender salamander</td>
<td></td>
<td>Fed: None&lt;br&gt;CA: None</td>
<td>Known from select localities in the San Gabriel Mountains and the Mt. Baldy area of Los Angeles County and the western end of the San Bernardino Mountains in San Bernardino Co., with an elevation range of 1,200-5,085 feet. Occurs on talus slopes surrounded by a variety of conifer and montane hardwood species, including bigcone spruce, pine, white fir, incense cedar, canyon live oak, black oak, and California laurel.</td>
<td>No</td>
<td>Presumed Absent&lt;br&gt;No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td><em>Bomhus crotchii</em>&lt;br&gt;Crotch bumble bee</td>
<td></td>
<td>Fed: None&lt;br&gt;CA: CE</td>
<td>Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada.</td>
<td>No</td>
<td>Presumed Absent&lt;br&gt;No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td><em>Buteo regalis</em>&lt;br&gt;ferruginous hawk</td>
<td></td>
<td>Fed: None&lt;br&gt;CA: WL</td>
<td>Occurs primarily in open grasslands and fields, but may be found in sagebrush flats, desert scrub, low foothills, or along the edges of pinyon-juniper woodland. Feeds primarily on small mammals and typically found in agricultural or open fields.</td>
<td>No</td>
<td>Presumed Absent&lt;br&gt;No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td><em>Calypte costae</em>&lt;br&gt;Costa’s hummingbird</td>
<td></td>
<td>Fed: None&lt;br&gt;CA: None</td>
<td>Desert and semi-desert, arid brushy foothills and chaparral. A desert hummingbird that breeds in the Sonoran and Mojave Deserts. Departs desert heat moving into chaparral, scrub, and woodland habitats.</td>
<td>No</td>
<td>Low&lt;br&gt;The project site provides minimal foraging and nesting habitat.</td>
</tr>
<tr>
<td><em>Chaetodipus fallax fallax</em>&lt;br&gt;northern San Diego pocket mouse</td>
<td></td>
<td>Fed: None&lt;br&gt;CA: SSC</td>
<td>Occurs in desert and coastal habitats in southern California, Mexico, and northern Baja California, from sea level to at least 1,400 meters above msl. Found in a variety of temperate habitats ranging from chaparral and grasslands to scrub forests and deserts. Requires low growing vegetation or rocky outcroppings, as well as sandy soils for burrowing.</td>
<td>No</td>
<td>Presumed Absent&lt;br&gt;No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td><em>Charina umbratica</em>&lt;br&gt;Southern rubber boa</td>
<td></td>
<td>Fed: None&lt;br&gt;CA: THR</td>
<td>Found in a variety of montane forest habitats, particularly in the vicinity of streams or wet meadows. Requires loose, moist soil for burrowing and seeks cover in rotting logs. Restricted to the San Bernardino and San Jacinto Mountains.</td>
<td>No</td>
<td>Presumed Absent&lt;br&gt;No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td><em>Contopus cooperi</em>&lt;br&gt;Olive-sided flycatcher</td>
<td></td>
<td>Fed: None&lt;br&gt;CA: SSC</td>
<td>Montane and northern coniferous forests. Usually found in forest edges and openings, such as meadows and ponds.</td>
<td>No</td>
<td>Presumed Absent&lt;br&gt;No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td><em>Diadophis punctatus modestus</em>&lt;br&gt;Sand Bernadino ringneck snake</td>
<td></td>
<td>Fed: None&lt;br&gt;CA: None</td>
<td>Found in various moist habitats including woodland chaparral, forest and grassland. Can also be found in farmlands and gardens. Shelters under logs, stones or boards and is not an active burrower.</td>
<td>No</td>
<td>Presumed Absent&lt;br&gt;No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Status</td>
<td>Habitat</td>
<td>Observed On-site</td>
<td>Potential to Occur</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
<td>--------</td>
<td>---------</td>
<td>------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Dipodomys merriami parvus</td>
<td>San Bernardino kangaroo rat</td>
<td>Fed: END CA: CE; SSC</td>
<td>Primarily found in Riversidian alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. May occur at lower densities in Riversidian upland sage scrub, chaparral and grassland in uplands and tributaries in proximity to Riversidian alluvial fan sage scrub habitats. Tend to avoid rocky substrates and prefer sandy loam substrates for digging of shallow burrows.</td>
<td>No</td>
<td>Moderate Was not captured during the 2022 small mammal trapping study.</td>
</tr>
<tr>
<td>Dipodomys nitratoides brevinasus</td>
<td>Short-nosed kangaroo rat</td>
<td>Fed: None CA: SSC</td>
<td>Inhabit grasslands with scattered shrubs and desert-shrub associations on powdery soils.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Dipodomys similans</td>
<td>Dulzura kangaroo rat</td>
<td>Fed: None CA: None</td>
<td>Relatively common in chaparral, coastal sage scrub, Riversidian alluvial fan sage scrub, and peninsular juniper woodland habitats.</td>
<td>No</td>
<td>Presumed Absent Was not captured during the small mammal trapping study.</td>
</tr>
<tr>
<td>Empidonax traillii</td>
<td>Willow flycatcher</td>
<td>Fed: None CA: END</td>
<td>Found in bushes, willows, thickets, brushy fields and upland copses. Breeds in thickets of deciduous trees and shrubs, especially willows or along woodland edges. Often near streams or marshes, especially in southern part of range, but may be found in drier habitats than Alder Flycatcher.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Empidonax traillii extimus</td>
<td>Southwestern willow flycatcher</td>
<td>Fed: END CA: END</td>
<td>Requires dense riparian habitats for nesting. Breeds in thickets of deciduous trees and shrubs, especially willows or along woodland edges. Often near streams or marshes. Winters around clearings and second growth in the tropics, especially near water.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Eremophila alpestris actia</td>
<td>California horned lark</td>
<td>Fed: None CA: WL</td>
<td>Generally found in shortgrass prairies, grasslands, disturbed fields, or similar habitat types along the coast or in deserts. Trees are shrubs are usually scarce or absent. Generally rare in montane, coniferous, or chaparral habitats. Forms large flocks outside of the breeding season.</td>
<td>No</td>
<td>Low The project site provides minimal foraging and nesting habitat.</td>
</tr>
<tr>
<td>Euphydryas editha quino</td>
<td>quino checkerspot butterfly</td>
<td>Fed: END CA: None</td>
<td>Primary larval host plant is dwarf plantain (<em>Plantago erecta</em>). Occupies a variety of habitat types, including grasslands, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland and semi-desert scrub.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Euchloe hyantis andrewsi</td>
<td>Andrew’s marble butterfly</td>
<td>Fed: None CA: None</td>
<td>Inhabits yellow pine forests near Lake Arrowhead and Big Bear Lake at elevations between 5,000 and 6,000 feet. Uses Laguna Mountains jewelflower (<em>Streptanthus bernardinus</em>) and pine rockcress (<em>Arabis holboelli var. pinetorum</em>) as host plants; larvae feed on mountain tansy mustard (<em>Descurainia incana</em>).</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Falco columbarius</td>
<td>merlin</td>
<td>Fed: None CA: WL</td>
<td>Winters in open forests, grasslands and coastal areas. Breeds in forested openings, edges and along rivers. Habitat varies from coniferous forests to open conifer woodland, prairie groves, foothill marshes and open country.</td>
<td>No</td>
<td>Presumed Absent The project site provides suitable foraging habitat, but no roosting opportunities are present.</td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Status</td>
<td>Habitat</td>
<td>Observed On-site</td>
<td>Potential to Occur</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------</td>
<td>--------</td>
<td>---------</td>
<td>------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td><em>Glaucomys oregonesis californicus</em></td>
<td>San Bernadino flying squirrel</td>
<td>Fed:</td>
<td>None</td>
<td>Occurs in white fir (<em>Abies concolor</em>) and Jeffrey pine (<em>Pinus jeffreyi</em>) mixed conifer forests with black oak (<em>Quercus kelloggii</em>) components at higher elevations. Use cavities in large trees, snags, and logs for cover. Habitats are typically mature, dense conifer forest in close proximity to riparian areas.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CA:</td>
<td>SSC</td>
<td></td>
<td>No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td><em>Gymnogyps californianus</em></td>
<td>California condor</td>
<td>Fed:</td>
<td>END</td>
<td>Inhabits rugged canyons, gorges and forested mountains between 985 and 8,860 feet. Nests primarily between 2,000 and 4,500 feet in cliff caves.</td>
<td>No</td>
</tr>
<tr>
<td><em>Icteria virens</em></td>
<td>yellow-breasted chat</td>
<td>Fed:</td>
<td>None</td>
<td>Primarily found in tall, dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories. Nesting areas are associated with streams, swampy ground, and the borders of small ponds. Breeding habitat must be dense to provide shade and concealment. It winters south the Central America.</td>
<td>No</td>
</tr>
<tr>
<td><em>Lanius ludovicianus</em></td>
<td>loggerhead shrike</td>
<td>Fed:</td>
<td>None</td>
<td>Often found in broken woodlands, shrublands, and other habitats. Prefers open country with scattered perches for hunting and fairly dense brush for nesting.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CA:</td>
<td>SSC</td>
<td>There is suitable habitat present within the project site.</td>
<td></td>
</tr>
<tr>
<td><em>Lasiusus xanthinus</em></td>
<td>Western yellow bat</td>
<td>Fed:</td>
<td>None</td>
<td>Roosts in palm trees in foothill riparian, desert wash, and palm oasis habitats with access to water for foraging.</td>
<td>No</td>
</tr>
<tr>
<td><em>Lepus californicus bennettii</em></td>
<td>San Diego black-tailed jackrabbit</td>
<td>Fed:</td>
<td>None</td>
<td>Occurs in diverse habitats, but primarily is found in arid regions supporting shortgrass habitats. Openness of open scrub habitat is preferred over dense chaparral.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CA:</td>
<td>SSC</td>
<td>The project site itself provides suitable foraging and burrowing habitat, but isolation of the site from surrounding open space limits the possibility of burrowing.</td>
<td></td>
</tr>
<tr>
<td><em>Neolarra alba</em></td>
<td>white cuckoo bee</td>
<td>Fed:</td>
<td>None</td>
<td>Found in dry, sandy areas (particularly deserts) in the American southwest near the host plants for <em>Perdita</em> bee species, of which it is a nest parasite.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CA:</td>
<td>None</td>
<td>No suitable habitat is present within or adjacent to the project site.</td>
<td></td>
</tr>
<tr>
<td><em>Neotoma lepida intermedia</em></td>
<td>San Diego desert woodrat</td>
<td>Fed:</td>
<td>None</td>
<td>Occurs in coastal scrub communities between San Luis Obispo and San Diego Counties. Prefers moderate to dense canopies, and especially rocky outcrops.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CA:</td>
<td>SSC</td>
<td>One individual was captured during the small mammal trapping study.</td>
<td></td>
</tr>
<tr>
<td><em>Nyctinomops femorosaccus</em></td>
<td>pocketed free-tailed bat</td>
<td>Fed:</td>
<td>None</td>
<td>Often found in pinyon-Juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis.</td>
<td>No</td>
</tr>
<tr>
<td><em>Oncorhynchus mykiss irideus pop.</em></td>
<td>steelhead – southern california DPS</td>
<td>Fed:</td>
<td>END</td>
<td>Found in permanent coastal streams from San Diego to the Smith River.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CA:</td>
<td>None</td>
<td>No suitable habitat is present within or adjacent to the project site.</td>
<td></td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Status</td>
<td>Habitat</td>
<td>Observed On-site</td>
<td>Potential to Occur</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>------------------------------</td>
<td>---------</td>
<td>-------------------------------------------------------------------------</td>
<td>------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td><em>Perognathus longimembris brevinasus</em></td>
<td>Los Angeles pocket mouse</td>
<td>Fed:</td>
<td>Occurs in lower elevation grasslands and coastal sage scrub communities in and around the Los Angeles Basin. Prefers open ground with fine sandy soils. May not dig extensive burrows but will seek refuge under weeds and dead leaves instead.</td>
<td>No</td>
<td>Present 39 individuals were captured during the small mammal trapping study.</td>
</tr>
<tr>
<td><em>Phrynosoma blainvillii</em></td>
<td>coast horned lizard</td>
<td>Fed:</td>
<td>Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (i.e. fire, floods, roads, grazing, fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.</td>
<td>No</td>
<td>Presumed Absent The project site itself supports suitable habitat for foraging and nesting, but on-site and surrounding anthropogenic disturbance and development limits the likelihood for occurrence.</td>
</tr>
<tr>
<td><em>Polioptila californica californica</em></td>
<td>coastal California gnatcatcher</td>
<td>Fed:</td>
<td>Obligate resident of sage scrub habitats that are dominated by California sagebrush (<em>Artemisia californica</em>). This species generally occurs below 750 feet elevation in coastal regions and below 1,500 feet inland. Ranges from the Ventura County, south to San Diego County and northern Baja California and it is less common in sage scrub with a high percentage of tall shrubs. Prefers habitat with more low-growing vegetation.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td><em>Progne subis</em></td>
<td>purple martin</td>
<td>Fed:</td>
<td>Prefers open spaces that are located near water sources. Forages in meadows, grasslands, over lakes and ponds and flooded pastures. Also inhabits urban areas like farms, croplands, parks and gardens. Nests in cavities of trees, cactus, buildings, or cliffs.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td><em>Pyrocephalus rubinus</em></td>
<td>vermilion flycatcher</td>
<td>Fed:</td>
<td>Prefers open habitat such as arid scrubland, farmland, desert savannah, cultivated lands and riparian woodlands. Nests can be found specifically in willows, oaks, cottonwoods, mesquites and sycamores.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td><em>Rana draytonii</em></td>
<td>California red-legged frog</td>
<td>Fed:</td>
<td>Found from sea level to elevations of about 5,200 feet, primarily in coastal drainages.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td><em>Rana muscosa</em></td>
<td>southern mountain yellow-legged frog</td>
<td>Fed: END</td>
<td>Occurs in lower elevation habitats characterized by rocky streambeds and wet meadows, while higher elevation habitats include lakes, ponds, and streams. Occupy streams in narrow, rock-walled canyons. Often found along rock walls or vegetated banks and always within a few feet of the water.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Status</td>
<td>Habitat</td>
<td>Observed On-site</td>
<td>Potential to Occur</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-----------------------</td>
<td>---------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Rhinichthys osculus ssp. 3</td>
<td>Santa Ana speckled dace</td>
<td>Fed: None, CA: SSC</td>
<td>Requires permanent flowing streams within summer water temperatures of 17 – 20 degrees Celsius. Inhabits shallow cobble and gravel riffles and small streams that flow through steep, rocky canyons with chaparral covered walls.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Salvadora hexalepis virgultea</td>
<td>coast patch-nosed snake</td>
<td>Fed: None, CA: SSC</td>
<td>Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains. Requires friable soils for burrowing.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Setophaga petechia</td>
<td>yellow warbler</td>
<td>Fed: None, CA: SSC</td>
<td>Nests over all of California except the Central Valley, the Mojave Desert region, and high altitudes and the eastern side of the Sierra Nevada. Winters along the Colorado River and in parts of Imperial and Riverside Counties. Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders or in mature chaparral. May also use oaks, conifers, and urban areas near stream courses.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Spea hammondii</td>
<td>Western spadefoot</td>
<td>Fed: None, CA: SSC</td>
<td>Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washed, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rainpools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Spinus lawrencei</td>
<td>Lawrence’s Goldfinch</td>
<td>Fed: None, CA: None</td>
<td>Open woodlands, chaparral, and weedy fields. Closely associated with oaks. Nests in open oak or other arid woodland and chaparral near water.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Strix occidentalis occidentalis</td>
<td>California spotted owl</td>
<td>Fed: None, CA: SSC</td>
<td>Breeds and roosts in forests and woodland with large old trees and snags, high basal areas of trees and snags, dense canopies, multiple canopy layers, and downed woody debris. Large old trees are key as they provide nest sites and cover from weather.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Taxidea taxus</td>
<td>American badger</td>
<td>Fed: None, CA: SSC</td>
<td>Primarily occupy grasslands, parklands, farms, tallgrass and shortgrass prairies, meadows, shrub-steppe communities and other treeless areas with sandy loam soils where it can dig more easily for its prey. Occasionally found in open chaparral (with less than 50% plant cover) and riparian zones.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Thamnophis hammondii</td>
<td>Two-striped gartersnake</td>
<td>Fed: None, CA: SSC</td>
<td>Occurs in or near permanent fresh water, often along streams with rocky beds and riparian growth up to 7,000 feet in elevation.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Status</td>
<td>Habitat</td>
<td>Observed On-site</td>
<td>Potential to Occur</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Vireo bellii pusillus</td>
<td>least Bell’s vireo</td>
<td>Fed: END</td>
<td>Primarily occupy Riverine riparian habitat that typically feature dense cover within 1-2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within or adjacent to the project site.</td>
</tr>
<tr>
<td>Arenaria paludicola</td>
<td>marsh sandwort</td>
<td>Fed: END</td>
<td>Grows mainly in wetlands and freshwater marshes in arid climates. The plant can grow in saturated acidic bog soils and soils that are sandy with a high organic content. Found at elevations ranging from 33 to 558 feet. Blooming period is from May to August.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within the project site.</td>
</tr>
<tr>
<td>Berberis nevinii</td>
<td>Nevin’s barrberry</td>
<td>Fed: END</td>
<td>Prefers a riparian and alluvial scrub habitat and can be found in foothill woodlands, coastal sage scrub, and chaparral communities. Grows on sandy soils in washes, alluvial terraces and canyon bottoms.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within the project site.</td>
</tr>
<tr>
<td>Brodiaea filifolia</td>
<td>Thread-leaved brodiaea</td>
<td>Fed: THR</td>
<td>Often found in clay soils within openings of chaparral, cismontane woodland, coastal scrub, playas, vernal pools, valley and foothill grassland habitats. Found at elevations ranging from 82 to 3,675 feet. Blooming period ranges from March to June.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within the project site.</td>
</tr>
<tr>
<td>Calochortus catalinae</td>
<td>Catalina mariposa-lily</td>
<td>Fed: None</td>
<td>Grows in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Found at elevations ranging from 49 to 2,297 feet. Blooming period is from February to June.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within the project site.</td>
</tr>
<tr>
<td>Calochortus palmeri var. palmeri</td>
<td>Palmer’s mariposa-lily</td>
<td>Fed: None</td>
<td>Found in Chaparral, lower montane coniferous forest and meadow and seep habitats from 2,330 to 7,840 feet. Blooms from April to July.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within the project site.</td>
</tr>
<tr>
<td>Calochortus plummerae</td>
<td>Plummer's mariposa-lily</td>
<td>Fed: None</td>
<td>Prefers openings in chaparral, foothill woodland, coastal sage scrub, valley foothill grasslands, cismontane woodland, lower montane coniferous forest and yellow pine forest. Often found on dry, rocky slopes and soils and brushy areas. Can be very common after a fire. Found at elevations ranging from 459 to 6,299 feet. Blooming period is from May to July.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within the project site.</td>
</tr>
<tr>
<td>Calochortus simulans</td>
<td>La Panza mariposa-lily</td>
<td>Fed: None</td>
<td>Found in Chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland habitats from 1,065 to 3,775 feet. Prefers granite soils, but can be found in sandy or serpentine substrates as well. Blooming period is from April to June.</td>
<td>No</td>
<td>Presumed Absent No suitable habitat is present within the project site.</td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Status</td>
<td>Habitat</td>
<td>Observed On-site</td>
<td>Potential to Occur</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>--------------------------------------</td>
<td>--------</td>
<td>-------------------------------------------------------------------------</td>
<td>------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| *Castilleja lasiorhyncha*            | San Bernadino Mountains owl’s-clover | Fed:   | Found in chaparral, riparian woodland, pebble (pavement) plain, upper montane coniferous forest, meadows and seeps habitats. Found at elevations ranging from 4,265 to 7,841 feet. Blooming period is from May to August. | No               | Presumed Absent  
No suitable habitat is present within the project site.                                               |
| *Centromadia pungensssp. Laevis*     | Smooth tarplant                      | Fed:   | Occurs in alkaline soils within chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland habitats. Grows in elevation from 0 to 2,100 feet. Blooming period ranges from April to September. | No               | Presumed Absent  
No suitable habitat is present within the project site.                                               |
| *Chloropyron maritimumssp. Maritimum*| Salt marsh bird’s-beak               | Fed:   | Upper terraces and higher edges of coastal salt marshes where tidal inundation is periodic. Found at elevations ranging from 0 to 98 feet. Blooming period is from May to October. | No               | Presumed Absent  
No suitable habitat is present within the project site.                                               |
| *Chorizanthe parryi var. parryi*     | Parry’s spineflower                  | Fed:   | Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet. Blooming period is from April to June. | No               | Presumed Absent  
No suitable habitat is present within the project site.                                               |
| *Dodecahema leptoceras*              | slender-horned spineflower           | Fed:   | Chaparral, coastal scrub (alluvial fan sage scrub). Flood deposited terraces and washes. Found at elevations ranging from 1,181 to 2,690 feet. Blooming period is from April to June. | No               | Presumed Absent  
No suitable habitat is present within the project site.                                               |
| *Eriastrum densifolium ssp. sanctorum*| Santa Ana River woollystar           | Fed:   | Found in sandy soil in association with mature alluvial scrub. Ideal habitat appears to be a terrace or bench that receives overbank deposits every 50 to 100 years. Cryptogamic crusts are frequently present in occupied areas. Found at elevations ranging from 299 to 2,001 feet. Blooming period is from April to September. | No               | Presumed Absent  
No suitable habitat is present within the project site.                                               |
| *Eriophyllum lanatum var. obovatum*  | Southern Sierra woolly sunflower     | Fed:   | Prefers full sun and well-drained soil. Most common in chaparral, oak woodland, mixed evergreen forest, yellow pine forest, grassland and sagebrush scrub habitats, but also grows on rocky slopes and bluffs. | No               | Presumed Absent  
No suitable habitat is present within the project site.                                               |
| *Fimbristylis thermalis*             | Hot springs fimbristylis             | Fed:   | Habitat includes meadows and seeps (alkaline, near hot springs). Found at elevations ranging from 361 to 4,396 feet. Blooming period is from July to September. | No               | Presumed Absent  
No suitable habitat is present within the project site.                                               |
| *Frasera neglecta*                   | Pine green-gentian                   | Fed:   | Found in lower montane coniferous forest, upper montane coniferous forest, pinyon and juniper woodland habitats. Found at elevations ranging from 4,593 to 8,202 feet. Blooming period is from May to July. | No               | Presumed Absent  
No suitable habitat is present within the project site.                                               |
| *Imperata brevifolia*                | California satintail                | Fed:   | Grows primarily in riparian habitats and has an affinity for moist soils, but can be found in chaparral, coastal scrub, mojavean desert scrub, meadows and seeps. Found at elevations ranging from 0 to 3,986 feet. Blooming period is from September to May. | No               | Presumed Absent  
No suitable habitat is present within the project site.                                               |
<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Status</th>
<th>Habitat</th>
<th>Observed On-site</th>
<th>Potential to Occur</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Juglans californica</em></td>
<td>southern California black walnut</td>
<td>Fed: None, CA: None, CNPS: 4.2</td>
<td>Found in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats. Found at elevations ranging from 164 to 2,953 feet. Blooming period is from March to August.</td>
<td>No</td>
<td>Presumed Absent</td>
</tr>
<tr>
<td><em>Juncus duranii</em></td>
<td>Duran’s rush</td>
<td>Fed: None, CA: None, CNPS: 4.3</td>
<td>Habitats include lower and upper montane coniferous forests, meadows and seeps. Found at elevations ranging from 5,801 to 9,199 feet. Blooming period is from July to August.</td>
<td>No</td>
<td>Presumed Absent</td>
</tr>
<tr>
<td><em>Lilium humboldtii ssp. ocellatum</em></td>
<td>ocellated Humboldt lily</td>
<td>Fed: None, CA: None, CNPS: 4.2</td>
<td>Found in openings within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland habitats. Found at elevations ranging from 98 to 5,906 feet in elevation. Blooming period is from March to August.</td>
<td>No</td>
<td>Presumed Absent</td>
</tr>
<tr>
<td><em>Lycium parishii</em></td>
<td>Parish’s desert-thorn</td>
<td>Fed: None, CA: None, CNPS: 1A</td>
<td>Habitats include coastal scrub and Sonoran Desert scrub. Found at elevations ranging from 443 to 3,281 feet. Blooming period is from March to April.</td>
<td>No</td>
<td>Presumed Absent</td>
</tr>
<tr>
<td><em>Malacothamnus parishii</em></td>
<td>Parish’s bush-mallow</td>
<td>Fed: None, CA: None, CNPS: 2B.3</td>
<td>Species is presumed extinct. Habitats include coastal scrub and chaparral. Found at elevations ranging from 1,000 to 1,495 feet. Blooming period is from June to July.</td>
<td>No</td>
<td>Presumed Absent</td>
</tr>
<tr>
<td><em>Muhlenbergia californica</em></td>
<td>California muhly</td>
<td>Fed: None, CA: None, CNPS: 4.3</td>
<td>Found in chaparral, coastal scrub, lower montane coniferous forest, meadows and seeps. Only known to occur in the San Bernardino Mountains. Found at elevations ranging from 328 to 6,562 feet. Blooming period is from June to September.</td>
<td>No</td>
<td>Presumed Absent</td>
</tr>
<tr>
<td><em>Schoenus nigricans</em></td>
<td>Black bog-rush</td>
<td>Fed: None, CA: None, CNPS: 2B.2</td>
<td>Grows within marches and swamps (often alkaline). Found at elevations ranging from 492 to 6,562 feet. Blooming period is from August to September.</td>
<td>No</td>
<td>Presumed Absent</td>
</tr>
<tr>
<td><em>Streptanthus bernardinus</em></td>
<td>Laguna Mountains jewelflower</td>
<td>Fed: None, CA: None, CNPS: 4.3</td>
<td>Grows in chaparral and lower montane coniferous forest on clay or decomposed granite soils. It is sometimes found in disturbed areas such as streambeds or roadcuts. From 4,724 to 8,202 feet in elevation. Blooming period is from May to August.</td>
<td>No</td>
<td>Presumed Absent</td>
</tr>
<tr>
<td><em>Streptanthus campestris</em></td>
<td>Southern Jewelflower</td>
<td>Fed: None, CA: None, CNPS: 1B.3</td>
<td>Found in rocky habitats within chaparral, lower montane coniferous forest, pinyon and juniper woodland. Found at elevations ranging from 2,953 to 7,546 feet. Blooming period is from April to July.</td>
<td>No</td>
<td>Presumed Absent</td>
</tr>
<tr>
<td><em>Symphyotrichum defoliatum</em></td>
<td>San Bernadino aster</td>
<td>Fed: None, CA: None, CNPS: 1B.2</td>
<td>Grows in grassland and meadow habitats at up to around 4,500 feet. Can also be found in disturbed areas.</td>
<td>No</td>
<td>Presumed Absent</td>
</tr>
<tr>
<td><em>Yucca brevifolia</em></td>
<td>Western Joshua tree</td>
<td>Fed: None, CA: None, CNPS: CT</td>
<td>Found growing in elevations between 1,600-7,200 feet in open, rocky grasslands, broad valleys, alluvial slopes, and on pediments with minimal runoff surrounding desert mountains and mesas.</td>
<td>No</td>
<td>Presumed Absent</td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Status</td>
<td>Habitat</td>
<td>Observed On-site</td>
<td>Potential to Occur</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>--------</td>
<td>---------</td>
<td>------------------</td>
<td>-------------------</td>
<td></td>
</tr>
<tr>
<td>Riversidian Alluvial Fan Sage Scrub</td>
<td>CDFW Sensitive Habitat</td>
<td>Occur within broad washes of sandy alluvial drainages that carry rainfall runoff sporadically in winter and spring but remain relatively dry through the remainder of the year. Is restricted to drainages and floodplains with very sandy substrates that have a dearth of decomposed plant material. These areas do not develop into riparian woodland or scrub due to the limited water resources and scouring by occasional floods.</td>
<td>No</td>
<td>Absent. This plant community was not observed on-site.</td>
<td></td>
</tr>
<tr>
<td>Southern Sycamore Alder Riparian Woodland</td>
<td>CDFW Sensitive Habitat</td>
<td>Occurs below 2,000 meters in elevation, sycamore and alder often occur along seasonally flooded banks; cottonwoods and willows are also often present. Poison oak, mugwort, elderberry and wild raspberry may be present in understory.</td>
<td>No</td>
<td>Absent. This plant community was not observed on-site.</td>
<td></td>
</tr>
</tbody>
</table>
Attachment D

Presence/Absence Trapping Study – San Bernardino Kangaroo Rat and
Other Sensitive Small Mammals
Presence/Absence Trapping Study
San Bernardino Kangaroo Rat and other Sensitive Small Mammals
5705 Industrial Parkway
San Bernardino, California

Prepared For:
U.S. Fish and Wildlife Service
Carlsbad Field Office
2177 Salk Ave #250
Carlsbad, California 92008
Contact: Stacey Love, Permit Coordinator

ELMT Consulting
2201 N. Grand Avenue #10098
Santa Ana, CA 92711
Contact: Travis McGill
(951)788-0670

Prepared by:
Kidd Biological Inc.
23046 Ave de la Carlotta, Suite 600
Laguna Hills, CA 92653
Contact: Jason Berkley
10(a)1(A) Permit # TE009015-5
Phone: (714)493-1120

Total Surveyed Area: ~7.5 Acres

Trapping Surveys Conducted: Final Report Date:
July 25-29, 2022 August 1, 2022
Introduction

Jason Berkley of Cereus Environmental was contracted by Kidd Biological Inc. to conduct protocol trapping survey for San Bernardino Kangaroo rat (Dipodomys merriami parvus, SBKR) on approximately 7.5-acres in the northern part of the City of San Bernardino. The site was determined to have potential to support SBKR during an initial habitat assessment by ELMT Consulting. The site was trapped to determine the presence or absence of the SBKR. No SBKR were trapped in the study area.

Site Location

The survey area is located in Western San Bernardino County, in the northwestern part of The City of San Bernardino. The site is north of Interstate 10, west of Highway 215 (Riverside Freeway) and south of Interstate 15. The confluence of Lytle Creek and Cajon Wash is 1-mile to the west with Cajon Boulevard/Historic Route 66 immediately to the east. The site is just east of Institution Road and Hallmark Parkway, west of the Highway 215.

Ecologically, the site is located in the Muscupiabe Area between the San Bernardino Mountains and the San Gabriel Mountains. The confluence of Lytle Creek and Cajon Wash is just to the west and Cable Creek is to the east. Devil’s Canyon percolation basins are 1.5 miles to the east. The project site is located in Section 11 of Township 1 North, Range 5 West of the San Bernadino North, CA 7.5 minute USGS quadrangle (Figure 2).

Methods

Literature Review

Available information on the known sensitive resources in the area was reviewed. The literature review included a review of standard field guides and texts on sensitive and non-sensitive biological resources, as well as the following sources:


Endangered and Threatened Wildlife and Plants; Proposed Rule to List the San Bernardino Kangaroo Rat as Endangered; and Notice of Public Hearing, U.S. Fish and Wildlife Service, 1998C.

We also reviewed other available technical information on the biological resources of the site, including previous trapping surveys on other near-by sites.
Figure 1. Survey Area

Figure 2. Site Location on San Bernardino North, CA USGS Topo Graphic Map
Results

Literature Review

Several sensitive small mammal species were identified as potentially present in the vicinity of the project. 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 while trapping for targeted species.

Potential Sensitive Biological Resources

The CNDDDB listed four sensitive small mammal species as potentially occurring within the project area and had at least some potential to be captured during the trapping surveys. These are described below.

San Bernardino Kangaroo Rat

The San Bernardino kangaroo rat (*Dipodomys merriami parvus*, 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 drainage. Most of the 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 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 habitat of the SBKR is described as being 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 past habitat losses and potential future losses prompted the emergency listing of the SBKR as an endangered species (USFWS, 1998a).

Northwestern San Diego Pocket Mouse

The northwestern San Diego pocket mouse (*Chaetodippus fallax fallax*, SDPM) 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. This species is designated at as a Species of Concern (CSC) by the California Department of Fish and Wildlife (CDFW).

Los Angeles Pocket Mouse

The Los Angeles pocket mouse (*Perognathus longimembris brevinasus*, LAPM) is one of two pocket mice found in this area of San Bernardino County. Both the LAPM and the SDPM occupy similar habitats, but the SDPM has a wider range extending south into San Diego County. The habitat of the LAPM 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 west to Morongo and south to the San Diego County border. LAPM forages in open ground
and underneath shrubs. Pocket mice in general dig burrows in loose soil, although this has not been completely documented for this subspecies. The LAPM is listed as a CSC by CDFW.

**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. The coastal race of the desert woodrat, the San Diego desert woodrat (*N. 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 intermedia* is listed as a CSC; its historical range has been impacted by the conversion of scrub habitats into residential, commercial and industrial use.

**RESULTS**

All surveys were performed July 25-29, 2022 by permitted biologist, Jason Berkley. A total of 9 trap lines were set up for a total of 475 trap nights.

Weather conditions did not vary much during the course of the trapping survey. Morning temperatures were in the high sixties and low seventies degrees Fahrenheit. Skies were mostly clear. The moon was waning crescent during the trapping event (0-9%).

<table>
<thead>
<tr>
<th>Day</th>
<th>Cloud Cover</th>
<th>Night Temperature (°F)</th>
<th>Wind</th>
<th>Moon Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 25</td>
<td>Clear</td>
<td>72</td>
<td>0</td>
<td>Waning Crescent 9%</td>
</tr>
<tr>
<td>July 26</td>
<td>Clear</td>
<td>68</td>
<td>0</td>
<td>Waning Crescent 5%</td>
</tr>
<tr>
<td>July 27</td>
<td>Clear</td>
<td>72</td>
<td>0</td>
<td>Waning Crescent 1%</td>
</tr>
<tr>
<td>July 28</td>
<td>Clear</td>
<td>70</td>
<td>0</td>
<td>New Moon 0%</td>
</tr>
<tr>
<td>July 29</td>
<td>Clear</td>
<td>72</td>
<td>0</td>
<td>Waning Crescent 1%</td>
</tr>
</tbody>
</table>

**Topography and Soils**

The topography on the property is generally level across the site with elevations between 1,618 and 1,640 feet above mean sea level. The site is completely surrounded by development, mostly light industrial buildings with the exception of Highway 215 to the northeast.

In general, surface soils on site are a mix of sand, gravel and river-wash cobbles. They are classified as Tujunga gravelly loam sand in the northeastern half of the site, with a narrow strip of Friant Rock outcrop running north-south in the western portion of the site (USDA Soil Conservation Service 2022).
Vegetation

The study area is comprised of mature Alluvial fan sage scrub dominated almost exclusively by California buckwheat (*Eriogonum fasciculatum*), with an understory of non-native grasses—mostly rip-gut brome (*Bromus diandrus*). There are scattered California sagebrush (*Artemisia californica*) and deerweed (*Acmispon glaber*).

FOCUSED TRAPPING RESULTS

After a total of 475 trap nights, no San Bernardino kangaroo rat were caught during the trapping surveys. Los Angeles pocket mice were trapped in relatively high numbers for such a small site and San Diego desert woodrats, were trapped in relatively low numbers (39 and 1, respectively).

A total of five (5) small mammal species were captured as a result of the trapping effort:
- Los Angeles Pocket Mouse (*Perognathus longimembris brevinasus*) (n=39)
- Western harvest mouse (*Reithrodontomys megalotis*) (n=8)
- Deer mouse (*Peromyscus maniculatus*) (n=3)
- Desert woodrat (*Neotoma lepida*) (this is presumably the *intermedia* sub species)(n=1)

<table>
<thead>
<tr>
<th>Trap Line</th>
<th>Trap Nights</th>
<th>LAPM</th>
<th>RHEMEG</th>
<th>PERMAN</th>
<th>NEOLEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>60</td>
<td>7 (3)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>1 (0)</td>
</tr>
<tr>
<td>B</td>
<td>60</td>
<td>4 (3)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>C</td>
<td>60</td>
<td>7 (10)</td>
<td>2 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>D</td>
<td>65</td>
<td>5 (5)</td>
<td>3 (2)</td>
<td>1 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>E</td>
<td>65</td>
<td>8 (4)</td>
<td>2 (0)</td>
<td>2 (1)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>F</td>
<td>65</td>
<td>4 (4)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>G</td>
<td>50</td>
<td>2 (4)</td>
<td>1 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>H</td>
<td>25</td>
<td>2 (2)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>I</td>
<td>25</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td></td>
<td>475</td>
<td>39 (35)</td>
<td>8 (2)</td>
<td>3 (1)</td>
<td>1 (0)</td>
</tr>
</tbody>
</table>

(#) = Recaptured individuals
LAPM=*Perognathus longimembris brevinasus*, Los Angeles Pocket Mouse
RHEMEG=*Reithrodontomys megalotis*, Western harvest mouse
PERMAN=*Peromyscus maniculatus*, Deer mouse
NEOLEP=*Neotoma lepida*, Desert woodrat

Conclusion

A total of four small mammal species were captured during the trapping surveys, two of which are California species of special concern: Los Angeles Pocket Mouse and San Diego wood rat. The Los Angeles pocket mice were found in high numbers throughout most of the site. Only one San Diego woodrat was captured.
It is possible that with the recent development in this area, the parcel in question has become an island where the LAPM have persisted, with no easy way to escape to other parcels in the area and thus the offspring are unable to disperse, creating an unnaturally large population here.

No SBKR or other federally-listed species were trapped or otherwise detected within the study area. The site is completely surrounded by development, so it is unlikely this parcel can ever be occupied by SBKR via natural recruitment. Although Cable Creek is just to the north and there is connectivity to this creek, this part of the creek is channelized with concrete and regularly maintained for flood control purposes. It is unlikely Cable Creek can function as a wildlife corridor for small mammals such as kangaroo rats or pocket mice.

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 trapping studies.

Jason Berkley

August 1, 2022
References


Kenagy, G. J. 1973a. Daily and seasonal patterns of activity and energetics in a heteromyid rodent


Attachment A: Site Photos

Picture 1. Looking Northwest at Trapping Area

Picture 2. Looking East at Buckwheat Scrub Habitat

Picture 3. Looking Northeast at Trapping Area
Good Morning Stacey,

Please find attached the 15-day notice to conduct SBKR trapping at the Hallmark Parkway Site owned by Vulcan Materials in San Bernardino. Let me know if you have any comments or concerns.

Jason Berkley

Jason Berkley
Wildlife Biologist
Cereus Environmental
13480 Norton Ave
Chino, CA 91710
P: 714-493-1120
F: 909-464-1830

jberkley@cereusenvironmental.com
July 5, 2022

Ms. Stacey Love
U.S. Fish and Wildlife Service, Carlsbad Field Office
2177 Salk Road, Suite 250
Carlsbad, California 93008

Subject: Notice to perform San Bernardino Kangaroo Rat presence/absence surveys on the Hallmark Parkway Property for the Vulcan Materials in San Bernardino, California.

Dear Stacey,

Vulcan Materials manages/owns the Hallmark Parkway site in the Industrial Area of San Bernardino. This site supports habitat capable of supporting the federally endangered San Bernardino kangaroo rat (*Dipodomys merriami parvus*, SBKR). I have been contracted to conduct focused protocol presence/absence surveys.

The survey area is located in Western San Bernardino County, in the northwestern part of The City of San Bernardino. The site is north of Hallmark Parkway and south of Highway 215 (Riverside Freeway) 5. The confluence of Lylte Creek and Cajon Wash is 1-mile to the south with Cajon Boulevard/Historic Route 66 immediately also to the south. The project site is located in an unsectioned portion of Township 1 North, Range 5 West of the San Bernadino North, CA 7.5 minute USGS quadrangle.

Surveys will be in accordance with U.S. Fish and Wildlife (USFWS) protocol. Survey methodology will employ standard and accepted scientific procedures and will include one trapping bout, a total of 5 nights, using up to 150 traps per night. All surveys will be conducted using 12” and 9” Sherman live traps. Each trap will be set and baited at sunset and checked at midnight and sunrise. All species captured will be identified, sexed, aged, measured, weighed, and mapped.

I would like to start the trapping as soon as the 15-day window is complete depending on moon phase and temperatures.

If you have any questions or comments regarding this letter, please contact me directly at (714) 493-1120. I appreciate your attention to this notification.

Sincerely,

Jason Berkley
TE-009015-5
Attachment E

Regulations
Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

**Federal Regulations**

**Endangered Species Act of 1973**

As defined within the Federal Endangered Species Act (FESA) of 1973, an endangered species is any animal or plant listed by regulation as being in danger of extinction throughout all or a significant portion of its geographical range. A threatened species is any animal or plant that is likely to become endangered within the foreseeable future throughout all or a significant portion of its geographical range. Without a special permit, federal law prohibits the “take” of any individuals or habitat of federally listed species. Under Section 9 of the FESA, take is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.” The term “harm” has been clarified to include “any act which actually kills or injures fish or wildlife, and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.” The presence of any federally threatened or endangered species within a project area generally imposes severe constraints on development, particularly if development would result in “take” of the species or its habitat. Under the regulations of the FESA, the United States Fish and Wildlife Service (USFWS) may authorize “take” when it is incidental to, but not the purpose of, an otherwise lawful act.

Critical Habitat is designated for the survival and recovery of species listed as threatened or endangered under the ESA. Critical Habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an FESA listed species and which may require special management considerations or protection. Critical Habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the ESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the U.S. Army Corps of Engineers (Corps)).

If the USFWS determines that Critical Habitat will be adversely modified or destroyed from a proposed action, the USFWS will develop reasonable and prudent alternatives in cooperation with the federal institution to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy Critical Habitat, USFWS will include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.
**Migratory Bird Treaty Act**

Pursuant to the Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) of 1918, as amended in 1972, federal law prohibits the taking of migratory birds or their nests or eggs (16 USC 703; 50 CFR 10, 21). The statute states:

> Unless and except as permitted by regulations made as hereinafter provided in this subchapter, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill...any migratory bird, any part, nest, or egg of any such bird...included in the terms of the [Migratory Bird] conventions...

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered “take.” This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

**State Regulations**

**California Environmental Quality Act (CEQA)**

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State lead agencies. If a project is determined to be subject to CEQA, the lead agency will be required to conduct an Initial Study (IS); if the IS determines that the project may have significant impacts on the environment, the lead agency will subsequently be required to write an Environmental Impact Report (EIR). A finding of non-significant effects will require either a Negative Declaration or a Mitigated Negative Declaration instead of an EIR. Section 15380 of the CEQA Guidelines independently defines “endangered” and “rare” species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, “endangered” species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while “rare” species are defined as those who are in such low numbers that they could become endangered if their environment worsens.

**California Endangered Species Act (CESA)**

In addition to federal laws, the state of California implements the CESA which is enforced by CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.
State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in “take” of individuals (defined in CESA as; “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) are regulated by CDFW. Habitat degradation or modification is not included in the definition of “take” under CESA. Nonetheless, CDFW has interpreted “take” to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

**Fish and Game Code**

Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds’ nest or any birds’ eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

**Native Plant Protection Act**

Sections 1900–1913 of the Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California. The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at
least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

**California Native Plant Society Rare and Endangered Plant Species**

Vascular plants listed as rare or endangered by the CNPS, but which have no designated status under FESA or CESA are defined as follows:

**California Rare Plant Rank**

1A- Plants Presumed Extirpated in California and either Rare or Extinct Elsewhere

1B- Plants Rare, Threatened, or Endangered in California and Elsewhere

2A- Plants Presumed Extirpated in California, But More Common Elsewhere

2B- Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3- Plants about Which More Information is Needed - A Review List

4- Plants of Limited Distribution - A Watch List

**Threat Ranks**

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

.2- Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3- Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).
There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates activities pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the CDFG regulates activities under the Fish and Game Code Section 1600-1616, and the Regional Board regulates activities pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

**Federal Regulations**

**Section 404 of the Clean Water Act**

Since 1972, the Corps and U.S. Environmental Protection Agency (EPA) have jointly regulated the filling of “waters of the U.S.,” including wetlands, pursuant to Section 404 of the Clean Water Act (CWA). The Corps has regulatory authority over the discharge of dredged or fill material into the waters of the United States under Section 404 of the CWA. The Corps and EPA define “fill material” to include any “material placed in waters of the United States where the material has the effect of: (i) replacing any portion of a water of the United States with dry land; or (ii) changing the bottom elevation of any portion of the waters of the United States.” Examples include, but are not limited to, sand, rock, clay, construction debris, wood chips, and “materials used to create any structure or infrastructure in the waters of the United States.” In order to further define the scope of waters protected under the CWA, the Corps and EPA published the Clean Water Rule on June 29, 2015. Pursuant to the Clean Water Rule, the term “waters of the United States” is defined as follows:

(i) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

(ii) All interstate waters, including interstate wetlands.\(^1\)

(iii) The territorial seas.

(iv) All impoundments of waters otherwise defined as waters of the United States under the definition.

(v) All tributaries\(^2\) of waters identified in paragraphs (i) through (iii) mentioned above.

(vi) All waters adjacent\(^3\) to a water identified in paragraphs (i) through (v) mentioned above, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

---

\(^1\) The term *wetlands* means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

\(^2\) The terms *tributary* and *tributaries* each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (iv) mentioned above), to a water identified in paragraphs (i) through (iii) mentioned above, that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark.

\(^3\) The term *adjacent* means bordering, contiguous, or neighboring a water identified in paragraphs (i) through (v) mentioned above, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like.
(vii) All prairie potholes, Carolina bays and Delmarva bays, Pocosins, western vernal pools, Texas coastal prairie wetlands, where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (i) through (iii) mentioned above.

(viii) All waters located within the 100-year floodplain of a water identified in paragraphs (i) through (iii) mentioned above and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (i) through (v) mentioned above, where they are determined on a case-specific basis to have a significant nexus to a waters identified in paragraphs (i) through (iii) mentioned above.

The following features are not defined as “waters of the United States” even when they meet the terms of paragraphs (iv) through (viii) mentioned above:

(i) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act.

(ii) Prior converted cropland.

(iii) The following ditches:
   
   (A) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
   
   (B) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
   
   (C) Ditches that do not flow, either directly or through another water, into a water of the United States as identified in paragraphs (i) through (iii) of the previous section.

(iv) The following features:

   (A) Artificially irrigated areas that would revert to dry land should application of water to that area cease;
   
   (B) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;
   
   (C) Artificial reflecting pools or swimming pools created in dry land;
   
   (D) Small ornamental waters created in dry land;
   
   (E) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;
   
   (F) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of a tributary, non-wetland swales, and lawfully constructed grassed waterways; and
   
   (G) Puddles.

(v) Groundwater, including groundwater drained through subsurface drainage systems.

(vi) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.
(vii) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

**Section 401 of the Clean Water Act**

Pursuant to Section 401 of the CWA, any applicant for a federal license or permit to conduct any activity which may result in any discharge to waters of the United States must provide certification from the State or Indian tribe in which the discharge originates. This certification provides for the protection of the physical, chemical, and biological integrity of waters, addresses impacts to water quality that may result from issuance of federal permits, and helps insure that federal actions will not violate water quality standards of the State or Indian tribe. In California, there are nine Regional Water Quality Control Boards (Regional Board) that issue or deny certification for discharges to waters of the United States and waters of the State, including wetlands, within their geographical jurisdiction. The State Water Resources Control Board assumed this responsibility when a project has the potential to result in the discharge to waters within multiple Regional Boards.

**State Regulations**

*Fish and Game Code*

Fish and Game Code Sections 1600 et. seq. establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Fish and Game Code Section 1602 requires any person, state, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

1. substantially obstruct or divert the natural flow of a river, stream, or lake;
2. substantially change or use any material from the bed, channel, or bank of a river, stream, or lake;
3. deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW’s regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top of bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.
**Porter Cologne Act**

The California *Porter-Cologne Water Quality Control Act* gives the State very broad authority to regulate waters of the State, which are defined as any surface water or groundwater, including saline waters. The Porter-Cologne Act has become an important tool in the post SWANCC and Rapanos regulatory environment, with respect to the state’s authority over isolated and insignificant waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file a Report of Waste Discharge in the event that there is no Section 404/401 nexus. Although “waste” is partially defined as any waste substance associated with human habitation, the Regional Board also interprets this to include fill discharged into water bodies.