

February 20, 2020

ESC-31

Ms. Angela Morrow, P.E.  
Deputy Director of Utilities/ Construction and Engineering  
City of Escondido  
Utilities Engineering Office  
1521 S. Hale Avenue  
Escondido, CA 92029

**Subject:            Biological Resources Report for the Escondido Membrane Filtration Reverse Osmosis (MFRO) Facility Project**

Dear Ms. Morrow:

This report documents the results of a biological resources technical study completed by HELIX Environmental Planning, Inc. (HELIX) for the Escondido Membrane Filtration Reverse Osmosis (MFRO) Facility Project (project) located within the City of Escondido, San Diego County, California (Figure 1, *Regional Location*). The City of Escondido Utilities (City) plans to construct a MFRO Facility to provide water for agricultural use. This facility would provide advanced treatment for Title 22 quality reuse water produced at the Hale Avenue Resources Recovery Facility (HARRF).

This report is intended to summarize the existing biological resources within the project site and provide an analysis of the proposed impacts in accordance with the California Environmental Quality Act (CEQA) and applicable federal, state, and local policy. The project is seeking funding from the Drinking Water State Revolving Fund (SRF) for a portion of the construction work. A federal policy conformance and cross-cutter analysis is also included to facilitate SRF review by the State Water Resources Control Board (SWRCB).

## PROJECT DESCRIPTION AND LOCATION

The City proposes to construct and operate the MFRO Facility to provide water for agricultural use. The facility would utilize membrane filtration (MF) (i.e., microfiltration or ultrafiltration membranes) and reverse osmosis (RO) technologies sized for a total production capacity of 2.0 million gallons per day (mgd). High quality treated water would be blended with Title 22 recycled water within an on-site blend tank. The water would then be sent through the existing non-potable reuse water/agriculture pipelines and distributed to growers.

The proposed project would consist of a commercial/industrial-like building (MFRO Facility), which would include partitioned areas to house the MFRO equipment, pumps, chemical storage, electrical rooms, control rooms, and a meeting room that includes a restroom, kitchenette, and janitorial closet. The proposed MFRO product water pipeline alignment within West Washington Avenue is approximately one mile long and would connect via a pipeline in Waverly Place to the existing 24-inch recycled water pipeline on the north side of Escondido Creek. The product water pipeline would primarily reside within the City's right of way (ROW) with a short segment encroaching into Caltrans ROW.

Construction of the MFRO facility would displace existing facilities used by the Escondido Public Works and Utilities/Water Departments for vector truck decanting and material storage. These facilities would be relocated within the site, as shown on Figure 3. The decanting facility would be approximately 4,800 square feet in size, with four dump/wash bays and two concrete pads for dumpsters. The material storage bins are open loading bins which house material used for City Public Works and Utilities Water operations. The size of the relocated concrete pad is approximately 12,250 square feet.

It is anticipated that soil import/export will be limited via a balanced grading plan. A maximum of twenty-four daily truck trips would be a reasonable limitation importing/exporting soil. Soil hauling would occur over approximately one month. Any disposal of the excavated materials would be disposed of at an appropriate permitted disposal site depending on the type of material. On-site soils are anticipated as suitable for fill.

The project site is generally located in the City of Escondido in northcentral San Diego County (Figure 1). It is depicted on the Escondido, California U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle, within an unsectioned portion of the Rincon del Diablo Land Grant (Figure 2, *Project Location [USGS Topography]*). More specifically, the MFRO facility and recycled water, sewer, and brine pipeline connections are located north of the SPRINTER rail line, south of State Route (SR) 78, east of Interstate (I-) 15, and west of N. Spruce Street and the Reidy Creek flood control channel, at 901 West Washington Avenue (Figure 3, *Project Location [Aerial Photograph]*). The MFRO product water pipeline alignment occurs along West Washington Avenue between the MFRO facility and Waverly Place, and along Waverly Place. This pipeline crosses the Reidy Creek flood control channel and terminates at the edge of Escondido Creek. The MFRO facility occurs with an approximately 10.3-acre parcel owned by the City of Escondido (City). The APN number is 232-090-7200.

The site is located outside of the Coastal Zone and outside of Critical Habitat designated by the U.S. Fish and Wildlife Service (USFWS; Figure 4, *USFWS Critical Habitat*). The MFRO facility site plan is provided as Figure 5, *Site Plan*.

## METHODS

### Literature Review

Prior to conducting the general biological survey, HELIX performed an updated search of the California Natural Diversity Database (CNDDDB; California Department of Fish and Wildlife [CDFW] 2019a-b, 2018), U.S. Fish and Wildlife Service (USFWS) Carlsbad Fish and Wildlife Offices Species Status Lists (U.S. Fish and Wildlife Service [USFWS 2019a]), USFWS Critical Habitat Portal (USFWS 2019b), USFWS National Wetlands Inventory (USFWS 2019c), USFWS Information for Planning and Conservation (IPaC), and

SanBIOS, database applications to obtain information regarding sensitive biological resources known to occur within the vicinity of the study area. The IPaC report was re-run in October, following changes to the project area.

## General Biological Survey

A general biological survey of the study area, which encompassed the project site and immediate vicinity, was completed by HELIX biologist Karl Osmundson on January 28, 2019. The survey focused on inventorying existing vegetation communities; qualifying habitat suitability and potential for occurrence of sensitive species, including federally-listed species protected under the Endangered Species Act; preliminarily identifying potential wetlands and other potential jurisdictional waters, including waters of the U.S. protected under the Clean Water Act (CWA); and identifying other sensitive biological resources, such as potential nesting habitat for bird species protected under the Migratory Bird Treaty Act (MBTA). The study area was surveyed with the aid of binoculars and observed or detected plant and animal species were recorded in field notes. Animal identifications were made in the field by visual observation or detection of calls, burrows, tracks, scat, and other animal sign. Plant identifications were made in the field. Representative photos were taken and are included as Attachment A.

## Preliminary Jurisdictional Delineation

HELIX completed a preliminary jurisdictional delineation concurrent with the general biological survey. The preliminary delineation focused on assessing ordinary high-water mark and other hydrology indicators, riparian and wetland vegetation, surface soils, topography, and other data, but did not include excavation of soil pits and establishment of wetland sampling points, with the intent to establish conservative limits of potential jurisdiction.

Prior to beginning fieldwork, aerial photographs (1"= 100' scale), topographic maps and data (1"= 100' scale), and National Wetlands Inventory maps were reviewed to assist in determining the location of potential jurisdictional areas in the project site. The field delineations were conducted to identify and map potential water and wetland resources that could be subject to U.S. Army Corps of Engineers (USACE) jurisdiction pursuant to Section 404 of the CWA (33 USC 1344), RWQCB jurisdiction pursuant to CWA Section 401 or State Porter-Cologne Water Quality Control Act, and CDFW jurisdiction pursuant to Sections 1600 et seq. of the California Fish and Game Code (CFG Code). Areas generally characterized by depressions, drainage features, and riparian and wetland vegetation were evaluated.

## Survey Limitations

The lists of species identified are not necessarily comprehensive accounts of all species that occur on the site, as species that are nocturnal, secretive, or seasonally restricted may not have been observed.

## Nomenclature

Nomenclature for this report follows Baldwin et al. (2012) for Latin names of plants, and Holland (1986) and Oberbauer (2008) for vegetation communities. Animal nomenclature follows North American Butterfly Association (2017) for butterflies, Center for North American Herpetology (Taggart 2015) for reptiles and amphibians, American Ornithological Society (2018) for birds, and Bradley et al. (2017) for mammals. Sensitive plant and animal status is from the CDFW's CNDDB (2019a-b, 2018).

## ENVIRONMENTAL SETTING

### Existing Conditions

#### Regional Context

The project site is located in the heart of a developed industrial district within the City (Figure 3). The site does not occur in or near lands identified for conservation or preserve configuration in the region. The only biological resources located nearby the site that are of local importance include the Reidy Creek flood control channel and Escondido Creek. Both reaches are concrete lined, but serve as important flood conveyance features for the local area, conveying storm water to natural downstream reaches of Escondido Creek that support regionally-important biological resources.

#### Disturbance

The project site is currently developed with City field offices, a metal storage building, and an asphalt paved parking lot. The remainder of the site is used by the City Public Works and Utilities Departments for storage and heavy equipment training, except for a location on the west side that is used by EDCO, a waste disposal corporation, for the storage of empty roll-off bins. The entirety of the site is developed and highly disturbed.

#### Topography and Soils

The project site is flat, with an elevation of approximately 656 feet above mean sea level (AMSL) to 644 AMSL. The MFRO facility, including pipeline connections, are mapped as Visalia sandy loam, 2 to 5 percent slopes (USDA 2017). The Visalia series of soils is characterized by moderately well-drained, very deep sandy loams and are formed from granitic alluvial deposits (Bowman 1973). The pipeline alignment includes Visalia sandy loam, 2 to 5 percent slopes; Placentia sandy loam, 2 to 9 percent slopes, warm MAAT, MLRA 19; and Ramona sandy loam, 2 to 5 percent slopes. The Placentia series is characterized by well-drained, sandy loam, clay and heavy sandy clay loam, and gravelly sandy loam horizons that formed in alluvium from granite and other rocks of similar composition and texture. The Ramona series is characterized by well-drained, very deep sandy loams that have a sandy clay loam subsoil and are formed in granitic alluvium. The surface soils of the project site show sign of significant disturbance and alteration from their native state.

#### Vegetation Communities/Habitat Types

One land cover or habitat type encompasses the project site: developed land (Figure 6, *Vegetation/Project Impacts*). Developed or urban/developed includes land that has been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. Developed land is characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation. Areas where no natural land is evident due to a large amount of debris or other materials being placed upon it may also be considered developed.

The MFRO facility site includes structures, paved parking areas, graveled roads, compacted bare earth used as roadways and for heavy equipment training, materials storage areas, and stockpiles. Sparse trees occur along the edges of the MFRO facility site, including blue gum (*Eucalyptus globulus*), ribbon

gum (*Eucalyptus viminalis*), queen palm (*Syagrus romanzoffiana*), and acacia (*Acacia* sp.). Additional non-native ornamental landscaping occurs within portions of West Washington Avenue where the proposed pipeline will be installed, and along the proposed pipeline connections. Approximately 13.0 acres of developed land characterized by these elements occur within the project site.

## Flora

HELIX identified a total of eight plant species in the project parcel, all of which are non-native species (Attachment B). Additional non-native ornamental landscaping occurs within portions of West Washington Avenue where the proposed pipeline will be installed.

## Fauna

A total of four animal species were observed or otherwise detected in the project site during the biological survey, consisting of three birds and one mammal species (Attachment C).

## Sensitive Biological Resources

### Sensitive Natural Communities

Sensitive natural communities include land that supports unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants as defined by Section 15380 of the CEQA Guidelines. Developed land does not meet the definition of sensitive. No sensitive natural communities occur on-site.

### Special-Status Plant and Animal Species

#### Special-Status Plant Species

Special-status plant species are those listed as federally threatened or endangered by the USFWS; State listed as threatened or endangered or considered sensitive by the CDFW; and/or are California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) List 1A, 1B, or 2 species, as recognized in the CNPS Inventory of Rare and Endangered Vascular Plants of California and consistent with the CEQA Guidelines. No Special-status plant species were observed on-site.

Special status plant species evaluated for their potential to occur in the study area are listed in Attachment D. There are no special status plant species with the potential to occur on-site due to lack of suitable habitat and regular disturbance.

#### Special-Status Animal Species

Special-status animal species are those listed as threatened or endangered, proposed for listing, or candidates for listing by the USFWS and considered sensitive animals by the CDFW. No special-status animal species were observed on the project site during the general biological survey.

Special status animal species evaluated for their potential to occur in the study area are listed in Attachment E. There are no special status animal species with the potential to occur on-site due to lack of suitable habitat and regular disturbance.

### Nesting Birds and Raptors

Limited portions of the project site contain marginal nesting habitat (e.g., trees, shrubs, structures) for several common bird species, including raptors, protected under the MBTA and CFG Code.

### Jurisdictional Waters and Wetlands

The project site is characterized entirely by uplands that lack potential jurisdictional waters and wetlands.

### Wildlife Corridors and Linkages

Wildlife corridors connect isolated habitat and allow movement or dispersal of plant materials and animals. Local wildlife corridors allow access to resources such as food, water, and shelter within the framework of the wildlife's daily routine and life history. For example, animals can use these corridors to travel between their riparian breeding habitats and their upland burrowing habitats. Regional corridors provide these functions over a larger scale and link two or more large habitat areas, allowing the dispersal of organisms and the consequent mixing of genes between populations. A corridor is a specific route that is used for the movement and migration of species; it may be different from a linkage in that it represents a smaller or narrower avenue for movement. A linkage is an area of land that supports or contributes to the long-term movement of animals and genetic exchange by providing live-in habitat that connects to other habitat areas. Many linkages occur as stepping-stone linkages that are made up of a fragmented archipelago arrangement of habitat over a linear distance.

The project site does not by itself serve as or contribute to any known or potential corridors or linkages.

## APPLICABLE REGULATIONS

Based on the findings of this report, activities affecting the biological resources determined to exist or have the potential to exist within the project site could be subject to the federal, state, and local regulations discussed below.

### Federal

#### Federal Endangered Species Act

The Federal Endangered Species Act (ESA) (7 United States Code [USC] 136; 16 USC 460 et seq. [1973]) extends legal protection to plants and animals, listed as endangered or threatened by the USFWS and gives authorization to the USFWS to review proposed federal actions to assess potential impacts to species listed as endangered or threatened. The ESA generally prohibits the "taking" of a federally listed species and adverse modification of designated critical habitat.

"Taking" of a threatened or endangered species is deemed to occur when an intentional or negligent act or omission results in any of the following actions: "to harass, harm, pursue, hunt, shoot, kill, trap, capture, or collect, or attempt to engage in any such conduct." Such acts may include significant habitat modification or degradation if it results in death or injury. Likewise, import, export, interstate, and foreign commerce of listed species are all prohibited. Sections 7 and 10 of the ESA permit "incidental



take” of a listed species via a federal or private action, respectively, through formal consultation with the USFWS. In lieu of a separate Section 10a Permit, an applicant may be included in a local Habitat Conservation Plan.

### Migratory Bird Treaty Act

All migratory bird species that are native to the United States or its territories are protected under the federal MBTA as amended under the Migratory Bird Treaty Reform Act of 2004 (Federal Record [FR] Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, USFWS places restrictions on disturbances allowed near active raptor nests.

### Clean Water Act

The USACE regulates impacts to waters of the U.S. under Section 404 of the Clean Water Act (CWA; 33 USC 401 et seq.; 33 USC 1344; USC 1413; and Department of Defense, Department of the Army, Corps of Engineers 33 Code of Federal Regulations [CFR] Part 323). The purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all waters of the U.S. A federal CWA Section 404 Permit would be required for a project to place fill in waters of the U.S. Projects impacting waters of the U.S. can be permitted on an individual basis or be covered under one of several approved nationwide permits. Individual permits are assessed individually based on the type of action, amount of fill, etc. Individual permits typically require substantial time (often longer than one year) to review and approve, while nationwide permits are pre-approved if a project meets appropriate conditions. Utility line activities may be authorized under CWA Section 404 Nationwide Permit (NWP) 12, which does not place a limit on impacts to linear feet of waters of the U.S. A CWA Section 401 Water Quality Certification administered by the RWQCB must be issued prior to issuance of a Section 404 Permit.

## State

### California Environmental Quality Act

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

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in ESA and the section of the CFG Code dealing with rare or endangered plants and animals. CEQA Guideline Section 15380(d) allows a public agency to undertake a review to determine whether a significant effect would occur on species that have not yet been listed by either the USFWS or CDFW (i.e., species of concern). Thus, if warranted under special circumstances, CEQA provides an agency with the ability to protect a species from a project’s potential impacts until the respective government agencies have an opportunity to designate the species as formally protected.

Pursuant to the requirements of CEQA, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the project area and determine whether the proposed project will have a potentially significant impact on such species.

### California Fish and Game Code

The CFG Code regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, as well as natural resources such as lakes and streams. Sections 1600 et seq. of CFG Code includes definitions and provisions for the protection of lake and streambed resources. The CDFW requires notification for any activity that could result in an alteration of lake or streambed resources. Pursuant to CFG Code Section 3503, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the code or any regulation made pursuant thereto. Raptors (birds of prey) and owls and their active nests are protected by CFG Code Section 3503.5, which states that it is unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird unless authorized by the CDFW. In common practice, CDFW places timing restrictions on the clearing of potential nesting habitat (e.g., vegetation), as well as restrictions on disturbances allowed near active raptor nests.

## SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

This section provides a project-level biological resources impact analysis for the proposed project in support of environmental review. The issues addressed in this section are derived from Appendix G of the State CEQA Guidelines. Mitigation, monitoring, and reporting requirements to eliminate or reduce project impacts to a less than significant level are also provided in this section.

### Issue 1: Special-Status Species

*Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?*

#### Issue 1 Impact Analysis

Less than Significant Impact with Mitigation. Project construction could result in potential significant impacts on nesting birds protected under the federal MBTA and CFG Code; however, the impacts would be reduced to less than significant levels with the implementation of proposed mitigation, as described in further detail below. The project would have no impact on any other special-status plant and animal species due to the lack of suitable habitat on the site and regular disturbance.

#### *Nesting Birds*

Trees, shrubs, and other vegetation that provide suitable nesting habitat for common birds, including raptors, protected under the MBTA and CFG Code are present within and in the immediate vicinity of the potential direct disturbance area for the project, including staging areas. Construction of the proposed project could result in the removal or trimming of trees and other vegetation during the general bird nesting season (January 15 through September 15) and, therefore, could result in impacts



to nesting birds in violation of the MBTA and CFG Code. Direct impacts could occur as a result of removal of vegetation supporting an active nest. Indirect effects could occur as a result of construction noise in the immediate vicinity of undeveloped areas supporting an active bird nest, such that the disturbance results in nest abandonment or nest failure. Impacts would be considered significant. Implementation of mitigation measure Bio-1 would reduce potentially significant impacts on nesting birds and raptors to less than significant levels.

## Issue 1 Mitigation Measures

### Mitigation

**Bio-1      **Avoidance of Nesting Birds and Raptors.**** To prevent direct impacts to nesting birds, including raptors, protected under the federal MBTA and CFG Code, the City shall enforce the following:

Project activities requiring the removal and/or trimming of vegetation suitable for nesting birds shall occur outside of the general bird breeding season (January 15 to September 15) to the extent feasible. If the activities cannot avoid the general bird breeding season, a qualified biologist shall be retained to conduct a pre-activity nesting bird survey within seven days prior to the activities to confirm the presence or absence of active bird nests. If no active bird nests are found by the qualified biologist, then the activities shall proceed with the reassurance that no violation to the MBTA and CFG Code would occur. If an active bird nest is found by the qualified biologist, then vegetation removal and/or trimming activities at the nest location shall not be allowed to occur until the qualified biologist has determined that the nest is no longer active. Avoidance buffers should start at 300 feet for passerine birds and 500 feet for raptors. However, buffers could be reduced at the discretion of the qualified biologist depending on the bird species and project activities required in the vicinity of the active nest

## Issue 2: Sensitive Natural Communities

*Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?*

### Issue 2 Impact Analysis

**No Impact.** The project would have no impact on riparian habitat and sensitive natural communities due to the fact that none occur on the project site. Direct impacts are restricted to existing developed land. If not properly contained, construction activities could result in adverse inadvertent and indirect impacts on resources located immediately adjacent to work areas, including the Reidy Creek and Escondido Creek flood control channels. As a standard construction practice and regulatory requirement, the City will implement Best Management Practices (BMPs) from the required Stormwater Pollution Prevention Plan (SWPPP) for the project, which may include:

- Installing and maintaining sediment and erosion control measures;
- Employing appropriate standard spill prevention practices and clean-up materials;

- Maintaining the project area free of trash and debris;
- Maintaining effective control of fugitive dust; and
- Properly storing, handling, and disposing of toxins and pollutants including waste materials.

Thus, with the required implementation of BMPs and the project's SWPPP, there no indirect impacts to off-site sensitive resources would occur.

#### Issue 2 Mitigation Measures

No mitigation is required.

#### Issue 3: Wetlands

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

#### Issue 3 Impact Analysis

No Impact. The project would have no impact on federally protected wetlands given that that none occurs on the project site. As described in Issue 2, the City will implement BMPs during construction, which would prevent any impacts to off-site federally protected wetlands (i.e., within the Reidy Creek flood control channel crossed by the MFRO product water pipeline alignment and downstream of the project, and Escondido Creek near the end of the MFRO product water pipeline alignment).

#### Issue 3 Mitigation Measures

No mitigation is required.

#### Issue 4: Wildlife Movement and Nursery Sites

*Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?*

#### Issue 4 Impact Analysis

Less than Significant Impact. The project site is not expected to function as a wildlife corridor in its current condition, although birds may use trees on-site. The project site is developed, surrounded by fencing, and within a developed industrial district. Impacts to wildlife movement and nursery sites would be less than significant, and no mitigation is required.

#### Issue 4 Mitigation Measures

No mitigation is required.

## Issue 5: Local Policies and Ordinances

*Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

### Issue 5 Impact Analysis

No Impact. The project would not conflict with any local policies or ordinances protecting biological resources. The removal of mature trees would be replaced in conformance with the City's Grading and Landscape Ordinances (Articles 55 and 66). The project would not conflict with any City policies or ordinances, and no impact would occur.

### Issue 5 Mitigation Measures

No mitigation is required.

## Issue 6: Adopted Conservation Plans

*Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?*

### Issue 6 Impact Analysis

No Impact. The City is not a participating entity of any adopted habitat conservation plans for the region, such as the North County Multiple Habitat Conservation Program (MHCP) or Multiple Species Conservation Program (MSCP); therefore, the project is not subject to any such plans and would have no conflicts.

### Issue 6 Mitigation Measures

No mitigation is required.

## FEDERAL CONFORMANCE ANALYSIS FOR BIOLOGICAL RESOURCES ISSUES

### ISSUE 1: Federal Endangered Species Act, Section 7

*Does the project involve any direct effects from construction activities, or indirect effects such as growth inducement that may affect federally listed threatened or endangered species or their critical habitat that are known, or have a potential, to occur on-site, in the surrounding area, or in the service area?*

No adverse effect. The proposed disturbance area does not contain any critical habitat for federally listed species. The project site does not contain and is not adjacent to undeveloped areas characterized by native habitat that could support animal species listed under the federal ESA. The portions of the Reidy Creek and Escondido Creek flood control channels near the project site are concrete lined and lack suitable habitat for listed species. No direct or indirect effects to federally listed animal species are

expected. Further discussion is provided below regarding potential effects of the proposed action on federally listed species.

### Federally Listed Plant Species

No adverse effect. No federally listed plant species were found during the project survey, and none have a high potential to occur. The project occurs in developed land currently being used as office space, storage, and training. The project site lacks suitable habitat, soils, and/or hydrology for listed plant species. Therefore, no direct or indirect effects on federally listed plant species are anticipated to occur as a result of proposed project.

The following federally listed endangered (FE) and federally listed threatened (FT) plant species were analyzed for their potential to occur:

- Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*); FE
- Encinitas baccharis (*Baccharis vanessae*); FT
- Nevin's barberry (*Berberis nevinii*); FE
- Orcutt's spineflower (*Chorizanthe orcuttiana*); FE
- San Diego ambrosia (*Ambrosia pumila*); FE
- San Diego button-celery (*Eryngium aristulatum* var. *parishii*); FE
- San Diego thorn-mint (*Acanthomintha ilicifolia*); FT
- spreading navarretia (*Navarretia fossalis*); FT
- thread-leaved brodiaea (*Brodiaea filifolia*); FT
- willowy monardella (*Monardella viminea*); FE

### Federally Listed Animal Species

No adverse effect. No federally listed plant species were observed during the project survey, and none have a high potential to occur. The following federally listed endangered (FE) and federally listed threatened (FT) animal species were analyzed for their potential to occur:

- Laguna Mountains skipper (*Pyrgus ruralis lagunae*); FE
- Quino checkerspot butterfly (*Euphydryas editha quino*); FE
- Riverside fairy shrimp (*Streptocephalus woottoni*); FE
- San Diego fairy shrimp (*Branchinecta sandiegonensis*); FE
- California least tern (*Sternula antillarum browni*); FE
- Coastal California gnatcatcher (*Poliophtila californica californica*); FT
- Least Bell's vireo (*Vireo bellii pusillus*); FE
- Light-footed Ridgway's rail (*Rallus obsoletus levipe*); FE

- southwestern willow flycatcher (*Empidonax traillii extimus*); FE
- western snowy plover (*Charadrius alexandrinus nivosus*); FT
- Pacific pocket mouse (*Perognathus longimembris pacificus*); FE
- Stephens' kangaroo rat (*Dipodomys stephensi*); FE
- Southern mountain yellow-legged frog (*Rana muscosa*); FE

The project site and surrounding areas lacks suitable habitat for these species. Thus, the project would not directly or indirectly adversely affect federally listed species.

## **ISSUE 2: Magnuson-Stevens Fishery Conservation and Management Act, Essential Fish Habitat**

*Does the project involve any direct effects from construction activities, or indirect effects such as growth inducement that may adversely affect essential fish habitat?*

No adverse effect. The proposed project would be constructed within developed upland areas that lack marine resources and Essential Fish Habitat regulated under the Magnuson-Stevens Fishery Conservation and Management Act. Therefore, the proposed project would not adversely affect Essential Fish Habitat and would be in conformance with the Magnuson-Stevens Fishery Conservation and Management Act.

## **ISSUE 3: Coastal Zone Management Act**

*Is any portion of the project site located within the coastal zone?*

No adverse effect. No portion of the project site is located within the coastal zone. Therefore, the proposed project would have no effect on resources protected under the Coastal Zone Management Act.

## **ISSUE 4: Migratory Bird Treaty Act**

*Will the project affect protected migratory birds that are known, or have a potential, to occur on-site, in the surrounding area, or in the service area?*

No adverse effect. Construction of the project may require the removal or trimming of trees and shrubs within developed areas during the general bird nesting season (January 15 through September 15) and/or raptor nesting season (January 15 through July 31), which could result in potential adverse effects on nesting birds and raptors in violation of the MBTA. Indirect effects could occur as a result of construction noise in the immediate vicinity of undeveloped areas supporting an active bird nest, such that the disturbance results in nest abandonment or nest failure.

With the implementation of mitigation measure Bio-1, the proposed action is not likely to adversely affect nesting birds, and the project would be in conformance with the MBTA.

## ISSUE 5: Protection of Wetlands

*Does any portion of the project boundaries contain areas that should be evaluated for wetland delineation or require a permit from the USACE?*

No adverse effect. No federally-protected wetlands occur within the project site. The Reidy Creek flood control channel occurs east of the MFRO facility and will be crossed by the MFRO product water pipeline alignment. The MFRO product water pipeline alignment connects with an existing recycled water pipeline along Escondido Creek. Potential runoff and increase in pollutants associated with construction activities near to the channel would be controlled and reduced through implementation of BMPs and other protective measures incorporated into the project as mandatory requirements for regulatory compliance and SWPPP implementation. With the incorporation of the protective measures, the project would not result in any adverse effects on federally protected wetlands and would be in conformance with the CWA.

## ISSUE 6: Wild and Scenic Rivers Act:

*Is any portion of the project located within a wild and scenic river?*

No adverse effect. None of the proposed project components are planned on or in the immediate vicinity of areas designated as Wild and Scenic River. Therefore, the proposed project would not adversely affect any areas designated as Wild and Scenic River and would be in conformance with the Wild and Scenic Rivers Act.

## CLOSING

We appreciate the opportunity to provide you with this letter report. Please do not hesitate to contact me at (619) 462-1515 or AmyM@helixepi.com, or Biology Group Manager Karl Osmundson at [KarlO@helixepi.com](mailto:KarlO@helixepi.com) if you have any questions or require further assistance.

Sincerely,



Amy Mattson  
Biologist



**Attachments:**

- Figure 1: Regional Location
- Figure 2: Project Location (USGS Topography)
- Figure 3: Project Location (Aerial Photograph)
- Figure 4: USFWS Critical Habitat
- Figure 5: Site Plan
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- Attachment A: Representative Site Photos
- Attachment B: Plant Species Observed
- Attachment C: Animal Species Observed or Detected
- Attachment D: Special Status Plant Species with Potential to Occur
- Attachment E: Special Status Animal Species with Potential to Occur
- Attachment F: IPaC Report

## REFERENCES

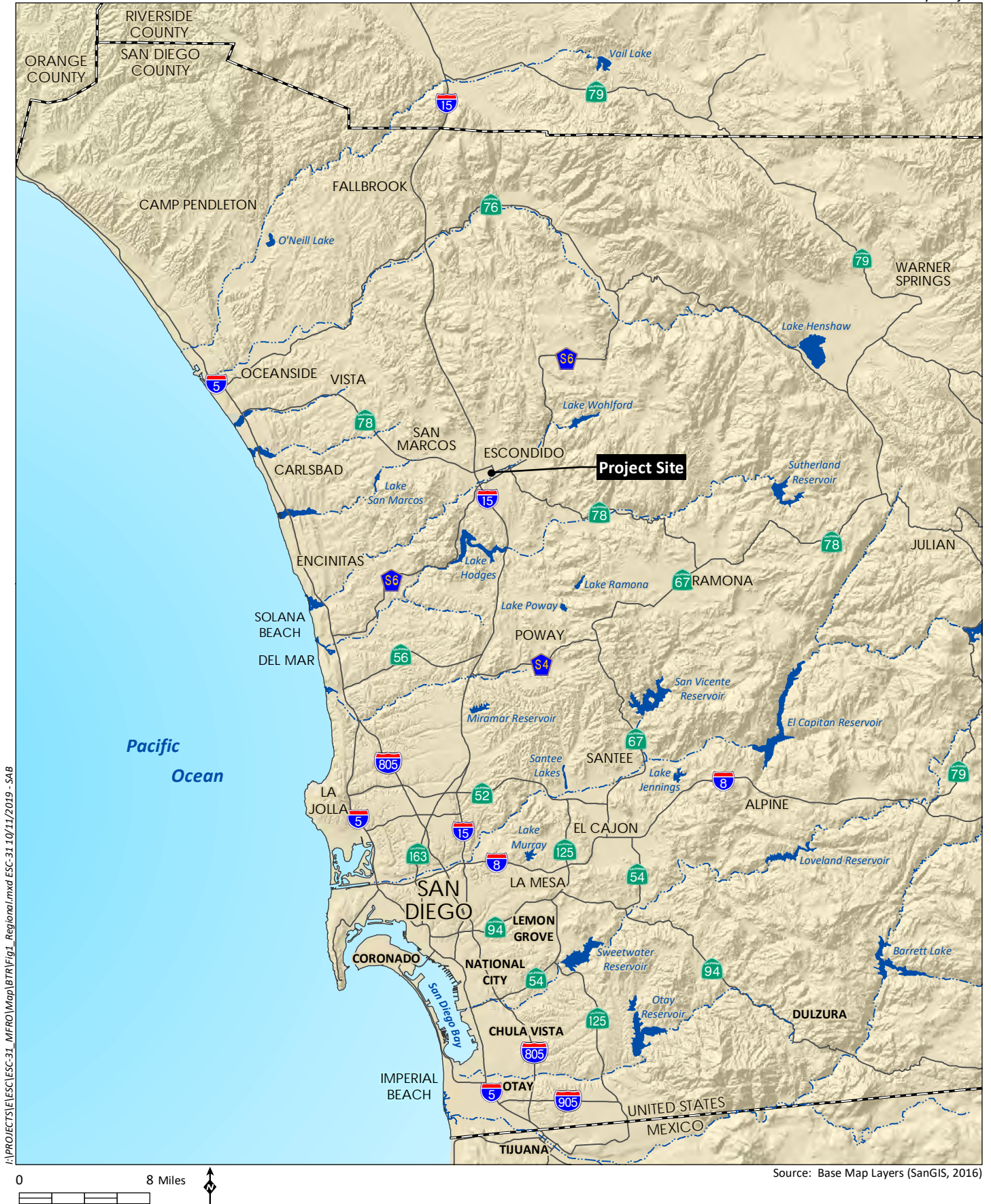
- American Ornithological Society (AOS). 2018. Check-list of North and Middle American Birds (online). Retrieved from: <http://checklist.aou.org/>.
- Baldwin, B.G., et al editors. 2012. The Jepson manual: vascular plants of California, second edition. University of California Press, Berkeley.
- Bradley, R.D., Ammerman, L.K., Baker, R.J., Bradley, L.C., Cook, J.A., Dowler, R.D. Jones, C., Schmidly, D.J., Stangi, F.B., Van De Bussche, R.A., Wursig, B. (2014). Revised checklist of North American mammals north of Mexico. Museum of Texas Tech University Occasional Papers. 327:1-27.
- California Department of Fish and Wildlife (CDFW). 2019a. California Natural Diversity Database (CNDDDB). RareFind (Internet) Data updated May 7.
- 2019b. CNDDDB. Special Vascular Plants, Bryophytes, and Lichens List. Retrieved from: <http://www.dfg.ca.gov/whdab/pdfs/TEPlants.pdf>. March.
2018. California Natural Diversity Database (CNDDDB). Special Animal List. November. Retrieved from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline>.
- Holland R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Nongame-Heritage Program, State of California, Department of Fish and Game, Sacramento. 156 pp.
- North American Butterfly Association. 2017. Checklist of North American Butterflies Occurring North of Mexico, Edition 2.3. Retrieved from: [https://www.naba.org/pubs/enames2\\_3.html](https://www.naba.org/pubs/enames2_3.html).
- Oberbauer, T. 2008. Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions. Revised from 1996 and 2005. July.
- San Diego Natural History Museum. 2019. Checklist of Mammal Species Recorded in San Diego County. Retrieved from: <https://www.sdnhm.org/science/birds-and-mammals/resources/>
- Simovich, M. 1990. Sensitive faunal elements of the vernal pools of Otay Ranch. A report to Michael Brandman and Associates. Prepared by Biology Department, University of San Diego. May 16.
- Taggart, T. W. 2015. The Center for North American Herpetology (CNAH): The Academic Portal to North American Herpetology. Retrieved from: <http://www.cnah.org/>.
- U.S. Department of Agriculture (USDA). 2017. Natural Resource Agency. Web Soil Survey. Retrieved from: <http://websoilsurvey.sc.egov.usda.gov/app/WebSoilSurvey.aspx>.

U.S. Fish and Wildlife Service (USFWS). 2019a. Critical Habitat Portal. Retrieved from:  
<https://ecos.fws.gov/ecp/report/table/critical-habitat.html>.

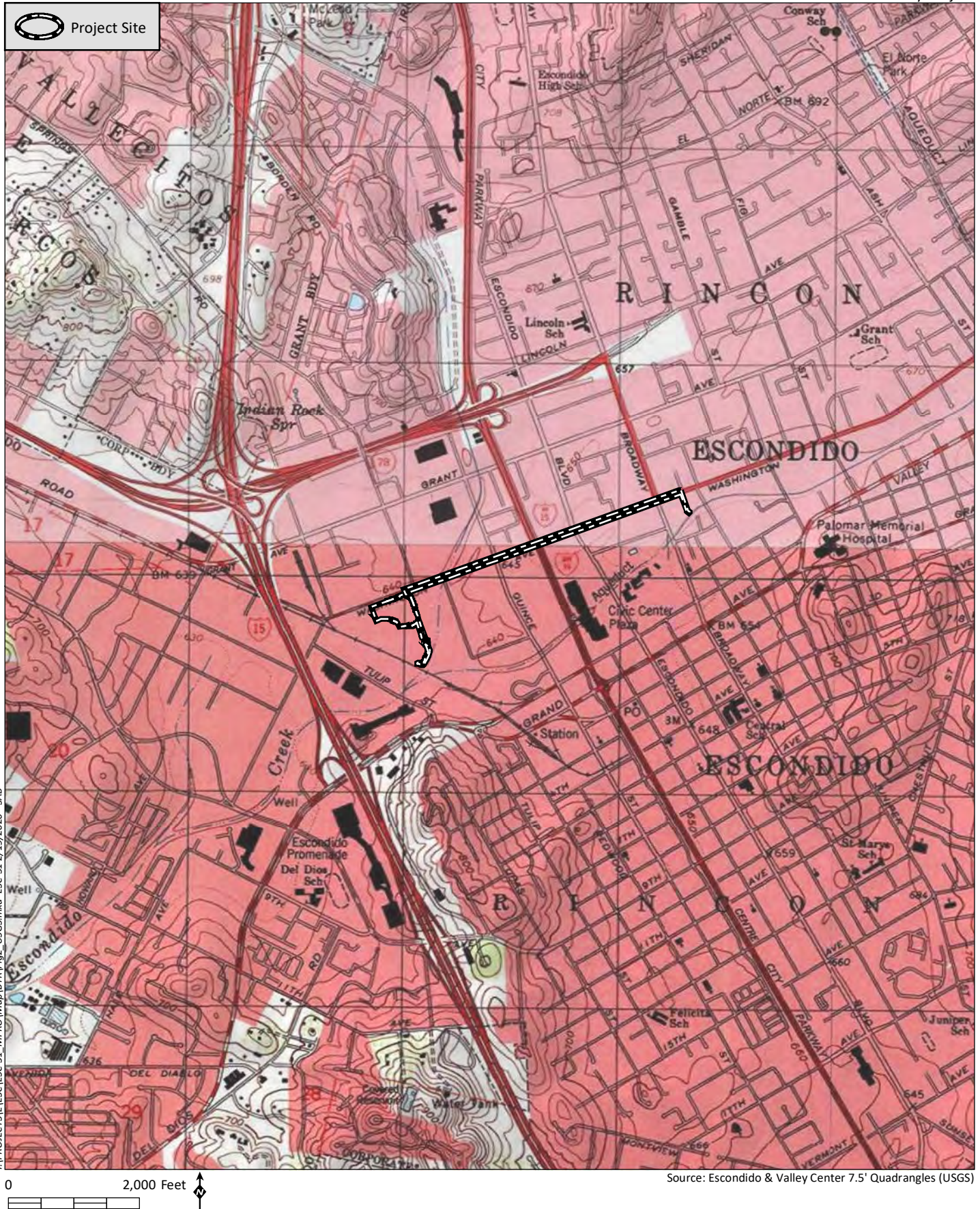
2019b. Occurrence Information for Multiple Species within Jurisdiction of the Carlsbad Fish and Wildlife Office (CFWO). Retrieved from: <http://www.fws.gov/carlsbad/gis/cfwogis.html>. May 1.

2019c. National Wetlands Inventory. Retrieved from: <https://www.fws.gov/wetlands/> .  
March 22.









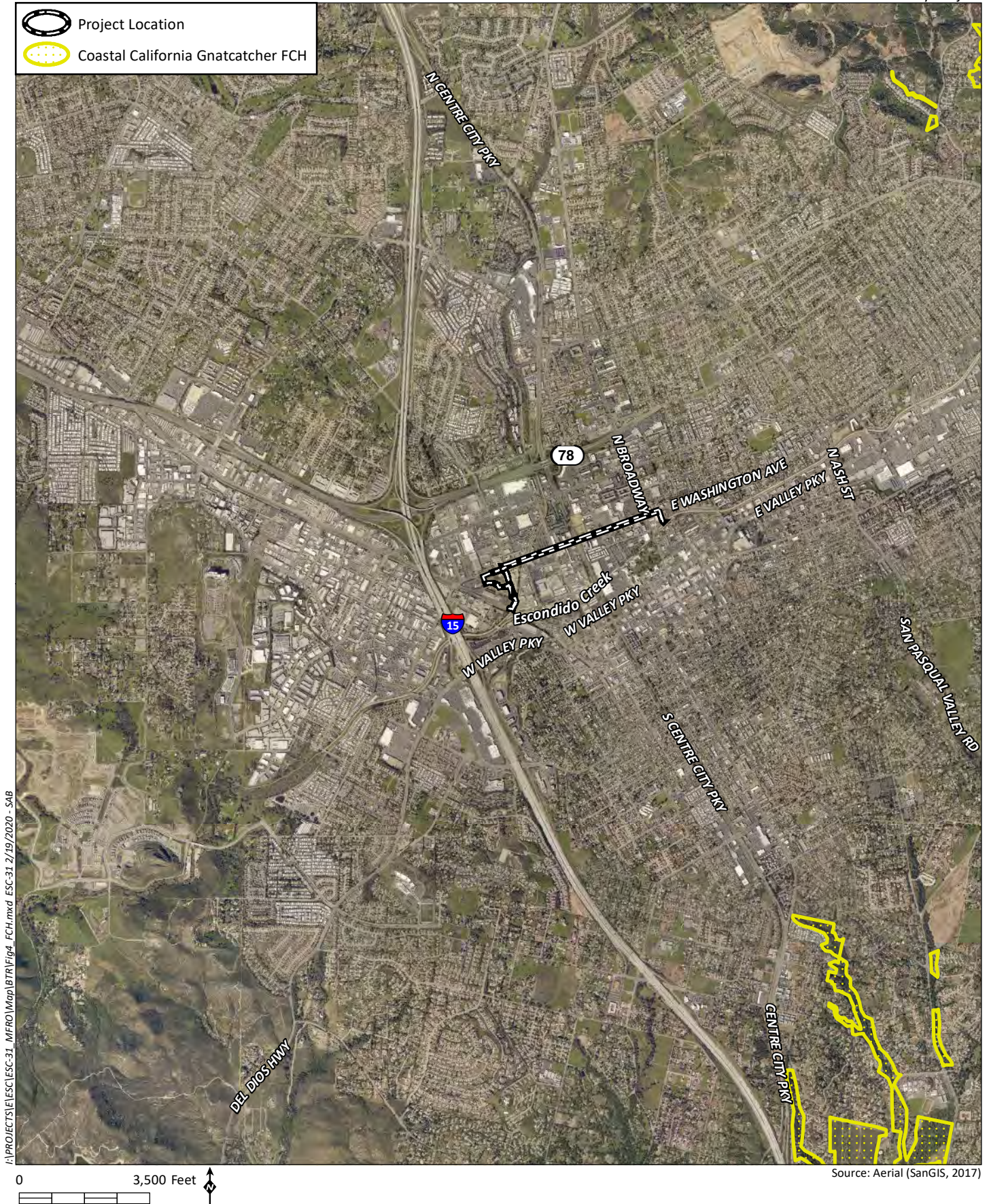
Source: Escondido & Valley Center 7.5' Quadrangles (USGS)



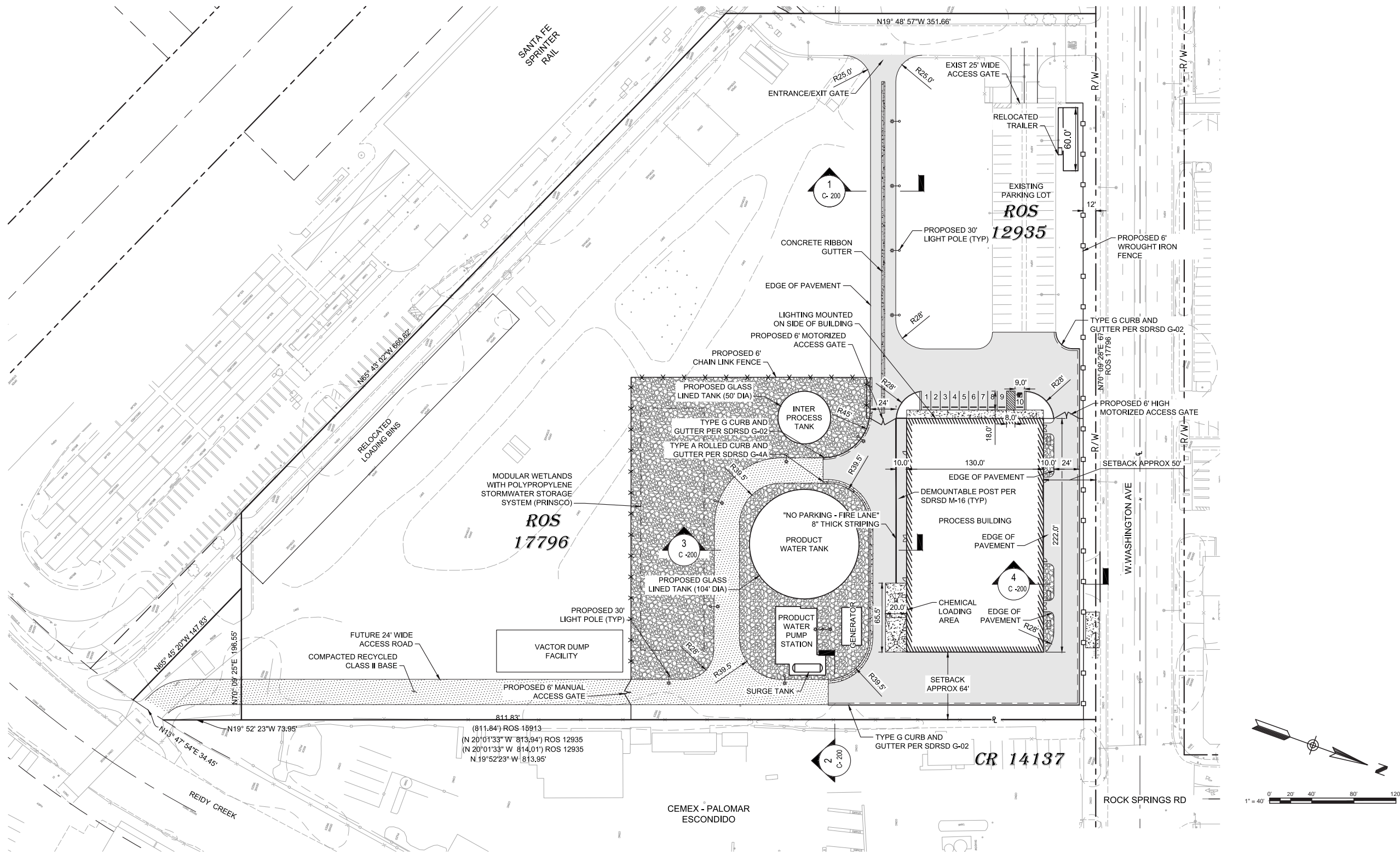


Figure 3



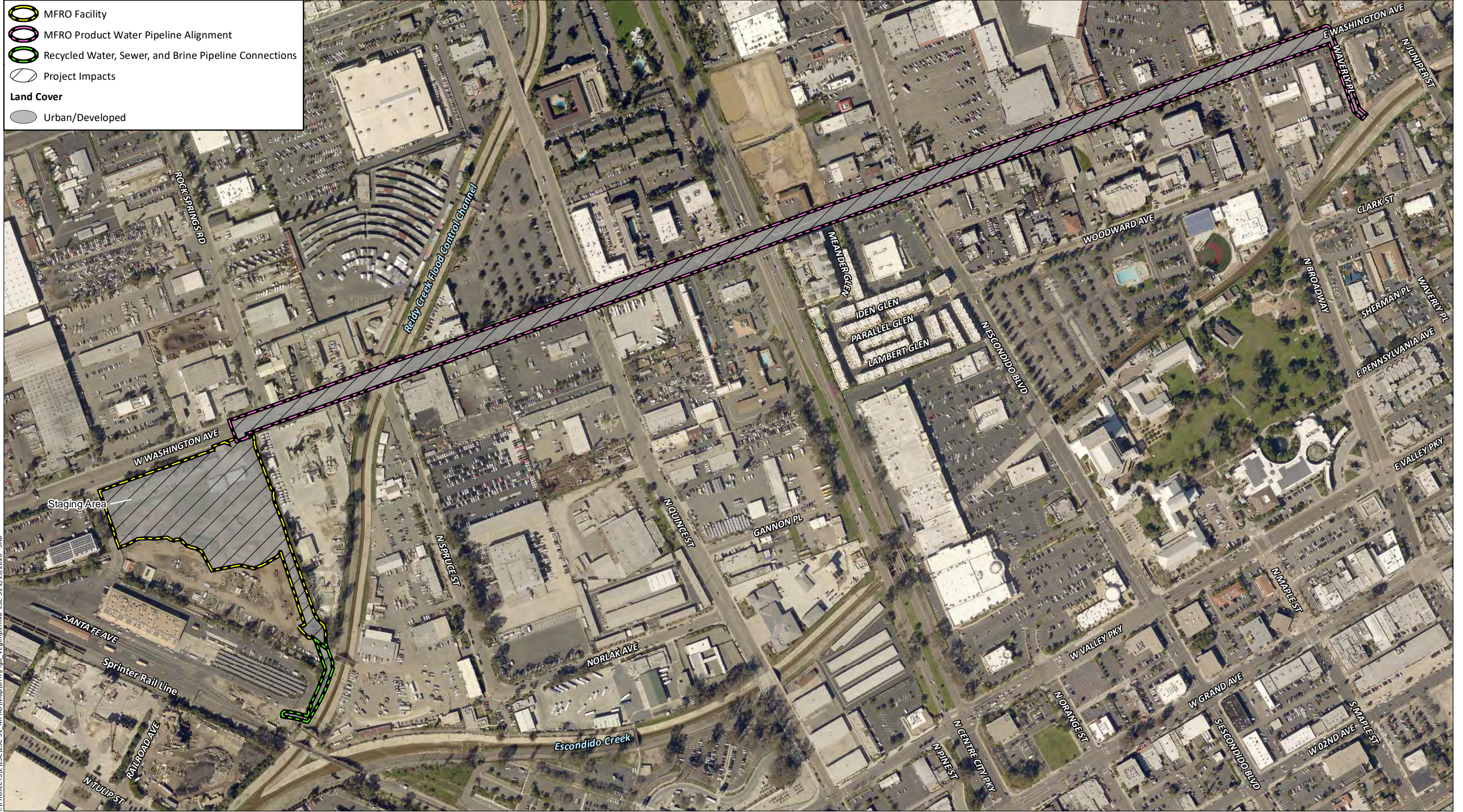






Source: FILANC & Brown and Caldwell (2020)





0 350 Feet








Photo 1. View to the west of facility parking lot.



Photo 2. View to the west of structures in the project site.





Photo 3. View to south of graveled road.



Photo 4. View of stockpiles in the project site.

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Photo 5. View of materials storage and unpaved road in the project site.



## Attachment B

### Plant Species Observed

Family	Scientific Name	Common Name
<b>Eudicots</b>		
Brassicaceae	<i>Hirschfeldia incana</i> *	short-pod mustard
Fabaceae	<i>Acacia</i> sp.*	acacia
Geraniaceae	<i>Erodium cicutarium</i> *	redstem filaree
Myrtaceae	<i>Eucalyptus globulus</i> *	blue gum
	<i>Eucalyptus viminalis</i> *	ribbon gum
<b>Monocots</b>		
Areaceae	<i>Syagrus romanzoffiana</i> *	queen palm
Poaceae	<i>Bromus</i> sp.*	brome
	<i>Cynodon dactylon</i> *	Bermuda grass

\*Non-native species

†Sensitive Species

## Attachment C

### Animal Species Observed or Detected

Taxon		Scientific Name	Common Name
Order	Family		
VERTEBRATES			
Birds			
Apodiformes	Trochilidae	<i>Calypte anna</i>	Anna's Hummingbird
Passeriformes	Corvidae	<i>Corvus brachyrhynchos</i>	American Crow
	Parulidae	<i>Setophaga coronata</i>	yellow-rumped warbler
Mammals			
Carnivora	Canidae	<i>Canis familiaris</i>	domestic dog

## Attachment D

### Special Status Plant Species with Potential to Occur

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
ashy spike-moss	<i>Selaginella cinerascens</i>	--/-- CNPS 4.1	Rhizomatous fern. Occurs in chaparral and coastal sage scrub. Elevation below 1,804 ft. Above-ground all year.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Banner dudleya	<i>Dudleya alainae</i>	--/-- CNPS 3.2	Perennial herb. Occurs on rocky areas in chaparral, lower montane coniferous forest, and Sonoran desert scrub. Elevation 2,428-3,937 ft. Flowering period Apr–Jul.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
beach goldenaster	<i>Heterotheca sessiliflora</i> ssp. <i>sessiliflora</i>	--/-- CNPS 1B.1	Perennial herb. Occurs in coastal sage scrub and chaparral. Elevation below 197 ft. Flowering period Mar-Dec.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
California's adder's-tongue	<i>Ophioglossum californicum</i>	--/-- CNPS 4.2	Rhizomatous fern. Occurs in grassy, open areas where it is generally associated with short grasses and other herbs. Although often found near vernal pools, can also occur in relatively dry, stony areas. Elevation 197-1,476 ft. Above-ground Jan–Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
California adolphia	<i>Adolphia californica</i>	--/-- CNPS 2B.1	Shrub. Occurs on clay soils in dry canyons and washes in coastal sage scrub and chaparral. Elevation 0-1,312 ft. Flowering period Dec–May.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
caraway-leaved woodland gilia	<i>Saltugilia caruifolia</i>	--/-- CNPS 4.3	Annual herb. Occurs in rocky soil and openings in chaparral and lower montane coniferous forest. Elevation 460-7,546 ft. Flowering period May-Aug.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
chaparral nolina	<i>Nolina cismontana</i>	--/-- CNPS 1B.2	Perennial shrub. Occurs on sandstone or gabbro soils, in chaparral and coastal scrub. Elevation 455–4,185 ft. Flowering period Mar–Jul.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.

**Attachment D (cont.)**  
**Special Status Plant Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
Cleveland's bush monkeyflower	<i>Diplacus clevelandii</i> [ <i>Mimulus clevelandii</i> ]	--/-- CNPS 4.2	Perennial herb. Occurs on gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest. Often occurs in disturbed areas, openings, and on rocky soils. Elevation 1,475–6,560 ft. Flowering period Apr–Jul.	<b>Not Likely to Occur:</b> Suitable habitat and soils do not occur within the project site.
Coulter's goldfields	<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	--/-- CNPS 1B.1	Annual herb. Occurs in coastal salt marshes and swamps, playas, and vernal pools. Elevation 0–4,005 ft. Flowering period Feb–Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Coulter's saltbush	<i>Atriplex coulteri</i>	--/-- CNPS 1B.2	Perennial herb. Occurs in coastal strand, valley grasslands, and coastal sage scrub. Elevation below 1,640 ft. Flowering period Mar–Oct.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Cuyamaca larkspur	<i>Delphinium hesperium</i> ssp. <i>cuyamacae</i>	--/Rare CNPS 1B.2	Perennial herb. Occurs in relatively dense montane meadows and lower coniferous forests. Elevation approximately 4,921 ft. Flowering period May – Jul.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
decumbent goldenbush	<i>Isocoma menziesii</i> var. <i>decumbens</i>	--/-- CNPS 1B.2	Perennial shrub. Occurs in coastal scrub habitats, especially on sandy soils and often in disturbed sites. Elevation 10–1475 ft. Flowering period Apr–Nov.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Del Mar manzanita	<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>	FE/-- CNPS 1B.1	Shrub. Occurs in maritime chaparral and closed-cone coniferous forests on sandstone coastal bluffs. Occasionally found inland with denser mixed chaparral vegetation. Elevation 0–328 ft. Flowering period Dec–Jul.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Del Mar sand aster	<i>Corethrogyne filaginifolia</i> var. <i>linifolia</i>	--/-- CNPS 1B.1	Perennial herb. Occurs on sandy soils in coastal bluff scrub, openings in maritime chaparral, and coastal sage scrub. Elevation below 8,530 ft. Flowering period May–Sept.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.

**Attachment D (cont.)**  
**Special Status Plant Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
delicate clarkia	<i>Clarkia delicata</i>	--/-- CNPS 1B.2	Annual herb. Occurs in shaded areas or the periphery of oak woodlands and cismontane chaparral. Elevation below 328 ft. Flowering period Apr-Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
delta woolly-marbles	<i>Psilocarphus brevissimus</i> var. <i>multiflorus</i>	--/-- CNPS 4.2	Annual herb. Occurs in vernal pools and flats. Elevation 33-1,640 ft. Flowering period May-Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Dunn's mariposa lily	<i>Calochortus dunnii</i>	--/Rare CNPS 1B.2	Perennial bulbiferous herb. Occurs on dry, stony ridges and fire breaks in chaparral or grassland/chaparral ecotone. Appears to be restricted to gabbroic and metavolcanic soils. Elevation 4,921-5,577 ft. Flowering period Apr-Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Encinitas baccharis	<i>Baccharis vanessae</i>	FT/SE CNPS 1B.1	Shrub. Mature but relatively low-growing maritime chaparral is primary habitat; also found in southern mixed chaparral and cismontane woodland. Occurs on sandstone soils in steep, open, rocky areas with chaparral associates. Elevation 197–2460 ft. Flowering period Aug–Dec.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Engelmann oak	<i>Quercus engelmannii</i>	--/-- CNPS 4.2	Perennial deciduous tree. Occurs in oak woodland, chaparral, riparian woodland, and native grassland. Elevation 160–4,265 ft. Flowering period Mar–Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
felt-leaved monardella	<i>Monardella hypoleuca</i> ssp. <i>lanata</i>	--/-- CNPS 1B.2	Perennial herb. Occurs in chaparral and cismontane woodland. Typically occurs in the understory of mature stands of chamise in xeric situations. Elevation 984-4,921 ft. Flowering period Jun–Aug.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.

**Attachment D (cont.)**  
**Special Status Plant Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
Fish's milkwort	<i>Polygala cornuta</i> var. <i>fishiae</i>	--/-- CNPS 4.3	Perennial deciduous shrub. Occurs in chaparral, cismontane woodland, and riparian woodland, particularly in shaded, rocky places in canyons in association with oak woodland or chaparral. Elevation 325–3,280 ft. Flowering period May–Aug.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
golden-rayed pentachaeta	<i>Pentachaeta aurea</i> ssp. <i>aurea</i>	--/-- CNPS 4.2	Annual herb. Occurs in mesic grasslands, woodlands, conifer forests, and sage scrub. Elevation 260–5,350 ft. Flowering period Mar–July.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
golden violet	<i>Viola purpurea</i> ssp. <i>aurea</i>	--/-- CNPS 2B.2	Perennial herb. Occurs in pinyon/juniper woodland, sagebrush, and sandy slopes. Elevation 5,120–6,790 ft. Flowering period Apr – Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
graceful tarplant	<i>Holocarpha virgata</i> ssp. <i>elongata</i>	--/-- CNPS 4.2	Annual herb. Occurs in chaparral, cismontane woodland, coastal scrub, and native grassland. Elevation 195–3,610 ft. Flowering period May–Nov.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Hall's monardella	<i>Monardella macrantha</i> ssp. <i>hallii</i>	--/-- CNPS 1B.3	Perennial rhizomatous herb. Occurs in broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, valley and foothill grassland, on dry slopes and ridges in openings. Elevation 2,395–7,200 ft. Flowering period Jun–Oct.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
heart-leaved pitcher sage	<i>Lepechinia cardiophylla</i>	--/-- CNPS 1B.2	Perennial shrub. Occurs in closed-cone coniferous forest, chaparral, and cismontane woodland. Elevation 1,540–3,937 ft. Flowering period Apr–Jul.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.

**Attachment D (cont.)**  
**Special Status Plant Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
intermediate monardella	<i>Monardella hypoleuca</i> ssp. <i>intermedia</i>	--/-- CNPS 1B.3	Perennial rhizomatous herb. Occurs in chaparral, cismontane woodland, and occasionally lower montane coniferous forest. Usually occurs in understory. Elevation 656-4,101 ft. Flowering period Jun–Sept.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
large-flowered leptosiphon	<i>Leptosiphon grandiflorus</i>	--/-- CNPS 4.2	Annual herb. Uses open areas and grassy flats, generally on sandy soil. Occurs in coastal strand, foothill woodland, northern coastal scrub, coastal sage scrub, closed-cone pine forest, valley grassland, and coastal prairie. Elevation below 3,937 ft. Flowering period Apr–Aug.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
lemon lily	<i>Lilium parryi</i>	--/-- CNPS 1B.2	Perennial bulbiferous herb. Occurs in moist montane meadows. Elevation 4,265-8,530 ft. Flowering period Jul–Aug.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Lewis' evening primrose	<i>Camissoniopsis lewisii</i>	--/-- CNPS 3	Annual herb. Occurs in very sandy substrates near the beach, typically on beach bluffs. Elevation below 984 ft. Flowering period Mar–Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
little mousetail	<i>Myosurus minimus</i> ssp. <i>apus</i>	--/-- CNPS 3.1	Annual herb. Occurs in alkaline vernal pools in native grassland. Elevation 65–2,100 ft. Flowering period Mar–Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
mesa horkelia	<i>Horkelia cuneata</i> var. <i>puberula</i>	--/-- CNPS 1B.1	Perennial herb. Occurs on sandy or gravelly soils in chaparral, cismontane woodland, and coastal scrub. Elevation 225–2,655 ft. Flowering period Mar–May.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Munz's sage	<i>Salvia munzii</i>	--/-- CNPS 2B.2	Shrub. Occurs in chaparral and Diegan coastal sage scrub. When found is often a dominant plant of the area. Elevation below 2,625 ft. Flowering period Jan–May.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.



**Attachment D (cont.)**  
**Special Status Plant Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
Nevin's barberry	<i>Berberis nevinii</i>	FE/SE CNPS 1B.1	Shrub. Occurs in sandy and gravelly places in coastal sage scrub or chaparral, and chaparral with strong desert affinities. Elevation below 2,133 ft. Flowering period Mar-Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Nuttall's scrub oak	<i>Quercus dumosa</i>	--/-- CNPS 1B.1	Perennial evergreen shrub. Occurs in chaparral and coastal sage scrub in sandy and clay loam habitat. Elevation below 656 ft. Flowering period Feb-Mar.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Orcutt's brodiaea	<i>Brodiaea orcuttii</i>	--/-- CNPS 1B.1	Perennial bulbiferous herb. Occurs on mesic or clay soils in vernal moist environments in closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, native grassland, and vernal pools. Elevation 95-5,550 ft. Flowering period May-Jul.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Orcutt's hazardia	<i>Hazardia orcuttii</i>	--/ST CNPS 1B.1	Perennial evergreen shrub found in clay soils in maritime chaparral and coastal scrub habitats. Elevation below 656 ft. Flowering period Aug-Oct.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Orcutt's linanthus	<i>Linanthus orcuttii</i>	--/-- CNPS 1B.3	Annual herb. Occurs in open, gravelly areas in montane coniferous forest or chaparral. Elevation 3,609-7,054 ft. Flowering period May-Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Orcutt's pincushion	<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	--/-- CNPS 1B.1	Annual herb. Occurs in sandy coastal bluff scrub and coastal dunes. Elevation 197-656 ft. Flowering period Jan-Aug.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Orcutt's spineflower	<i>Chorizanthe orcuttiana</i>	FE/SE CNPS 1B.1	Annual herb. Occurs in coastal openings in chaparral, coastal sage scrub, and closed-cone pine forest. Elevation 150-490 ft. Flowering period Mar-May.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.

**Attachment D (cont.)**  
**Special Status Plant Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
Palmer's goldenbush	<i>Ericameria palmeri</i> var. <i>palmeri</i>	--/-- CNPS 1B.1	Large shrub. Occurs in coastal drainages, mesic chaparral, and occasionally in coastal sage scrub. Elevation 0-1,500 ft. Flowering period Sep–Nov.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Palmer's grapplinghook	<i>Harpagonella palmeri</i>	--/-- CNPS 4.2	Annual herb. Occurs on clay soil, in open areas in chaparral, coastal scrub, and native grassland. Elevation 65–3,135 ft. Flowering period Mar–May.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Palomar monkeyflower	<i>Erythranthe diffusa</i> [ <i>Mimulus diffusus</i> ]	--/-- CNPS 4.3	Annual herb. Occurs in lower montane coniferous forest and chaparral understory. It has been found in xeric openings in the chamise chaparral and beneath conifers near very mesic meadows. Elevation 984-6,890 ft. Flowering period Apr–Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
paniculate tarplant	<i>Deinandra paniculata</i>	--/-- CNPS 4.2	Annual herb. Occurs on vernal mesic and sometimes sandy soils in coastal scrub, native grassland, and vernal pools. Elevation 80–3,085 ft. Flowering period Mar–Nov.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Parish's brittlescale	<i>Atriplex parishii</i>	--/-- CNPS 1B.1	Annual herb. Occurs on highly alkaline silty-clay soils in playas, vernal pools, and chenopod scrub. Elevation 80–6,235 ft. Flowering period Jun–Oct.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Parry's tetracoccus	<i>Tetracoccus dioicus</i>	--/-- CNPS 1B.2	Shrub. Occurs on gabbro (e.g. Las Posas) soils in low growing chamise chaparral and sage scrub. Usually, conditions are quite xeric with only limited annual growth. Elevation below 3,281 ft. Flowering period Apr–May.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Payson's jewelflower	<i>Caulanthus simulans</i>	--/-- CNPS 4.2	Annual herb. Occurs on sandy, granitic soils in chaparral, coastal sage scrub, and pinyon/juniper woodland. Elevation 1,312-7,218 ft. Flowering period (Feb) Mar–May (Jun).	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.

**Attachment D (cont.)**  
**Special Status Plant Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
peninsular spineflower	<i>Chorizanthe leptotheca</i>	--/-- CNPS 4.2	Annual herb. Occurs in chaparral, coastal scrub, and lower montane coniferous forest. Elevation 300–980 ft. Flowering period May–Aug.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
purple stemodia	<i>Stemodia durantifolia</i>	--/-- CNPS 2B.1	Perennial herb. Occurs in wet sand or rocks along small creeks and seasonal streams. Elevation below 1,312 ft. Flowering period Jan–Dec.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
rainbow manzanita	<i>Arctostaphylos rainbowensis</i>	--/-- CNPS 1B.1	Shrub. Preferred habitat in southern mixed chaparral with a relatively dense canopy from 6 to 8 feet. Elevation 492 - 2,625 ft. Flowering period Dec–Mar.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Ramona horkelia	<i>Horkelia truncata</i>	--/-- CNPS 1B.3	Perennial herb. Occurs in chaparral, coastal sage scrub, and cismontane woodland habitats. Supported by clay and gabbroic soils. Elevation 1,312-4,265 ft. Flowering period May–Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Robinson's pepper-grass	<i>Lepidium virginicum</i> var. <i>robinsonii</i>	--/-- CNPS 4.3	Annual herb. Occurs in dry, disturbed areas, bottomland, riverbanks, meadows, fields, pastures, cliffs, chaparral and coastal sage scrub. Elevation below 9,186 ft. Flowering period Jan-Jul.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site, and site is subject to regular use.
round-leaved filaree	<i>California macrophylla</i>	--/--	Annual herb. Occurs on clay soils in cismontane woodland and native grassland. Elevation 45–3,935 ft. Flowering period Mar–May.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
rush-like bristleweed	<i>Xanthisma junceum</i>	--/-- CNPS 4.3	Perennial herb. Occurs in xeric chaparral and coastal sage scrub, on exposed, rocky substrates. Elevation 500-4,000 ft. Flowering period Jun – Jan.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.

**Attachment D (cont.)**  
**Special Status Plant Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
San Bernardino aster	<i>Symphyotrichum defoliatum</i>	--/-- CNPS 1B.2	Perennial rhizomatous herb. Occurs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic), and near ditches, streams, and springs. Elevation below 6,726 ft. Flowering period Jul-Nov.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
San Diego ambrosia	<i>Ambrosia pumila</i>	FE/-- CNPS 1B.1	Perennial rhizomatous herb. Generally found along creeks or seasonal drainages along the upper terraces of rivers or periphery of willow riparian areas, primarily on sandy loam or clay soils. Also found in native grassland, valley bottoms, dry drainages, and vernal pool margins. Occurs on loam or clay soils. Often on disturbed sites. Elevation 65–2,000 ft. Flowering period Apr – Oct.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site, and site is subject to regular use.
San Diego barrel cactus	<i>Ferocactus viridescens</i>	--/-- CNPS 2B.1	Shrub (stem succulent). Occurs in chaparral, coastal sage scrub, valley and foothill grassland, and vernal pools. Optimal habitat for this cactus appears to be Diegan coastal sage scrub hillsides, often at the crest of slopes and growing among cobbles. Elevation 33-492 ft. Flowering period May–Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
San Diego button-celery	<i>Eryngium aristulatum</i> var. <i>parishii</i>	FE/SE CNPS 1B.1	Annual or perennial herb. Occurs in vernal pools or mima mound areas with vernal moist conditions and freshwater marshes. Elevation 115-2,495 ft. Flowering period Apr–Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
San Diego County viguiera	<i>Bahiopsis</i> [ <i>Viguiera</i> ] <i>laciniata</i>	--/-- CNPS 4.3	Perennial shrub. Occurs in coastal sage scrub, often at high density. Elevation 295-2,460 ft. Flowering period Feb–Aug.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.

**Attachment D (cont.)**  
**Special Status Plant Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
San Diego goldenstar	<i>Bloomeria clevelandii</i>	--/-- CNPS 1B.1	Perennial bulbiferous herb. Occurs in valley grasslands, particularly near mima mound topography or in the vicinity of vernal pools, on clay soils. Elevation below 328 ft. Flowering period Apr–May.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
San Diego marsh-elder	<i>Iva hayesiana</i>	--/-- CNPS 2B.2	Perennial herb. Occurs preferentially in creeks of intermittent streambeds. Typically, the riparian canopy is open, allowing substantial sunlight to reach this marsh-elder. Sandy alluvial embankments with cobbles are frequently utilized. May occur in a variety of wetland/riparian areas. Elevation below 2,953 ft. Flowering period Apr–Oct.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
San Diego milk-vetch	<i>Astragalus oocarpus</i>	--/-- CNPS 1B.2	Perennial herb. Typically occurs in cismontane chaparral edges at the periphery of meadows. Associated with open areas and mild soil disturbances in chaparral or open southern oak woodland on dry, brushy slopes. Elevation 1,312–5,840 ft. Flowering period May–Aug.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
San Diego sand aster	<i>Corethrogyne filaginifolia</i> var. <i>incana</i>	--/-- CNPS 1B.1	Perennial herb. Occurs in coastal sage scrub and chaparral. Elevation 16–2,362 ft. Flowering period Jun–Sept.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
San Diego sagewort	<i>Artemisia palmeri</i>	--/-- CNPS 4.2	Shrub. Occurs along streams in coastal sage scrub and chaparral. Identifiable from leaves year round. Elevation 0–3,000 ft. Flowering period May – Sep.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.

**Attachment D (cont.)**  
**Special Status Plant Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
San Diego sunflower	<i>Hulsea californica</i>	--/-- CNPS 1B.3	Perennial herb. Occurs in montane coniferous forest and lightly disturbed chaparral. Occurs in large numbers following fires and is otherwise found in small colonies or singly in mildly disturbed locales. Elevation 3,280-6,562 ft. Flowering period Apr-Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
San Diego thorn-mint	<i>Acanthomintha ilicifolia</i>	FT/SE CNPS 1B.1	Annual herb. Occurs in vernal pools, clay depressions on mesas, chaparral slopes, and coastal sage scrub. Elevation 150-3,280 ft. Flowering period Apr-Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
San Felipe monardella	<i>Monardella nana</i> ssp. <i>leptosiphon</i>	--/-- CNPS 1B.2	Perennial rhizomatous herb. Occurs in lower montane coniferous forest. Elevation 3,970-5,906 ft. Flowering period Jun-Jul.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
sea dahlia	<i>Leptosyne maritima</i>	--/-- CNPS 2B.2	Perennial herb. Occurs on sandstone cliffs and coastal bluffs. Elevation below 66 ft. Flowering period Mar-May.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
small-flowered microseris	<i>Microseris douglasii</i> ssp. <i>platycarpa</i>	--/-- CNPS 4.2	Annual herb. Occurs on clay soils in cismontane woodland, coastal scrub, native grassland, and vernal pools. Elevation 45–3,510 ft. Flowering period Mar–May.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
small-flowered morning glory	<i>Convolvulus simulans</i>	--/-- CNPS 4.2	Annual herb. Occurs on clay and serpentinite seeps in openings within chaparral, coastal scrub, and native grassland. Elevation 95–2,430 ft. Flowering period Mar–Jul.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
smooth tarplant	<i>Centromadia pungens</i> ssp. <i>laevis</i>	--/-- CNPS 1B.1	Annual herb. Occurs on alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, and native grassland. Elevation 0–2,100 ft. Flowering period Apr–Sept.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
south coast branching phacelia	<i>Phacelia ramosissima</i> var. <i>australitoralis</i>	--/-- CNPS 3.2	Perennial herb. Usually occurs in non-wetlands. Elevation 15-720 ft. Flowering period Mar-Aug.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.

**Attachment D (cont.)**  
**Special Status Plant Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
south coast saltscale	<i>Atriplex pacifica</i>	--/-- CNPS 1B.2	Annual herb. Occurs on xeric coastal bluff scrub in open areas and alkaline flats. Elevation below 984 ft. Flowering period Mar - Oct.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
southern mountain misery	<i>Chamaebatia australis</i>	--/-- CNPS 4.2	Shrub. Occurs on dry slopes in chaparral with gabbro and metavolcanic soils. Elevation 984-4,035 ft. Flowering period Nov-May.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
southern mountains skullcap	<i>Scutellaria bolanderi</i> ssp. <i>austromontana</i>	--/-- CNPS 1B.2	Perennial herb. Occurs in mesic areas and streambanks in chaparral, cismontane woodland, and lower montane coniferous forest. Elevation 1,390–6,560 ft. Flowering period Jun–Aug.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
southern tarplant	<i>Centromadia parryi</i> ssp. <i>australis</i>	--/-- CNPS 1B.1	Annual herb. Occurs in seasonally moist (saline) grasslands. Mesic areas in valley and foothill grasslands, coastal scrub, alkaline locales, vernal pools, and peripheral salt marsh are utilized. Elevation below 1,410 ft. Flowering period May–Nov.	<b>Low Potential to Occur:</b> Suitable habitat does not occur within the project site.
southwestern spiny rush	<i>Juncus acutus</i> ssp. <i>leopoldii</i>	--/-- CNPS 4.2	Perennial herb. Occurs in alkaline meadows and seeps, coastal salt marshes, and coastal dunes. Elevation 5–2,955 ft. Flowering period Mar–Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
spreading navarretia	<i>Navarretia fossalis</i>	FT/-- CNPS 1B.1	Annual herb. Occurs in vernal pools in chenopod scrub, marshes and swamps, and playas. Elevation 95–2,150 ft. Flowering period Apr–Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
sticky dudleya	<i>Dudleya viscida</i>	--/-- CNPS 1B.2	Perennial herb. Occurs on rocky areas in coastal bluff scrub, chaparral, cismontane woodland, and coastal scrub. Grows predominantly on very steep north-facing slopes in shady, mesic conditions. Elevation 30–1,805 ft. Flowering period Apr–Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.



**Attachment D (cont.)**  
**Special Status Plant Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
summer holly	<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	--/-- CNPS 1B.2	Perennial shrub. Occurs in chaparral and cismontane woodland. Mesic north-facing slopes in southern mixed chaparral are the preferred habitat. Elevation 95–2,590 ft. Flowering period Apr–Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
thread-leaved brodiaea	<i>Brodiaea filifolia</i>	FT/SE CNPS 1B.1	Perennial herb (bulb). Occurs in coastal sage scrub, cismontane woodlands, vernal moist grassland, and around vernal pools with clay soils. Elevation 82-3,640 ft. Flowering period Mar-Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
Torrey pine	<i>Pinus torreyana</i> ssp. <i>torreyana</i>	--/-- CNPS 1B.2	Tree. Occurs on ocean bluffs in chaparral, coastal scrub, and closed-cone pine forest. Most occur within Torrey Pines State Reserve. Found outside its current range in landscaping. Elevation below 656 ft.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
variegated dudleya	<i>Dudleya variegata</i>	--/-- CNPS 1B.2	Perennial herb. Occurs in chaparral, cismontane woodland, coastal sage scrub, valley and foothill grassland, and vernal pools. Elevation below 984 ft. Flowering period Apr-Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
vernal barley	<i>Hordeum intercedens</i>	--/-- CNPS 3.2	Annual herb. Occurs in coastal dunes, coastal scrub, native grassland (saline flats and depressions), and vernal pools. Elevation 15–3,280 ft. Flowering period Mar–Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
wart-stemmed ceanothus	<i>Ceanothus verrucosus</i>	--/-- CNPS 2B.2	Perennial evergreen shrub. Occurs in coastal chaparral intermixed with chamise. Soils consist of Exchequer rocky silt loams and San Miguel-Exchequer rocky silt loams. Elevation below 1,148 ft. Flowering period Jan-Apr.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.

**Attachment D (cont.)**  
**Special Status Plant Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
western dichondra	<i>Dichondra occidentalis</i>	--/-- CNPS 4.2	Perennial rhizomatous herb. Occurs on dry, sandy banks in coastal sage scrub, chaparral, or southern oak woodland. Often proliferates on recently burned slopes. Elevation below 1,706 ft. Flowering period Mar-Jul.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
western spleenwort	<i>Asplenium vespertinum</i>	--/-- CNPS 4.2	Perennial herb. Occurs in chaparral, cismontane woodland, and coastal scrub. Elevation 590-3,280 ft. Flowering period Feb-Jun.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.
willowy monardella	<i>Monardella viminea</i>	FE/SE CNPS 1B.1	Perennial herb. Occurs in riparian scrub, usually at sandy locales in seasonally dry washes. Generally, there is no canopy cover, and river cobbles may lie in close proximity. Elevation below 1,312 ft. Flowering period Jun–Aug.	<b>Not Likely to Occur:</b> Suitable habitat does not occur within the project site.

California Native Plant Society's California Rare Plant Rank:

- 1A Plants presumed extinct in California.
- 1B Plants rare, threatened, or endangered in California and elsewhere.
- 2 Plants rare, threatened, or endangered in California, but more common elsewhere.
- 3 Plants in need of more information.
- 4 Plants of limited distribution.

Potential to Occur:

**Not Likely to Occur** – There are no present or historical records of the species occurring on or in the immediate vicinity, (within 1 mile) of the survey area and the diagnostic habitats strongly associated with the species do not occur on or in the immediate vicinity of the survey area.

**Low Potential to Occur** – There is a historical record of the species in the vicinity of the survey area and potentially suitable habitat on the survey area, but existing conditions, such as density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation, substantially reduce the possibility that the species may occur. The survey area is above or below the recognized elevation limits for this species.

**Moderate Potential to Occur** – The diagnostic habitats associated with the species occur on or in the immediate vicinity of the survey area, but there is not a recorded occurrence of the species within the immediate vicinity (within 1 mile). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity.

**High Potential to Occur** – There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the survey area (within 1 mile).

**Species Present** – The species was observed on the survey area at the time of the survey or during a previous biological survey.

## Attachment E

### Special Status Animal Species with Potential to Occur

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
<b>INVERTEBRATES</b>				
Crotch bumble bee	<i>Bombus crotchii</i>	--/--	Occurs in open grassland and scrub habitat.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
Laguna Mountains skipper	<i>Pyrgus ruralis lagunae</i>	FE/--	Occurs in mountain meadow areas in pine forests where the larval foodplant, Cleveland's horkelia ( <i>Horkelia clevelandii</i> ), occurs.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site, and the associated plant species was not observed.
monarch butterfly	<i>Danaus plexippus</i>	--/--	Roosts located in wind-protected tree groves (eucalyptus [ <i>Eucalyptus</i> sp.], Monterey pine [ <i>Pinus radiata</i> ], cypress [ <i>Cupressus</i> sp.]), with nectar and water sources nearby. Larval host plants consist of milkweeds ( <i>Asclepias</i> sp.).	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site, and the associated plant species were not observed.
Quino checkerspot butterfly	<i>Euphydryas editha quino</i>	FE/--	Occurs in sunny openings within chaparral and coastal sage shrublands. Host plants include <i>Plantago erecta</i> , <i>Cordylanthus rigidus</i> , <i>Collinsia</i> spp., <i>Plantago patagonica</i> , <i>Antirrhinum coulterianum</i> , and <i>Castilleja exserta</i> .	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site, and the associated plant species were not observed.
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>	FE/--	Typically occurs in deep vernal pools and seasonal wetlands at least 30 centimeters deep (Simovich 1990).	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.

**Attachment E (cont.)**  
**Special Status Animal Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
San Diego fairy shrimp	<i>Branchinecta sandiegonensis</i>	FE/--	Occurs in seasonally astatic pools, which occur in tectonic swales or earth slump basins and other areas of shallow, standing water often in patches of grassland and agriculture interspersed in coastal sage scrub and chaparral.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
<b>VERTEBRATES</b>				
<b>Fish</b>				
Arroyo chub	<i>Gila orcuttii</i>	--/SSC	Occurs in freshwater, in sandy and muddy bottoms of flowing pools and runs of headwaters creeks and small to medium rivers. Often found in intermittent streams.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
<b>Reptiles and Amphibians</b>				
arroyo toad	<i>Anaxyrus californicus</i>	FE/SSC	Found on banks with open-canopy riparian forest characterized by willows, cottonwoods, or sycamores; breeds in areas with shallow, slowly moving streams, but burrows in adjacent uplands during dry months.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
coast horned lizard	<i>Phrynosoma blainvillii</i>	--/SSC	Occurs in coastal sage scrub, chaparral, open oak woodlands, and open coniferous forests. Important habitat components include basking sites, adequate scrub cover, areas of loose soil, and an abundance of harvester ants ( <i>Pogonomyrmex</i> sp.), a primary prey item.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site, and associated species not observed.

**Attachment E (cont.)**  
**Special Status Animal Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
coast patch-nosed snake	<i>Salvadora hexalepis virgultea</i>	--/SSC	Inhabits semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.
coastal whiptail	<i>Aspidoscelis tigris stejnegeri</i>	--/SSC	Occurs in open coastal sage scrub, chaparral, and woodlands. Frequently found along the edges of dirt roads traversing its habitats. Important habitat components include open, sunny areas, shrub cover with accumulated leaf litter, and an abundance of insects, spiders, or scorpions.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
Coronado skink	<i>Plestiodon skiltonianus interparietalis</i>	--/WL	Occurs in grasslands, coastal sage scrub, and open chaparral where there is abundant leaf litter or low herbaceous growth.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
large-blotched salamander	<i>Ensatina eschscholtzii klauberi</i>	--/WL	Occurs in evergreen and deciduous forests and oak woodlands. Requires rocks, logs, and debris, under which they may remain moist.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
orange-throated whiptail	<i>Aspidoscelis hyperythra</i>	--/WL	Occurs in coastal sage scrub, chaparral, edges of riparian woodlands, and washes. Also found in weedy, disturbed areas adjacent to these habitats. Important habitat requirements include open, sunny areas, shaded areas, and abundant insect prey base, particularly termites ( <i>Reticulitermes</i> sp.).	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.
red-diamond rattlesnake	<i>Crotalus ruber</i>	--/SSC	Found in chaparral, coastal sage scrub, along creek banks, particularly among rock outcrops or piles of debris with a supply of burrowing rodents for prey.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.
rosy boa	<i>Charina trivirgata</i>	--/--	Occurs among rocky outcrops in coastal sage scrub, chaparral, and desert scrub.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.

**Attachment E (cont.)**  
**Special Status Animal Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
Southern mountain yellow-legged frog	<i>Rana muscosa</i>	FE/SE & WL	Occurs in mid- to upper-elevation permanent waterways, often with open riparian vegetation (Mark Jennings pers. comm. 2003).	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
Southwestern [Southern Western] pond turtle	<i>Actinemys pallida</i> [ <i>Emys marmorata pallida</i> ]	--/SSC	Almost entirely aquatic. Occurs in freshwater marshes, creeks, ponds, rivers and streams, particularly where basking sites, deep water retreats, and egg laying areas are readily available.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
two-striped gartersnake	<i>Thamnophis hammondi</i>	--/SSC	Typical habitat is along permanent and intermittent streams bounded by dense riparian vegetation; also found associated with vernal pools and stock ponds.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.
western spadefoot	<i>Spea hammondi</i>	--/SSC	Occurs in open coastal sage scrub, chaparral, and grassland, along sandy or gravelly washes, floodplains, alluvial fans, or playas; requires temporary pools for breeding and friable soils for burrowing; generally excluded from areas with bullfrogs ( <i>Rana catesbiana</i> ) or crayfish ( <i>Procambarus</i> sp.).	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
<b>Birds</b>				
Belding's savannah sparrow	<i>Passerculus sandwichensis beldingi</i>	--/SE	Occurs in coastal marshes dominated by pickleweed ( <i>Salicornia</i> spp.)	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site, and the associated plant species was not observed.
Bell's sage sparrow	<i>Artemisiospiza belli belli</i>	BCC/WL	Occurs in sunny, dry stands of coastal sage scrub or chaparral.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
burrowing owl	<i>Athene cunicularia</i>	BCC/SSC	Occurs in grassland or open scrub habitats.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.

**Attachment E (cont.)**  
**Special Status Animal Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
California black rail	<i>Laterallus jamaicensis</i>	BCC/ST & FP	Occurs in wetland habitats.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.
California least tern	<i>Sternula antillarum browni</i>	FE/SE & FP	Occurs in coastal areas adjacent to the ocean.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
coastal cactus wren	<i>Campylorhynchus brunneicapillus sandiegensis</i>	BCC/SSC	Occurs in coastal sage scrub with large cacti for nesting.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site, and the associated plant species were not observed.
coastal California gnatcatcher	<i>Poliophtila californica californica</i>	FT/SSC	Obligate resident of arid coastal scrub below about 1,500 ft. Usually found within dense coastal scrub habitat in arid washes, on mesas, and on slopes of coastal hills. California buckwheat ( <i>Eriogonum fasciculatum</i> ), coastal sage ( <i>Artemisia californica</i> ), and patches of pricklypear ( <i>Opuntia</i> sp.) are particularly favored.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site, and the associated plant species were not observed.
Cooper's hawk	<i>Accipiter cooperii</i>	--/WL	Tends to inhabit lowland riparian areas and oak woodlands in proximity to suitable foraging areas such as scrublands or fields.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
golden eagle	<i>Aquila chrysaetos</i>	BCC/WL & FP	Typical foraging habitat includes grassy and open, shrubby habitats. Generally nests on remote cliffs; requires areas of solitude at a distance from human habitation.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
least Bell's vireo	<i>Vireo bellii pusillus</i>	FE, SE	Summer resident of Southern California. Inhabits riparian woodland and is most frequent in areas that combine an understory of dense, young willows or mule fat with a canopy of tall willows.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.
least bittern	<i>Ixobrychus exilis</i>	BCC/SSC	This species inhabits areas that contain freshwater or brackish marshes with tall emergent vegetation.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.

**Attachment E (cont.)**  
**Special Status Animal Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
Light-footed Ridgway's (clapper) rail	<i>Rallus obsoletus levipes</i> [ <i>Rallus longirostris levipes</i> ]	FE/SE & FP	Occurs in coastal salt marshes, especially those dominated by cordgrass ( <i>Spartina</i> sp.), but has been known to use brackish and freshwater sites.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site, and the associated plant species was not observed.
southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	--/WL	Occurs in coastal sage scrub and sparse mixed chaparral on rocky hillsides and in canyons; also found in open sage scrub/grassy areas of successional growth.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE/SE	Breeds within thickets of willows or other riparian understory usually along streams, ponds, lakes, or canyons. Migrants may be found among other shrubs in wetter areas.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
Swainson's hawk	<i>Buteo swainsoni</i>	BCC/ST	This species typically inhabits North America in the spring and summer and winters in South America. They typically prefer open and semi-open country in deserts, grasslands, and prairies. Also likes hayfields and pastures.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.
tricolored blackbird	<i>Agelaius tricolor</i>	BCC/CE & SSC	Occurs in marsh habitat near grasslands, pastures, and agricultural fields.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.
western snowy plover	<i>Charadrius alexandrinus nivosus</i>	FT & BCC/SSC	Occurs in beaches, dunes, and salt flats.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
White-faced ibis	<i>Plegadis chihi</i>	--/WL	Nests in freshwater marshes and forages in shallow waters and wet, grassy habitats.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.
yellow warbler	<i>Setophaga petechia</i>	BCC/SSC	Found along riparian woodlands.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
yellow-breasted chat	<i>Icteria virens</i>	--/SSC	Prefers mature riparian woodlands.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.



**Attachment E (cont.)**  
**Special Status Animal Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
<b>Mammals</b>				
American badger	<i>Taxidea taxus</i>	--/SSC	Occurs in open plains and prairies, farmland, and sometimes edges of woods.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.
big free-tailed bat	<i>Nyctinomops macrotis</i>	--/SSC	Occurs in rocky areas. Roosts in crevices in high cliffs or rock outcrops. Often forages over water. Rare visitor to San Diego county (San Diego Natural History Museum [SDNHM] 2019)	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.
Dulzura pocket mouse	<i>Chaetodipus californicus femoralis</i>	--/SSC	Occurs in a variety of habitats including coastal scrub, chaparral, and grasslands in San Diego County. Associated with grass-chaparral edges	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site. .
hoary bat	<i>Lasiurus cinereus</i>	--/--	Occurs in woodland and coniferous forests and forages over open areas or lakes.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.
long-eared myotis	<i>Myotis evotis</i>	--/--	Occurs in sage to coniferous forests on high mountains, sometimes in buildings.	<b>Low Potential to Occur:</b> Potentially suitable habitat is present in the project site, but structures in the project area not likely to be used given the high level of disturbance.
northwestern San Diego pocket mouse	<i>Chaetodipus fallax fallax</i>	--/SSC	Occurs in open areas of coastal sage scrub and weedy growth, often on sandy substrates.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
Pacific pocket mouse	<i>Perognathus longimembris pacificus</i>	FE/SSC	Occurs on fine-grained, sandy or gravelly substrates in coastal strand, coastal dunes, river alluvium, and coastal sage scrub growing on marine terraces.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.

**Attachment E (cont.)**  
**Special Status Animal Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
pallid bat	<i>Antrozous pallidus</i>	--/SSC	Locally common species of low elevations in California. Rocky, mountainous areas and near water; also found over more open, sparsely vegetated grasslands, and prefers foraging in the open. Uses three different roosts: 1) the day roost is in a warm, horizontal opening such as rock cracks; 2) the night roost is in the open, near foliage; and 3) the hibernation roost, which is in caves or cracks in rocks.	<b>Low Potential to Occur:</b> Potentially suitable habitat is present in the project site, but structures in the project area not likely to be used given the high level of disturbance.
pocketed free-tailed bat	<i>Nyctinomops femorosaccus</i>	--/SSC	Semiarid desert lands. Day-roosts in caves, crevices in cliffs, and under the roof tiles of buildings. Uses a variety of arid habitats in southern California: pine-juniper woodlands, desert scrub, palm oases, desert wash, desert riparian, etc. Prefers rocky areas with high cliffs.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.
San Diego black-tailed jackrabbit	<i>Lepus californicus bennettii</i>	--/SSC	Found primarily in open habitats including coastal sage scrub, chaparral, grasslands, croplands, and open, disturbed areas if there is at least some shrub cover present.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.
San Diego desert woodrat	<i>Neotoma lepida intermedia</i>	--/SSC	Open chaparral and coastal sage scrub, often building large, stick nests in rock outcrops or around clumps of cactus or yucca.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
silver-haired bat	<i>Lasionycteris noctivagans</i>	--/--	Occurs in forests near water. Summer roosts in dead trees; willow ( <i>Salix</i> spp.), maple ( <i>Acer</i> sp.), and ash ( <i>Fraxinus</i> sp.) trees; and uncommonly in structures. Winter roosts are unknown. Rare visitor to San Diego county (SDNHM 2019)	<b>Low Potential to Occur:</b> Potentially suitable habitat is present in the project site, but structures in the project area not likely to be used given the high level of disturbance.

**Attachment E (cont.)**  
**Special Status Animal Species with Potential to Occur**

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
Stephens' kangaroo rat	<i>Dipodomys stephensi</i>	FE/ST	Occurs in Sparsely vegetated habitats of sagebrush or annual grasses.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	--/SSC	Occurs in desert scrubs as well as pine and piñon-juniper forests. Requires a water source and caves, mines, tunnels, buildings, or other man-made structures for roosting.	<b>Low Potential to Occur:</b> Potentially suitable habitat is present in the project site, but structures in the project area not likely to be used given the high level of disturbance.
western mastiff bat	<i>Eumops perotis californicus</i>	--/SSC	Suitable habitat consists of extensive open areas with abundant roost locations (crevices in cliff faces, high buildings, trees, and tunnels).	<b>Low Potential to Occur:</b> Potentially suitable habitat is present in the project site, but structures in the project area not likely to be used given the high level of disturbance.
western red bat	<i>Lasiurus blossevillei</i>	--/SSC	Occurs in riparian areas dominated by cottonwoods, oaks, sycamores, and walnuts.	<b>Not Likely to Occur:</b> Suitable habitat is not present in the project site.
western small-footed myotis	<i>Myotis ciliolabrum</i>	--/--	Occurs in rid and shortgrass prairie regions, cliffs, talus, or clay buttes or riverbeds in prairie areas.	<b>Low potential to Occur:</b> Suitable habitat is not present in the project site.
western yellow bat	<i>Lasiurus xanthinus</i>	--/SSC	Found in wooded areas and desert scrub, particularly in palm trees. Rare visitor to San Diego County (SDNHM 2019).	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.
Yuma myotis	<i>Myotis yumanensis</i>	--/--	Preferred habitat is open forests and woodland. Closely tied to bodies of water for foraging and drinking. Roosts in buildings, mines, crevices, caves, and under bridges.	<b>Low Potential to Occur:</b> Suitable habitat is not present in the project site.

## Attachment E (cont.)

### Special Status Animal Species with Potential to Occur

Common Name	Species Name	Status <sup>1</sup>	Habitat Associations	Potential to Occur
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<sup>1</sup>Listing codes are as follows:

**Federal:**

FE Federal Endangered  
CE Candidate Endangered  
FT Federal Threatened  
FSC Federal Species of Concern  
BCC Bird of Conservation Concern

**State:**

SSC California Species of Concern  
WL Watch List

**Potential to Occur:**

**Not Likely to Occur** - There are no present or historical records of the species occurring on or in the immediate vicinity, (within 1 mile) of the survey area and the diagnostic habitats strongly associated with the species do not occur on or in the immediate vicinity of the survey area.

**Low Potential to Occur** - There is a historical record of the species in the vicinity of the survey area and potentially suitable habitat on the survey area, but existing conditions, such as density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation, substantially reduce the possibility that the species may occur. The survey area is above or below the recognized elevation limits for this species.

**Moderate Potential to Occur** - The diagnostic habitats associated with the species occur on or in the immediate vicinity of the survey area, but there is not a recorded occurrence of the species within the immediate vicinity (within 1 mile). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity.

**High Potential to Occur** - There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the survey area (within 1 mile).

**Species Present** - The species was observed on the survey area at the time of the survey or during a previous biological survey.



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Carlsbad Fish And Wildlife Office  
2177 Salk Avenue - Suite 250  
Carlsbad, CA 92008-7385  
Phone: (760) 431-9440 Fax: (760) 431-5901  
<http://www.fws.gov/carlsbad/>



In Reply Refer To:

October 18, 2019

Consultation Code: 08ECAR00-2020-SLI-0095

Event Code: 08ECAR00-2020-E-00216

Project Name: Membrane Filtration Reverse Osmosis (MFRO) Facility Project (Project)

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

#### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.



A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
-

# Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Carlsbad Fish And Wildlife Office**

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440

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## Endangered Species Act Species

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Birds

NAME	STATUS
Coastal California Gnatcatcher <i>Polioptila californica californica</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8178">https://ecos.fws.gov/ecp/species/8178</a>	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a>	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a>	Endangered

## Amphibians

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad <i>Anaxyrus californicus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3762">https://ecos.fws.gov/ecp/species/3762</a>	Endangered

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## Insects

NAME	STATUS
<b>Quino Checkerspot Butterfly</b> <i>Euphydryas editha quino</i> (= <i>E. e. wrighti</i> ) There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5900">https://ecos.fws.gov/ecp/species/5900</a>	Endangered

## Flowering Plants

NAME	STATUS
<b>Encinitas Baccharis</b> <i>Baccharis vanessae</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/3343">https://ecos.fws.gov/ecp/species/3343</a>	Threatened
<b>San Diego Ambrosia</b> <i>Ambrosia pumila</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8287">https://ecos.fws.gov/ecp/species/8287</a>	Endangered
<b>San Diego Button-celery</b> <i>Eryngium aristulatum</i> var. <i>parishii</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5937">https://ecos.fws.gov/ecp/species/5937</a>	Endangered
<b>San Diego Thornmint</b> <i>Acanthomintha ilicifolia</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/351">https://ecos.fws.gov/ecp/species/351</a>	Threatened
<b>Thread-leaved Brodiaea</b> <i>Brodiaea filifolia</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6087">https://ecos.fws.gov/ecp/species/6087</a>	Threatened
<b>Willow Monardella</b> <i>Monardella viminea</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/250">https://ecos.fws.gov/ecp/species/250</a>	Endangered

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.