

5.2 Biological Resources

This section describes the biological resources at and near the Redondo Beach Energy Center Project (RBEP) site and the potential effects the project may have on these resources. Section 5.2.1 presents the project setting, and Section 5.2.2 discusses the affected environment, including an overview of the region, habitat and vegetation communities, and special-status species. Section 5.2.3 presents an environmental analysis of the project, including standards of significance, potential impacts of construction and operation of the RBEP facility, and potential impacts on special-status species. Section 5.2.4 evaluates any potential cumulative impacts on biological resources in the project vicinity, and Section 5.2.5 addresses proposed mitigation measures that would avoid, minimize, or compensate for adverse impacts. Section 5.2.6 describes the laws, ordinances, regulations, and standards (LORS) that apply to the project. Section 5.2.7 presents agency contacts, and Section 5.2.8 discusses permits. Section 5.2.9 lists the references that were used to prepare this section.

5.2.1 Setting

RBEP will be a 496-megawatt¹ natural-gas-fired power plant, consisting of one 3-on-1 combined-cycle gas turbine power block. The power block includes three combustion turbine generators, three supplemental-fired heat recovery steam generators, one steam turbine generator, an air-cooled condenser, and related ancillary equipment. RBEP will be constructed entirely within the existing approximately 50-acre Redondo Beach Generating Station site in Redondo Beach, California. The project will use the existing onsite potable water, natural gas, stormwater, process wastewater, and sanitary pipelines and electrical transmission facilities. No offsite linear developments are proposed as part of the project.

RBEP will use potable water, provided by the California Water Service Company, for construction water and for operational process and sanitary uses. During RBEP operation, stormwater and process wastewater will be discharged to a retention basin and then ultimately to the Pacific Ocean via an existing permitted outfall. Sanitary wastewater will be conveyed to the Los Angeles County Sanitation District via the existing City of Redondo Beach sewer connection. A new onsite 230-kilovolt (kV) transmission interconnection will connect the RBEP power block to the existing onsite Southern California Edison (SCE) 230-kV switchyard.

Construction and demolition activities at the project site are anticipated to last 60 months, from January 2016 until December 2020. The first activities to occur onsite will be the dismantling and partial removal of existing Units 1-4. The major generating equipment, including steam turbines, generators, boilers, and duct work, will be removed, leaving the administration building and western portion of the building that houses Units 1-4 intact. These buildings will be left standing temporarily to provide screening between the construction site of the new power block and Harbor Drive. Construction of the new power block will begin in the first quarter of 2017 and continue through to the end of the second quarter 2019, when it will be ready for commercial operation. Although the power block will be operational, construction will continue through 2019, including construction of the new control building and the relocation of the Wyland Whaling Wall. The existing Units 5-8 and auxiliary boiler No. 17 will remain in service until the second quarter of 2018. Units 5-8 and auxiliary boiler No. 17 will be demolished starting the first quarter of 2019 through the fourth quarter of 2020. During the demolition and removal of Units 5-8, the Wyland Whaling Wall will be dismantled and moved to a new location directly in front of the new power block. Finally the remaining buildings and structures left standing will be demolished and removed by the end of 2020.

All laydown and construction parking areas will be located within the existing Redondo Beach Generating Station fence line, as shown in Figure 2.1-1. Approximately 17 acres onsite will be used for construction laydown and parking. All construction equipment and supplies will be trucked directly to the site.

¹ Referenced to site ambient average temperature (SAAT) conditions of 63.3° Fahrenheit (F) dry bulb and 58.5°F wet bulb temperature.

5.2.2 Affected Environment

This section provides an overview of the region, including discussions of significant wetlands and other protected natural areas, sensitive habitats, designated critical habitat and, special-status plants and animals. For the purposes of this document, the site includes the entire 50-acre RBEP site. The regional overview of the project area includes, but is not limited to, the area within a 10-mile radius of the RBEP site.

The project site is approximately 12 feet above mean sea level and can be found on the U.S. Geological Survey (USGS) Redondo Beach, California 7.5-minute series topographic quadrangle within Township 4 south, Range 14 west, section 7; Township 4 south, Range 14 west, section 6; and Township 4 south, Range 15 west, section 1 (San Bernardino Meridian). The RBEP site is located approximately 1,000 feet west of the Pacific Coast Highway (also known as State Route 1) and at the southeast corner of Harbor Avenue and Herondo Street. Land use in the region primarily includes urban development to the north, east, and south of the RBEP boundary. The King Harbor Marina, Hermosa Beach (public beach owned by the City of Hermosa Beach), and the Pacific Ocean are located west of the project site.

A description of regional biogeography, wetlands, and other sensitive resources was obtained from reference sources including *Ecological Subregions of California* (USDA, 1997) and the California Department of Fish and Game (CDFG) *Biological Information and Observation System* (CDFG, 2012a). The U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) (USFWS, 2012a) was also queried to determine the location of reported wetlands near the site. These sources, as well as aerial photographs and USGS topographical maps, were consulted to determine the terrestrial and aquatic biological resources with potential to occur within a 10-mile radius of the RBEP site.

A list of sensitive biological resources for the region including natural communities and special-status plant and wildlife species was compiled for the project using the CDFG California Natural Diversity Database (CNDDDB) RareFind database (CDFG, 2012b) and other publicly available studies, information, and resources, such as the Carlsbad Fish and Wildlife Office Species Status List (USFWS, 2012b). A list of potentially occurring sensitive biological resources was generated for the region based on the combined results from these reference sources. Appendix 5.2A includes tables listing regional special-status plant and wildlife species. Species that were observed during the site visit are discussed in subsequent subsections, and photographs of the RBEP site are provided in Appendix 5.2B. Biological resources staff resumes are provided in Appendix 5.2C. Agency consultation correspondence is included in Appendix 5.2D.

5.2.2.1 Regional Overview

The RBEP site lies within the Los Angeles Plain subsection of the Southern California Coast Section (USDA, 1997). This subsection is characterized by flat floodplains and terraces and gently sloped alluvial fans with small areas of marine terraces. Steep hills and mountains, including parts of the Santa Monica and San Gabriel Mountains, are found in the northern part of this subsection and parts of the San Jose and Puente Hills are found along the eastern edge of the subsection. Historically, the predominant natural plant communities in the Los Angeles Plain included grasslands, shrublands, salt marshes, dunes, and woodlands (USDA, 1997). Extensive urban development throughout the region has replaced most of the natural communities with urban development, and today natural areas are restricted to scattered open space preserves and other protected areas. Current land use within the region is predominantly urban development, including the communities of Redondo Beach, Hermosa Beach, Torrance, and Palos Verdes Estates. These areas are characterized by a mixture of commercial and residential development interspersed with schools, public beaches, landscaped parks, open space, and wetland preserves.

The regional climate is moderated by marine influences with mean annual temperatures ranging from about 53 degrees Fahrenheit (°F) to 72°F. The mean annual precipitation is about 12 inches, with most of the rainfall occurring between November and March (WRCC, 2012).

The RBEP site is approximately 1 mile north of Redondo Beach State Park and is approximately 900 feet inland from the Pacific Ocean (from the northern portion of the project area). The site overlies the West Coast Basin in the Coastal Plain of Los Angeles, which is part of the South Coast Hydrologic Region (DWR, 2004). There are no natural rivers, streams, ponds, or wetlands in or around the project area, but the Pacific Ocean is within 1 mile.

The NWI has identified three constructed retention ponds (PUBKx) within the RBEP boundaries, but only one of the retention ponds is currently in use. PUBKx is a code assigned by the NWI that indicates the retention ponds are considered a palustrine system (P) with an unconsolidated bottom (UB), an artificially flooded water regime (K) that has been excavated (x) (USFWS, 2012a).

5.2.2.2 Significant Regional Wetlands and Other Protected Areas

Several important ecological reserves, wetland preservation sites, and designated open spaces occur in the regional vicinity. These protected areas represent some of the best remaining habitat in the region and provide important habitat for migratory birds along the Pacific Flyway and habitat for several special-status plants and animals. The closest habitat to the RBEP site, Madrona Marsh, is approximately 3.1 miles southeast of the project area. Other habitats within a 10-mile radius of the site are all at a distance of approximately 5.5 to 9.8 miles away from the site. Figure 5.2-1 shows the locations of these areas in relation to RBEP. Each of these areas is briefly described below.

Figures 5.2-2a through 5.2-2c provide the NWI's designation of wetland habitats, including any potential jurisdictional and non-jurisdictional wetlands delineated out to 250 feet from the edge of disturbance. For the purpose of these figures, wetlands as defined by the Coastal Act are included, which include "lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens" (Coastal Act Section 30121).

5.2.2.2.1 Madrona Marsh Nature Preserve

The Madrona Marsh Nature Preserve is approximately 3.1 miles southeast of the RBEP site. The preserve is approximately 49 acres and is owned and managed by the City of Torrance. This preserve is one of the last remaining vernal marshes in southern California (City of Torrance, 2011). The lowland area is a 10-acre vernal marsh and alkaline margin, while the upland supports a back dune system and vernal pools. Currently, the preserve is trying to restore as much native vegetation to the upland areas as feasible; virtually all the vegetation of the wetland is composed of native species (Friends of Madrona Marsh Preserve, 2012). Native trees including California sycamore (*Platanus racemosa*), Fremont cottonwood (*Populus fremontii*), red willow (*Salix laevigata*), and coast live oak (*Quercus agrifolia*) have been planted in the upland areas of the preserve. According to the *City of Torrance General Plan Update Draft Environmental Impact Report*, there are 101 species of plants and animals occurring in the Madrona Marsh Preserve that have been granted a special-status designation, either from wildlife agencies or organizations (City of Torrance, 2009). One plant species that is state listed as threatened, Nuttall's scrub oak (*Quercus dumosa*), occurs within the preserve. Wildlife species that are federally listed as endangered include the Riverside fairy shrimp (*Streptocephalus wootoni*) and San Diego fairy shrimp (*Branchinecta sandiegonensis*) (The Planning Center, 2009).

5.2.2.2.2 Palos Verdes Peninsula Subarea Natural Community Conservation Plan (NCCP)

In 1996, the City of Rancho Palos Verdes entered into a Planning Agreement with CDFG and USFWS to develop a Natural Community Conservation Planning (NCCP) subarea plan (CDFG, 2012c). The northern boundary for the proposed Palos Verdes Peninsula (PVP) Subarea NCCP is located approximately 5.5 miles south of the project site according to NCCP reserve boundary parcels (RPV, 2012), but an NCCP permit has not been issued so the final boundaries have not been finalized (CDFG, 2012b). Significant regional wetlands and protected areas in the PVP Subarea NCCP include Vista del Norte, Aqua Amarga, Vincente Bluffs, Alta Vincente, Abalone Cove, Ocean Trails, San Ramon, Forrestal, Portuguese Bend, Upper Filiorum, and Three Sisters (Figure 5.2-1).

The planning area is 8,661 acres with a 1,428-acre reserve system (CDFG, 2012c). This NCCP only involves land located within the City of Rancho Palos Verdes because that was the only Peninsula city to enter into this agreement (RPV, 2012). Primary habitats included coastal sage scrub, southern cactus scrub, saltbush scrub, southern coastal bluff scrub, and riparian scrub (RPV, 2004). The Peninsula Palos Verdes Subarea is relatively small compared to other NCCP subareas in southern California; however, this NCCP is unique because it contains healthy concentrations of coastal sage scrub habitat (approximately 1,000 acres) and numerous coastal sage scrub species that are not found in other southern California coastal sage scrub communities (RPV, 2012).

Several special-status plant species proposed to be covered by the NCCP include aphanisma (*Aphanisma blitoides*), bright green dudleya (*Dudleya virens*), Catalina crossosoma (*Crossosoma californicum*), Lyon's pentachaeta (*Pentachaeta lyonii*), Peirson's morning-glory (*Calystegia peirsonii*), Santa Catalina Island desert-thorn (*Lycium brevipes* var. *hassei*), south coast saltscale (*Atriplex pacifica*), southern tarplant (*Centromadia parryi* ssp. *australis*), and woolly seablite (*Suaeda taxifolia*). The proposed special-status wildlife species include El Segundo blue butterfly (*Euphilotes battoides allyni*), Palos Verdes blue butterfly (*Glaucopsyche lygdamus palosverdesensis*), cactus wren (*Campylorhynchus brunneicapillus*), and coastal California gnatcatcher (*Polioptila californica californica*) (CDFG, 2012b).

5.2.2.2.3 Linden H. Chandler Preserve

The Linden H. Chandler Preserve is located in the city of Rolling Hills Estates. The preserve, which is owned by the City of Rolling Hills Estates and the Palos Verdes Peninsula Land Conservancy (PVPLC), is located approximately 5.8 miles southeast of the RBEP site. The site is only 28.5 acres, but it provides some natural habitat in Rolling Hills Estates consisting of grasslands, coastal sage scrub, and a riparian corridor. PVPLC has rigorously been restoring coastal sage scrub since development, agriculture, and invasive plant species have reduced this ecosystem by 75 to 90 percent. This area has been restored to provide habitat for Palos Verdes blue butterfly and the coastal California gnatcatcher, which is federally listed as threatened (PVPLC, 2011).

5.2.2.2.4 George F. Canyon Nature Preserve

The George F. Canyon Nature Preserve includes approximately 36 acres of riparian and coastal sage scrub habitats. It is located in the city of Rolling Hills Estates and is managed by PVPLC (PVPLC, 2011). This nature preserve is approximately 6.6 miles southeast of the RBEP site. An intermittent stream attracts many wildlife species to the area, including several non-migratory bird species and migratory birds including orioles, yellow-rumped warbler (*Dendroica coronate*), western tanager (*Piranga ludoviciana*), phainopepla (*Phainopepla nitens*), and black-headed grosbeak (*Pheucticus melanocephalus*).

5.2.2.2.5 Defense Fuel Support Point (DFSP)

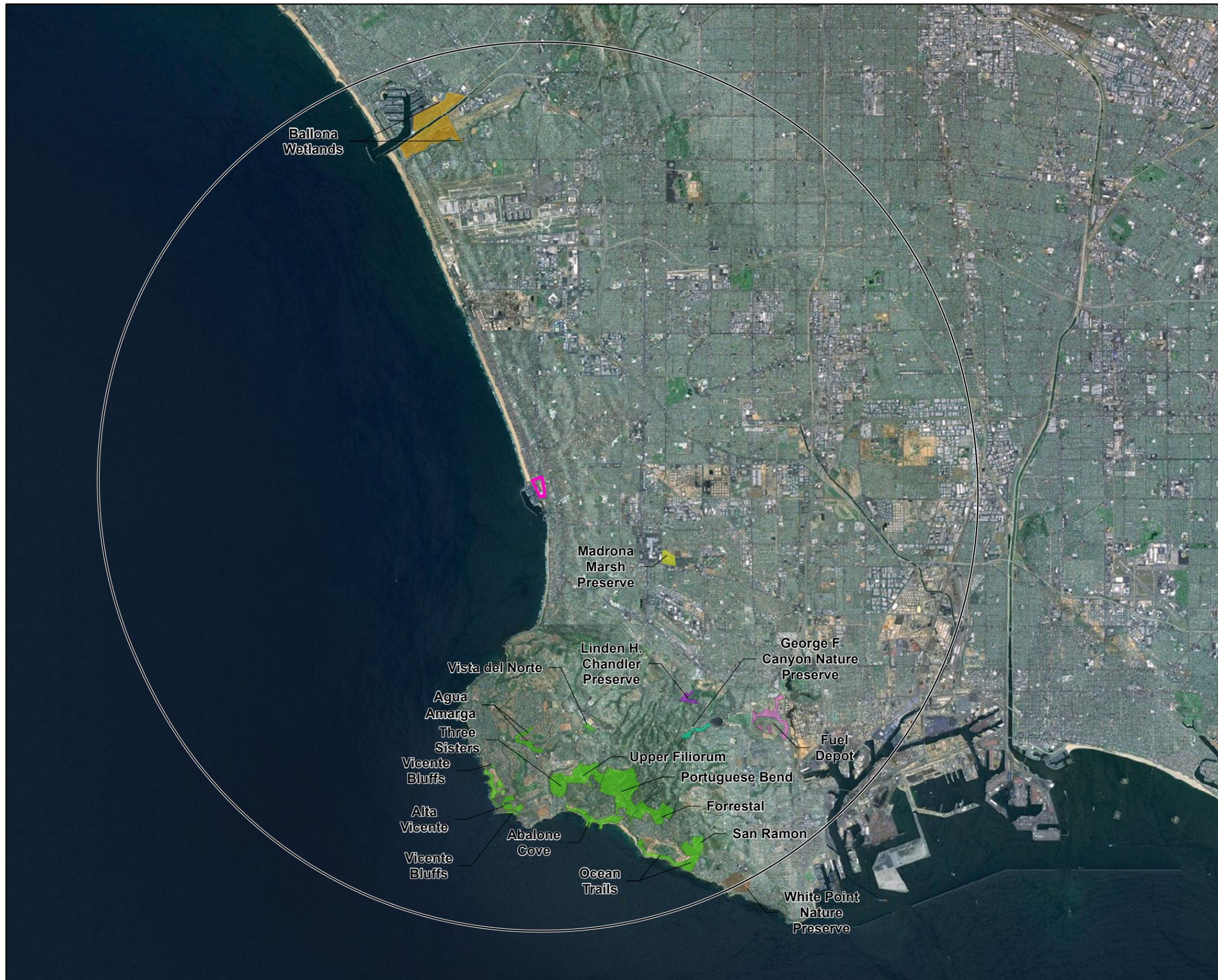
The DFSP is approximately 331 acres and is located in San Pedro in the city of Los Angeles, approximately 7 miles southeast of the RBEP site (NAVFAC, 2012). This site belongs to the United States military and is not open to the public. The coastal sage scrub onsite provides habitat for the Palos Verdes blue butterfly. This species was rediscovered at this location after being presumed extinct. The PVPLC uses this location as a plant nursery, and native plants are grown from locally collected seeds, which are used for restoration projects (PVPLC, 2011).

5.2.2.2.6 Ballona Wetlands

The Ballona Wetlands are located south of Marina del Rey and east of Playa del Rey, approximately 8 miles north-northwest of the RBEP site. The protected wetlands include 600 acres of estuarine and brackish marshes, freshwater marsh and riparian habitats, seasonal wetlands, and coastal sage scrub in the Santa Monica Bay (Friends of Ballona Wetlands, 2012). The refuge provides important habitat for numerous migratory birds. Special-status avian species that occur at the Ballona Wetlands include two endangered species: the least tern (*Sterna antillarum*; federally listed) and Belding's savanna sparrow (*Passerculus sandwichensis beldingi*; state listed). In addition, the least bittern (*Ixobrychus exilis*; State Species of Special Concern) is known to breed in the freshwater marsh (Friends of Ballona Wetlands, 2012).

5.2.2.2.7 White Point Nature Preserve

The White Point Nature Preserve is located in San Pedro in the city of Los Angeles, approximately 9.8 miles southeast of the RBEP site. The preserve is approximately 102 acres of restored coastal sage scrub habitat that is managed by the PVPLC (PVPLC, 2011). The coastal California gnatcatcher and western meadowlark (*Sturnella neglecta*) have been observed within the preserve (Moody and Dalkey, 2007).



- Legend**
- AES Redondo Beach Energy Project
 - 10 Mile Buffer
 - Palos Verdes Peninsula Subarea NCCP
 - Ballona Wetlands
 - Madrona Marsh Preserve
 - Linden H. Chandler Preserve
 - George F. Canyon Nature Preserve
 - Defense Fuel Support Point (Fuel Depot)
 - White Point Nature Preserve

Source: ESRI, i-cubed, USDA FSA, USGS, AEX, GeoEye, Getmapping, Aerogrid, IGP, (c) 2011 Esri, DeLorme, NAVTEQ, TomTom Palos Verdes Peninsula Land Conservancy (2009), Friends of Ballona Wetlands (2012), City of Torrance (2011).

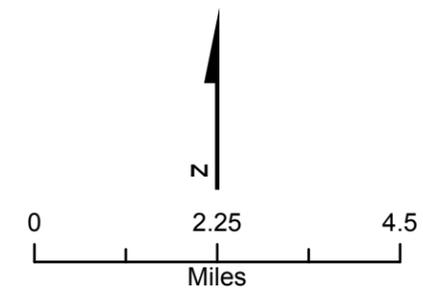


FIGURE 5.2-1
Significant Regional Wetlands and Protected Areas
 AES Redondo Beach Energy Project
 Redondo Beach, CA



- Legend**
- AES Redondo Beach Energy Project
 - 250-Foot Buffer
 - 1-Miile Buffer
- Wetland Type**
- Estuarine and Marine Wetland
 - Freshwater Emergent Wetland
 - Freshwater Forested/Shrub Wetland
 - Freshwater Pond
 - Riverine

Source: FWS (2012).

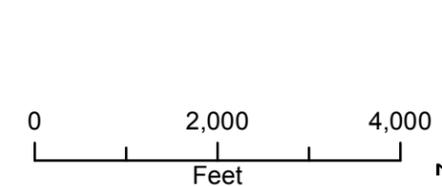
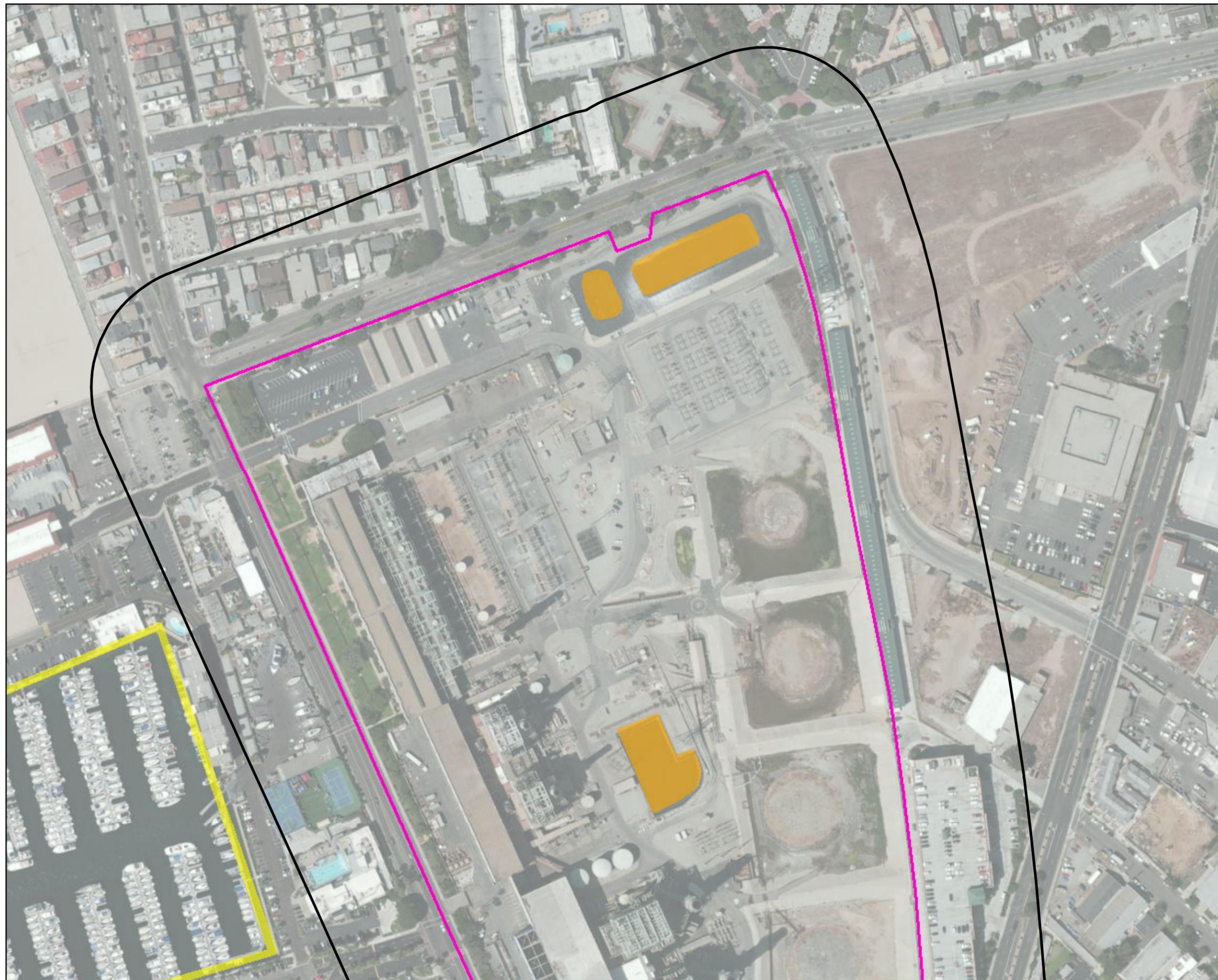


FIGURE 5.2-2a
Wetlands Within 1 Mile of Project Site
 AES Redondo Beach Energy Project
 Redondo Beach, California



- Legend**
- AES Redondo Beach Energy Project
 - 250-Foot Buffer
- Wetland Type**
- Estuarine and Marine Wetland
 - Freshwater Pond

Source: FWS (2012).

Note: NWI data is accurate to produce medium resolution information at a scale of 1:12,000. Larger scales will not contain the same level of accuracy.

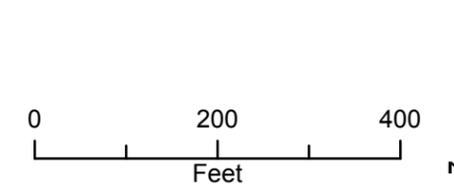


FIGURE 5.2-2b
Wetlands in
Immediate Vicinity of Project Site
(1:2400 scale)
 AES Redondo Beach Energy Project
 Redondo Beach, California



- Legend**
- AES Redondo Beach Energy Project
 - 250-Foot Buffer
- Wetland Type**
- Estuarine and Marine Wetland
 - Freshwater Pond

Source: FWS (2012).

Note: NWI data is accurate to produce medium resolution information at a scale of 1:12,000. Larger scales will not contain the same level of accuracy.

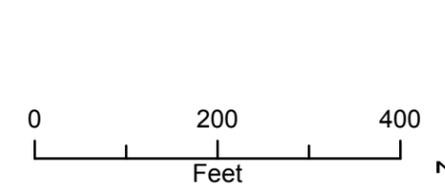


FIGURE 5.2-2c
Wetlands in
Immediate Vicinity of Project Site
(1:2400 scale)
 AES Redondo Beach Energy Project
 Redondo Beach, California

5.2.2.3 Sensitive Habitat Types Identified in the CNDDDB and Critical Habitat

Sensitive habitats within 10 miles of the RBEP site include significant natural communities identified by the CNDDDB, including southern coastal salt marsh, southern coastal bluff, and southern dune scrub. Critical habitat for the coastal California gnatcatcher, Palos Verdes blue butterfly, and the western snowy plover (*Charadrius alexandrinus nivosus*) are also present in the regional vicinity of the RBEP site. Sensitive habitat types and critical habitat areas within 10 miles of the RBEP site are shown on Figure 5.2-3. Descriptions of these areas are provided below.

5.2.2.3.1 Southern Coastal Salt Marsh

Southern coastal salt marsh occurs in areas subject to regular tidal flooding by salt water, such as sheltered inland bays, estuaries, and lagoons. The distribution of plant species within the salt marsh is often in distinct zones based on the frequency and duration of tidal flooding. Typically, California cordgrass (*Spartina foliosa*) occurs at the lowest elevations adjacent to open waters that are subject to regular, prolonged tidal inundation. The mid-elevation areas of the marsh are typically characterized by pickleweed (*Salicornia virginica*) and are generally subject to cyclical inundation during high tides and drying during low tides. The upper marsh zone is generally subject to flooding for short durations and only during peak high tides, and generally supports a more diverse mixture of plant species including pickleweed, saltgrass (*Distichlis spicata*), alkali heath (*Frankenia salina*), alkali weed (*Cressa truxilensis*), California seablite (*Suaeda californica*), and marsh jaumea (*Jaumea carinosa*).

The historical extent of salt marsh habitat throughout the south coast region has been dramatically reduced as a result of urban coastal development. Today, this community is restricted to isolated patches surrounded by development or in designated protected areas. Southern coastal salt marsh habitat is found in the Ballona Wetlands, which is approximately 8 miles north-northwest of RBEP (Figure 5.2-3).

5.2.2.3.2 Southern Coastal Bluff Scrub

Southern coastal bluff scrub occurs at localized sites along the coast with woody and/or succulent plants that reach up to 2 meters in height (Holland, 1986). As with other natural habitats, the historical extent of this habitat type in southern California has been dramatically reduced. Native plants commonly found in this habitat include saltbush (*Atriplex* spp.), island morning glory (*Calystegia macrostegia*), Indian paintbrush (*Castilleja affinis*), San Diego spineflower (*Chorizanthe orcuttiana*), sea dahlia (*Leptosyne maritima*), dudleya (*Dudleya* spp.), California brittlebush (*Encelia californica*), seaside daisy (*Erigeron glaucus*), seaside golden yarrow (*Eriophyllum staechadifolium*), goldenbush (*Ericameria* spp.), cliff aster (*Malacothrix saxatilis*), chilicothe (*Marah macrocarpa*), prickly pear (*Opuntia littoralis*), and lemonade berry (*Rhus integrifolia*) (Holland, 1986). This sensitive habitat type occurs approximately 3 miles south of RBEP and stretches along the coastline of the Palos Verdes Peninsula (Figure 5.2-3).

5.2.2.3.3 Southern Dune Scrub

Southern dune scrub is characterized as a dense coastal scrub community of scattered shrubs, subshrubs, and herbs that are typically less than 1 meter tall and often associated with high percent cover. This habitat type is drier, fairly warmer, and experiences less onshore wind when compared to central and northern dune scrub habitats. Native plants commonly found in this habitat include beach saltbush (*Atriplex leucophylla*), California croton (*Croton californicus*), California ephedra (*Ephedra californica*), mock heather (*Ericameria ericoides*), dune lupine (*Lupinus chamissonis*), desert thorn (*Lycium brevipes*), prickly pear, lemonade berry, and jojoba (*Simmondsia chinensis*) (Holland, 1986). This sensitive habitat type occurs approximately 5.8 miles north-northwest of RBEP (Figure 5.2-3).

5.2.2.3.4 Critical Habitat

Critical habitat for three federally listed species occurs in the regional vicinity of the RBEP site. Critical habitat for the coastal California gnatcatcher occurs approximately 3.4 miles south of the RBEP site (Figure 5.2-2). Critical habitat for the Palos Verdes blue butterfly is located approximately 5.6 miles south of the RBEP site (Figure 5.2-3). Critical habitat for the western snowy plover was designated at Hermosa State Beach, approximately 750 feet northwest; Dockweiler South, which is 4.8 miles northwest; and Dockweiler North, about 6.9 miles northwest of the RBEP site (USFWS, 2011a) (Figure 5.2-3).

5.2.2.4 Regional Sensitive or Special-status Species

Special-status species information was compiled from a variety of sources and is summarized in tables provided in Appendix 5.2A. The tables list all special-status species historically found or with the potential to occur within the project region, including regional species listed as threatened or endangered that have special requirements under the federal Endangered Species Act (ESA) (USFWS, 1970) and the California Endangered Species Act (CESA) (Fish and Game Code, Sections 2050 et seq). Other non-listed sensitive and special-status species, including California Native Plant Society (CNPS) List 1-4 species, CDFG Species of Special Concern, CDFG Fully Protected Species, and other CDFG Special Animals and bird species, are also tabulated in Appendix 5.2A. This appendix includes the status designation for each species, habitat types that may support these species in the project region, a determination of potential for these species to occur within the RBEP 1-mile survey area, and a rationale for the occurrence determination. The known locations of special-status species identified in the CNDDDB records within a 10-mile range of the RBEP site are shown on Figure 5.2-4a. Special-status species that have been identified in the CNDDDB records within 1 mile of the RBEP site are shown on Figure 5.2-4b.

Plants were considered to be sensitive or special-status if one or more of the following criteria were met:

- Federally or state-listed, proposed, or candidate for listing as rare, threatened or endangered (USFWS, 2011b; CDFG, 2012d)
- State Special Plant as defined by the CNDDDB (CDFG, 2012d)
- Designated by the CNPS in its Inventory of Rare and Endangered Plants of California (CNPS, 2012)

Animals were considered to be sensitive or special-status if one or more of the following criteria were met:

- Federally or state-listed, proposed, or candidate for listing as threatened or endangered (USFWS, 2011b; CDFG, 2011)
- California State Species of Concern as defined by the CNDDDB (CDFG, 2011)
- California State Fully Protected Species (CDFG, 2011)
- State Special Animal as defined by the CNDDDB (CDFG, 2011)

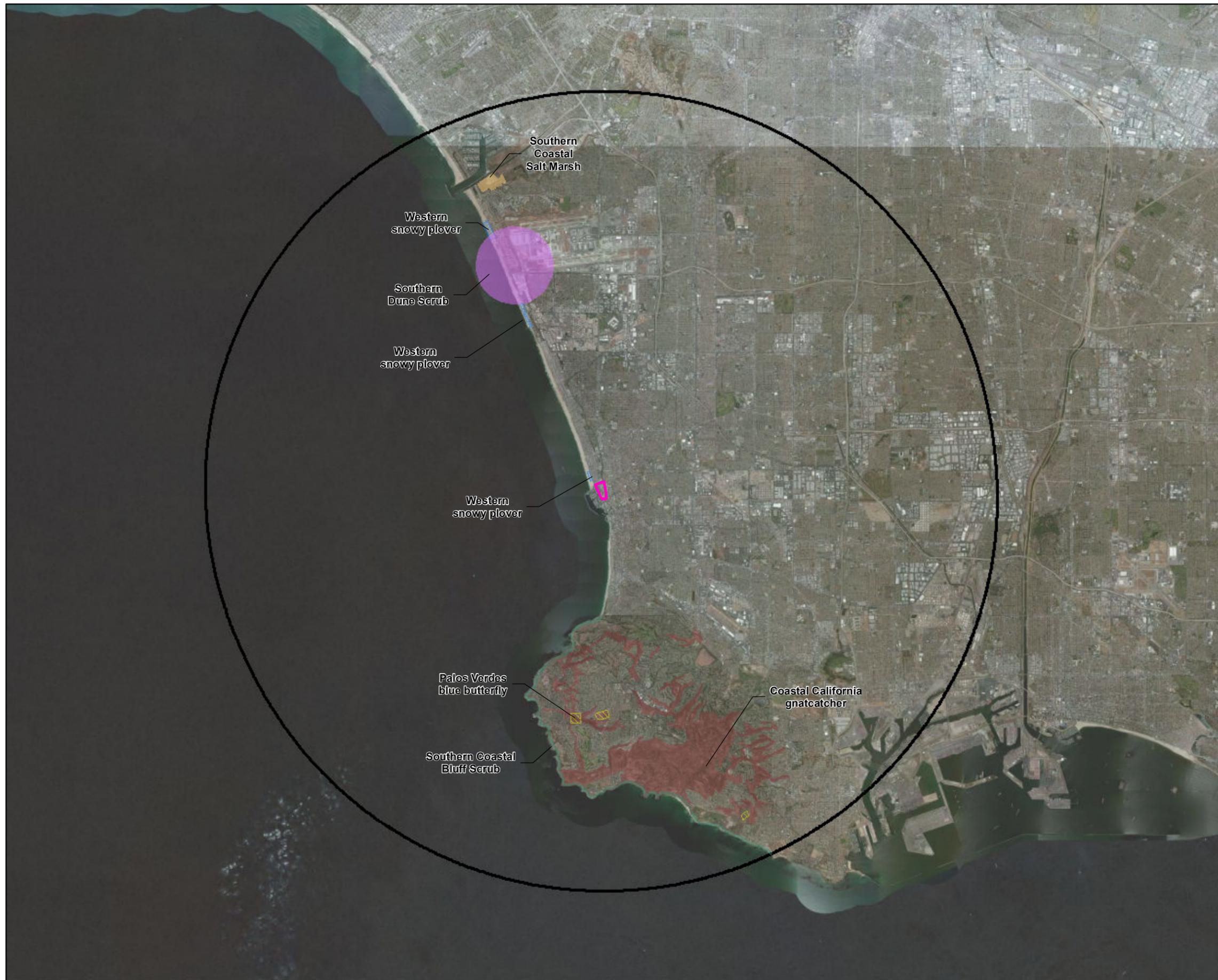
Sensitive and special-status species from the regional lists with habitat(s) and/or known distribution within the 1-mile survey area for the project were evaluated for potential impacts from RBEP construction and operation, and the results of the evaluation are discussed in Sections 5.2.2.7 and 5.2.2.8. Special-status species from the regional lists with habitats or known distribution that do not occur within the project area were not evaluated beyond the tables in Appendix 5.2A.

5.2.2.4.1 Survey Methods

A site reconnaissance survey was conducted by CH2M HILL biologists on September 29, 2011 (biological resources staff resumes are provided in Appendix 5.2C). The project site was assessed for biological resources, including suitable habitat with the potential to support special-status plant and wildlife species. Methodologies for plant and wildlife surveys are provided in the subsequent sections. CNDDDB reporting forms were not completed because no special-status plant or wildlife species were documented within the project boundaries.

Botanical Surveys. According to the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*, botanical surveys should be completed before any project-related activities may modify vegetation, such as clearing, mowing, or ground-breaking activities (CDFG, 2009). In addition, protocols outlined in these guidelines are to be adhered to when:

- “Natural (or naturalized) vegetation occurs on the site, and it is unknown if special status plant species or natural communities occur on the site, and the project has the potential for direct or indirect effects on vegetation; or
- Special status plants or natural communities have historically been identified on the project site; or
- Special status plants or natural communities occur on sites with similar physical and biological properties as the project site.” (CDFG, 2009)



- Legend**
- AES Redondo Beach Generating Station
 - 10 Mile Buffer
 - Critical Habitat**
 - Coastal California gnatcatcher
 - Palos Verdes blue butterfly
 - Western Snowy Plover/Southern Coastal Salt Marsh
 - Sensitive Habitats**
 - Southern Coastal Bluff Scrub
 - Southern Coastal Salt Marsh
 - Southern Dune Scrub

Source: California Department of Fish and Game, Habitat Conservation Division, Wildlife and Habitat Data Analysis Branch, March 2012.
 U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office February 13, 2008.

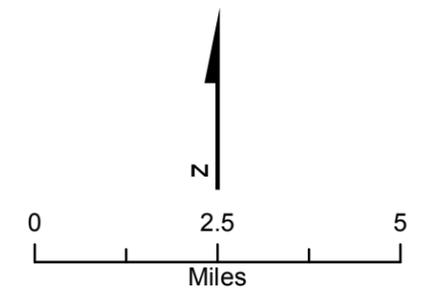
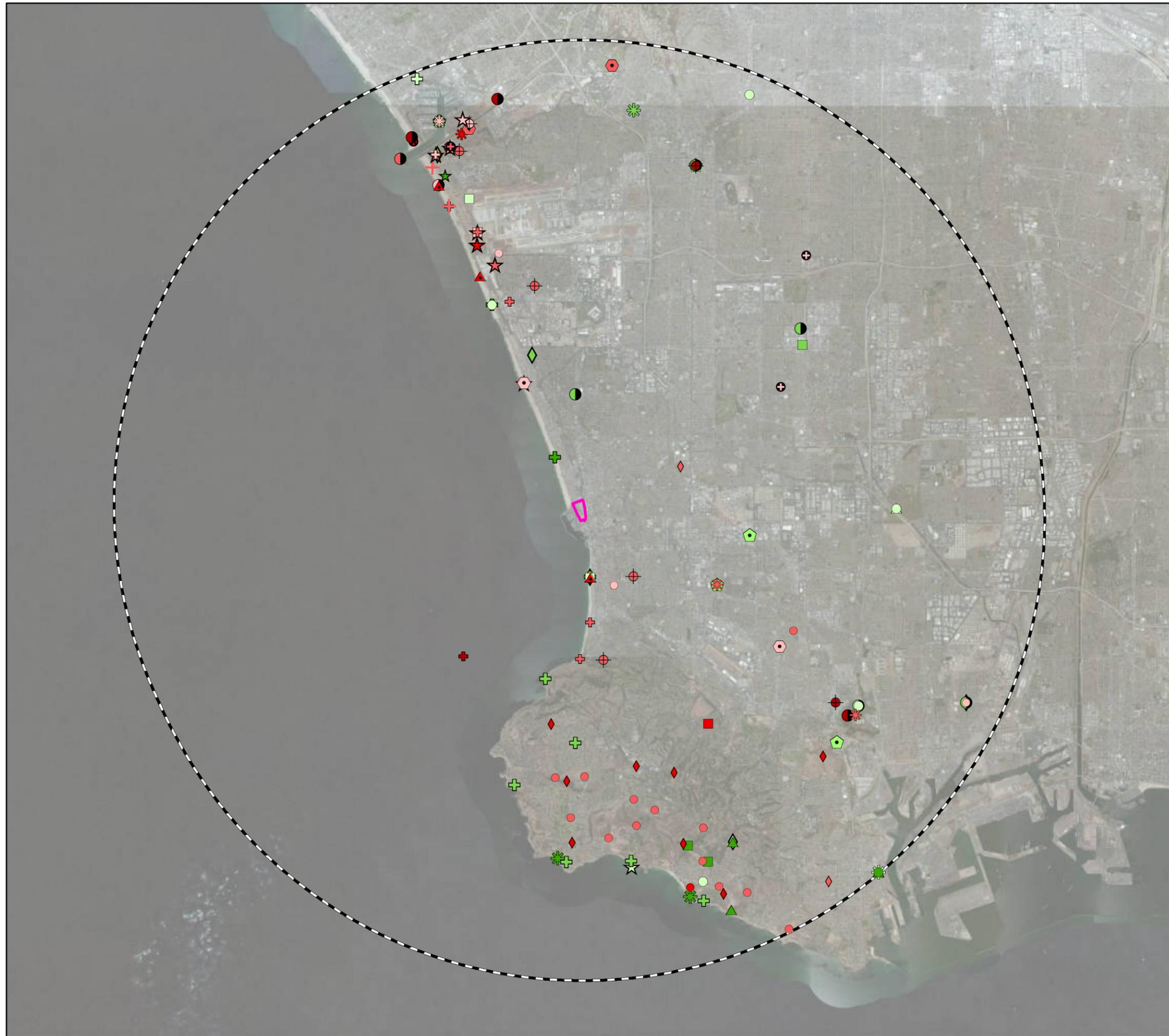


FIGURE 5.2-3
Sensitive Natural Communities and Critical Habitat
 AES Redondo Beach Energy Project
 Redondo Beach, California



- Legend**
- Plants**
- Brand's star phacelia
 - California Orcutt grass
 - Catalina crossosoma
 - Ballona cinquefoil
 - Coulter's goldfields
 - Davidson's saltscale
 - Lyon's pentachaeta
 - Orcutt's pincushion
 - Parish's brittlescale
 - San Bernardino aster
 - San Fernando Valley spineflower
 - Santa Catalina Island desert-thorn
 - coastal goosefoot
 - South Coast saltscale
 - Ventura Marsh milk-vetch
 - aphanisma
 - beach spectaclepod
 - estuary seablite
 - island green dudleya
 - coastal dunes milk-vetch
 - mud nama
 - prostrate vernal pool navarretia
 - spreading navarretia
 - southern tarplant
 - AES Redondo Beach Energy Project
 - 10-Mile Buffer
- Animals**
- Belding's savannah sparrow
 - Belkin's dune tabanid fly
 - Busck's gallmoth
 - California black rail
 - California brown pelican
 - California least tern
 - Dorothy's El Segundo Dune weevil
 - El Segundo blue butterfly
 - El Segundo flower-loving fly
 - Henne's eucosman moth
 - Lange's El Segundo Dune weevil
 - Mohave tui chub
 - Pacific pocket mouse
 - Palos Verdes blue butterfly
 - San Diego desert woodrat
 - burrowing owl
 - coast horned lizard
 - coastal California gnatcatcher
 - coastal cactus wren
 - globose dune beetle
 - mimic tryonia (=California brackishwater snail)
 - monarch butterfly
 - pocketed free-tailed bat
 - sandy beach tiger beetle
 - senile tiger beetle; silvery legless lizard
 - south coast marsh vole
 - southern California saltmarsh shrew
 - tricolored blackbird
 - wandering (=saltmarsh) skipper
 - western mastiff bat
 - western pond turtle
 - western snowy plover

Source: California Department of Fish and Game, Habitat Conservation Division, Wildlife and Habitat Data Analysis Branch, March 2012.

CNDDDB version 03/2012.
 Please Note: The occurrences shown on this map represent the known locations of the species and/or a range location of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDDB about a species or an area can never be used as proof that no special status species occur in an area.

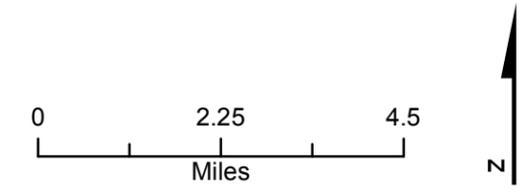


FIGURE 5.2-4a
Special Status Species (within 10 miles)
 AES Redondo Beach Energy Project
 Redondo Beach, California



- Legend**
- AES Redondo Beach Energy Project
 - 1-Miile Buffer
 - Plant (80m)
 - Plant (specific)
 - Plant (non-specific)
 - Plant (circular)
 - Animal (80m)
 - Animal (specific)
 - Animal (non-specific)
 - Animal (circular)
 - Terr. Comm. (80)
 - Terr. Comm. (specific)
 - Terr. Comm. (non-specific)
 - Terr. Comm. (circular)
 - Aqu. Comm. (80)
 - Aqu. Comm. (specific)
 - Aqu. Comm. (non-specific)
 - Aqu. Comm. (circular)
 - Sensitive EO's (Commercial only)

Source: California Department of Fish and Game, Habitat Conservation Division, Wildlife and Habitat Data Analysis Branch, March 2012.

CNDDDB version 03/2012.
 Please Note: The occurrences shown on this map represent the known locations of the species and/or a range location of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDDB about a species or an area can never be used as proof that no special status species occur in an area.

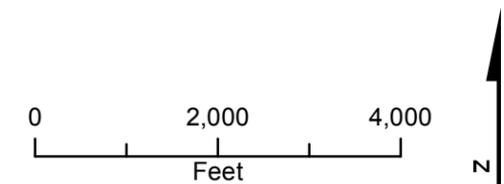


FIGURE 5.2-4b
Special Status Species (within 1 mile)
 AES Redondo Beach Energy Project
 Redondo Beach, California

RBEP will be constructed entirely within the existing Redondo Beach Generating Station fence line and no natural vegetation occurs within the project area. Vegetation within the project area primarily consists of landscaping plants and non-native species that are regularly treated with herbicides and removed as necessary. Power generating facilities have been on the site since the early 1900s, and special-status plants or natural communities have not been documented within the project area (CDFG, 2012d, and Figure 5.2-4b). RBEP is located within an existing developed operational industrial site that does not provide any physical or biological properties available for special-status/rare plants or natural communities. Because none of the appropriate criteria outlined in CDFG's protocols were met for the project site, a general site pedestrian survey was conducted by qualified biologists, and vegetation located within the project area was recorded. More specifically, considering the long-term industrial development and the ongoing management and maintenance of the site, establishing transects within the project area was not appropriate. The biologists surveyed around the tank containment berms, retention basins, the open paved and gravel areas, and along the fence line of Redondo Beach Generating Station.

CH2M HILL biologists used the applicable CNDDDB RareFind as a checklist (see Appendix 5.2E) to record any special-status plant species. The RareFind report and list were generated for all CNDDDB occurrences that have been documented within 1 mile of the project area. The RareFind list for plant species and the complete RareFind report for these occurrences is included in Appendix 5.2E.

Wildlife Surveys. Perimeter landscaping and additional areas, which include the fuel oil storage containment areas, retention basins, the open paved and gravel areas, and along the fence line of Redondo Beach Generating Station were surveyed for wildlife species and nesting birds. CH2M HILL's biologists used the applicable CNDDDB RareFind report as a checklist (see Appendix 5.2E for the checklist) to record special-status wildlife species observed onsite. The RareFind report and list were generated for all CNDDDB occurrences that have been documented within 1 mile of the project area. The RareFind list for wildlife species and the complete RareFind report for these occurrences is included in Appendix 5.2E. Biologist qualifications are provided in Appendix 5.2C.

5.2.2.4.2 Observed Plant Species

The site is entirely developed with no natural habitats present. Vegetation observed during the September site visit was limited to landscaping trees and shrubs and a few scattered weedy plants. Most of the non-landscape vegetation was observed in the small ponded area immediately west of fuel oil storage tank #1 and in the southwest corner of the fuel oil storage tank #1 containment area. Species in these areas consisted of a few cattails (*Typha* sp.) and what appears to be sprangletop (*Leptochloa* sp.), an opportunistic weedy species often found in moist, disturbed areas (a complete list of observed species is provided in Appendix 5.2F). No special-status plant species were observed within the project area; therefore, CNDDDB reporting forms were not completed. Five special-status plant species have been documented within 1 mile of the project area; these species include beach spectaclepod (*Dithyrea maritima*), Brand's star phacelia (*Phacelia stellaris*), aphanisma (*Aphanisma blitoides*), Parish's brittlescale (*Atriplex parishii*), and South Coast saltscale (*Atriplex pacifica*) (Figure 5.2-4b) (CDFG, 2012b). However, none of these special-status plant species are located within the project boundaries.

5.2.2.4.3 Observed Animal Species

There is no natural habitat on the site, and the potential for special-status wildlife to occur within the project area is very unlikely. Some of the wildlife species observed during the site visit included highly urbanized and common species, such as the American crow (*Crovis brachyrhynchos*), gull (*Larus* spp.), and rock pigeon (*Columba livia*). (A complete list of observed species is provided in Appendix 5.2F.) Almost all of the special-status wildlife species reported in the CNDDDB in the regional vicinity are found in coastal dunes, marshes, riparian areas, grasslands, and coastal sage scrub, and none of these habitats are found within the RBEP site. The California least tern (a species that is state and federally listed as endangered) will nest in open, sparsely vegetated areas including landfill sites and paved areas and could be considered to have very limited potential to occur. Other birds protected under the Migratory Bird Treaty Act (MBTA), such as killdeer (*Charadrius vociferous*), mourning doves (*Zenaida macroura*), and house finches (*Carpodacus mexicanus*) may nest in open areas and in unused structures found within the project area; however, no special-status or protected species were observed during the site visit. Because no special-status wildlife species were observed within the project area, CNDDDB reporting forms were not completed.

5.2.2.5 Land Cover Types and Vegetation Communities

Land cover types and vegetation communities within a 1-mile radius of the RBEP site are shown in Figures 5.2-5a through 5.2-5f. Urban development collectively represents the largest land use in the survey area. Other land cover and natural vegetation communities identified include industrial, parks, and open space. The Pacific Ocean is approximately 1,200 feet west of the RBEP site.

5.2.2.5.1 Urban

Urban developed areas include residential, commercial, and light industrial uses, as well as public schools and other municipal facilities. Most of the land use within the 1-mile radius of the RBEP site consists of urban development.

5.2.2.5.2 Industrial and Landfill

Industrial areas include the onsite SCE 230-kV switchyard. According to the City of Redondo Beach Official Zoning map, another small industrial area has been zoned to the east of RBEP (City of Redondo Beach, 2008). There are no landfills in the vicinity of the project area.

5.2.2.5.3 Parks and Open Space

Parks and open space include natural and landscaped areas that have been designated for recreational uses or provide undeveloped green space. Parks in the immediate vicinity of the RBEP site include Redondo Beach State Park, Veterans Park, Vincent Park, Clark Field, and Hermosa Beach State Park. Open space includes undeveloped areas east of the project site and small landscaped areas within the 1-mile buffer.

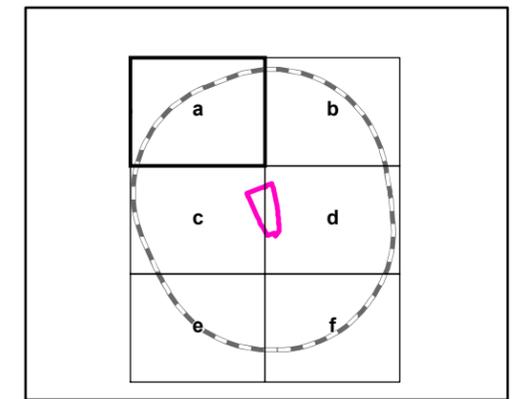
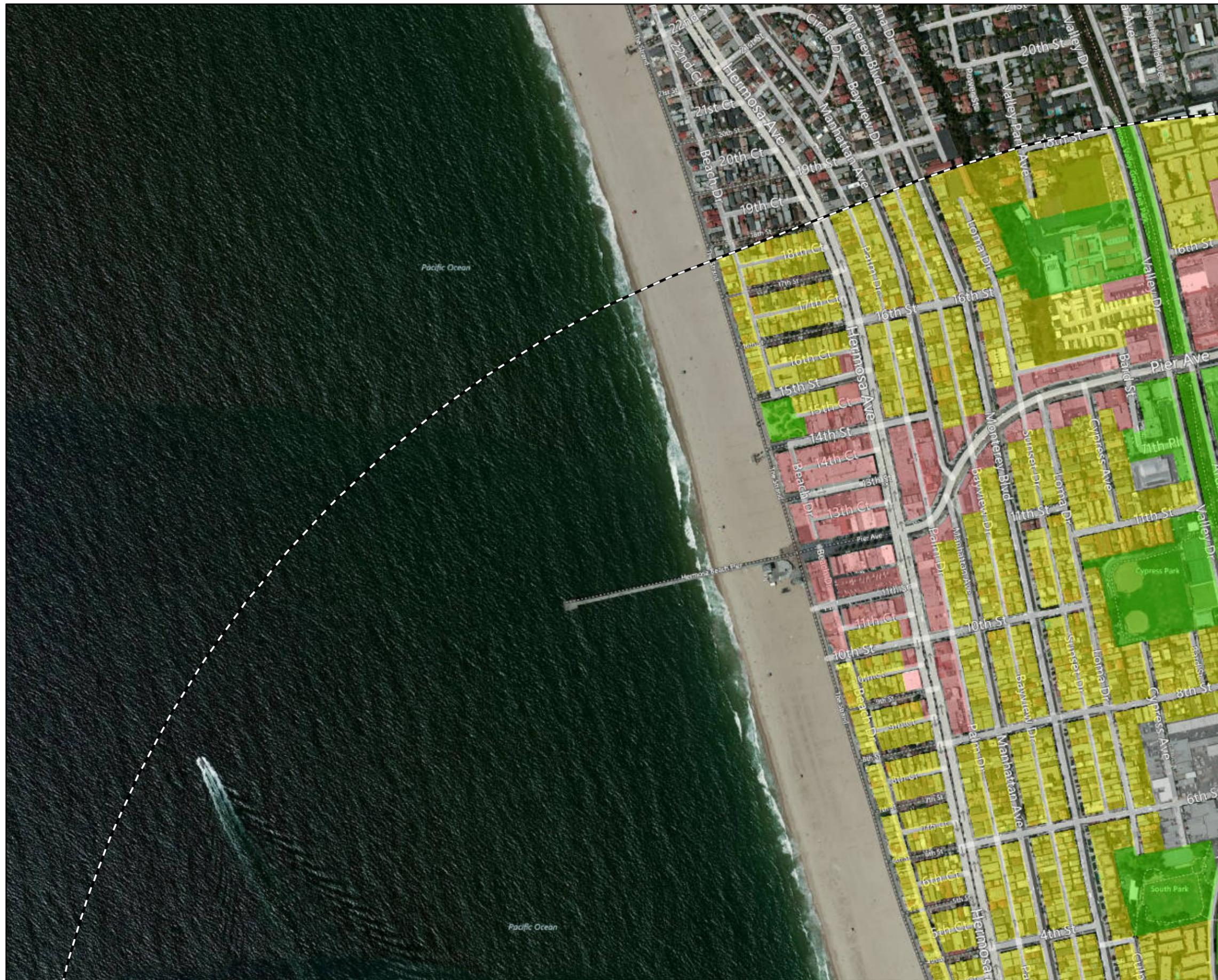
5.2.2.6 RBEP Site and Associated Facilities

RBEP will be constructed entirely within the existing approximately 50-acre Redondo Beach Generating Station site, a currently operating power plant located west of Pacific Coast Highway. The existing Redondo Beach Generating Station includes eight steam turbines: Units 5–8, which are currently operational, and Units 1–4, which are no longer in use. All eight units will be demolished as part of the project. SCE owns and operates a 230-kV switchyard on the existing Redondo Beach Generating Station site. Five former fuel oil tank containment areas are located in the eastern and southern portion of the site. Three retention ponds are located on the site, two in the northeastern corner and one near the center of the site. Landscape trees and shrubs have been planted around the perimeter fencing. No natural habitat or wetlands are present on the existing Redondo Beach Generating Station site.

5.2.2.7 Special-status Plant Species

Five special-status plant species are known to occur or have occurred within 1 mile of RBEP: beach spectacle-pod, Brand's star phacelia, aphanisma, Parish's brittlescale, and south coast saltscale (Figure 5.2-4b) (CDFG, 2012b). The RBEP site is located entirely within existing developed areas with no suitable habitat; therefore, the project will not affect any special-status plant species.

All special-status species occurrences listed above have been documented with non-specific locality information. The beach spectacle-pod is a historical record from 1902 and is assumed to be extirpated from the area from a field survey conducted in 1998, and the only potential habitat remaining is the El Segundo Blue Butterfly Preserve at the Los Angeles World Airports (CDFG, 2012b). There were two historical records for Brand's star phacelia in the vicinity of Redondo Beach, one collection was obtained in 1897 and the other in 1909 (CDFG, 2012b). The collection taken for aphanisma was not dated; the exact location of this observation record is not known and has been mapped in the vicinity of Redondo Beach (CDFG, 2012b). The south coast saltscale record was obtained from a 1903 collection and the specific location is unknown. This occurrence has been mapped at Redondo Beach (CDFG, 2012d). These species are associated with coastal bluff scrub and coastal scrub, and these habitats are not found within the project area. The Parish's brittlescale occurrence record was obtained from an undated collection that was mapped at Redondo Beach (CDFG, 2012b). This species is associated with alkali meadows, vernal pools, chenopod scrub, and playas, none of which occur in the RBEP site.



- Legend**
-  AES RBEP Site and Survey Boundaries
 -  1- Mile Buffer From Project Site
 -  Commercial
 -  Industrial
 -  Mixed Use
 -  Park and Recreation
 -  Public/Institutional
 -  Residential

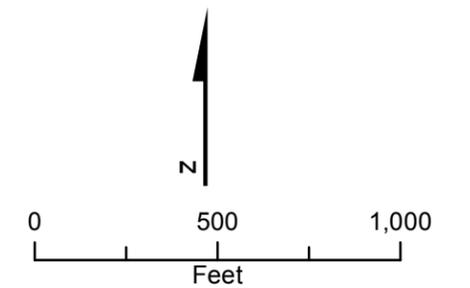
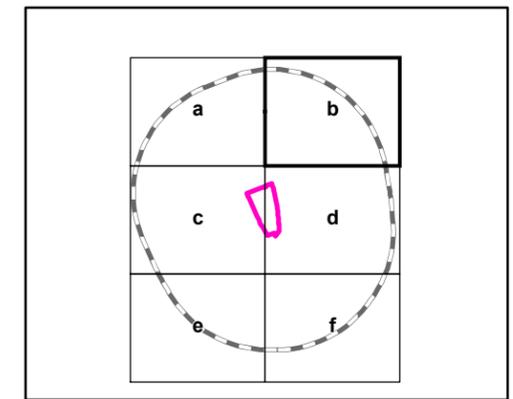
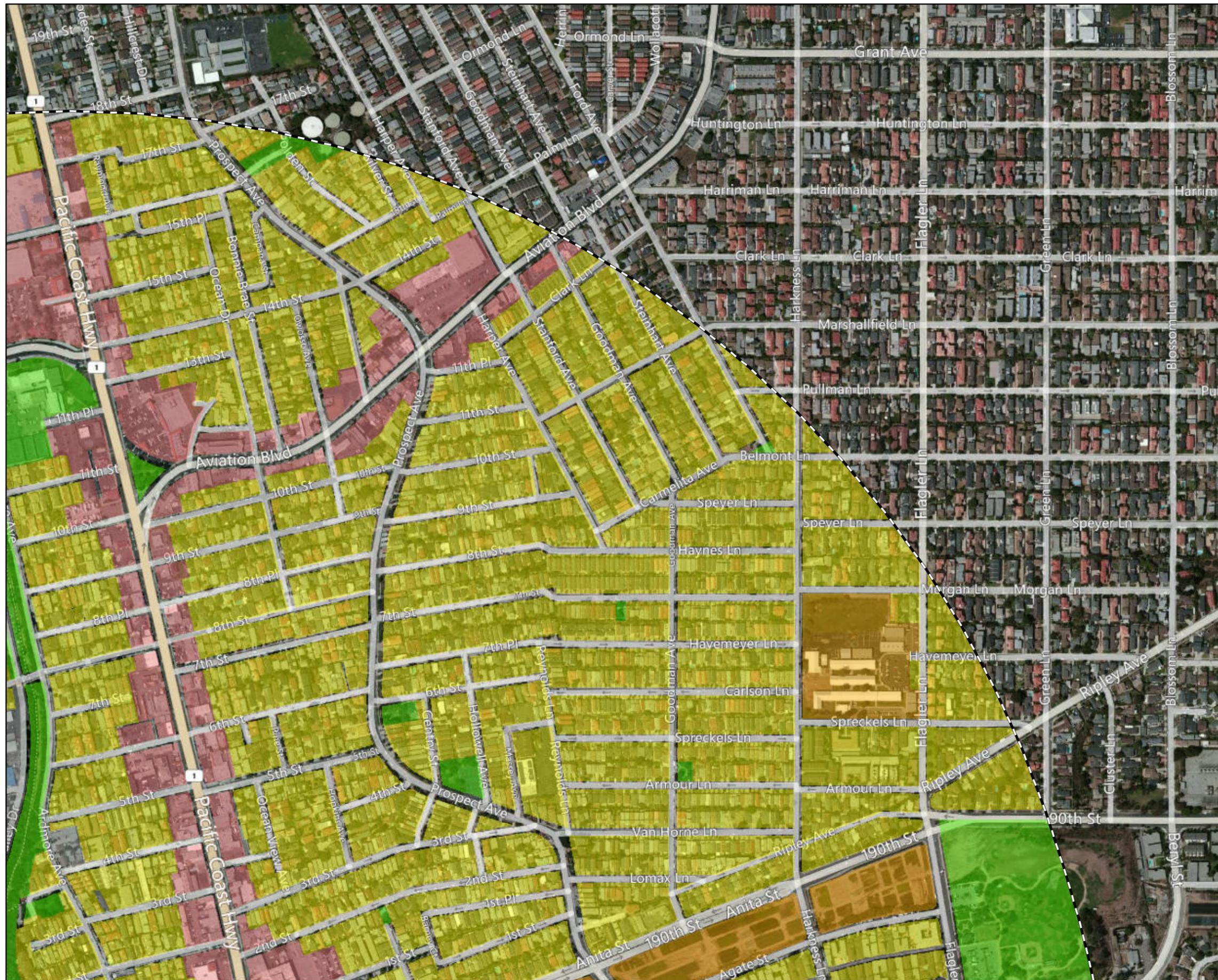


FIGURE 5.2-5a
Land Cover Types and
Vegetation Communities
 AES Redondo Beach Energy Project
 Redondo Beach, California



- Legend**
- AES RBEP Site and Survey Boundaries
 - 1- Mile Buffer From Project Site
 - Commercial
 - Industrial
 - Mixed Use
 - Park and Recreation
 - Public/Institutional
 - Residential

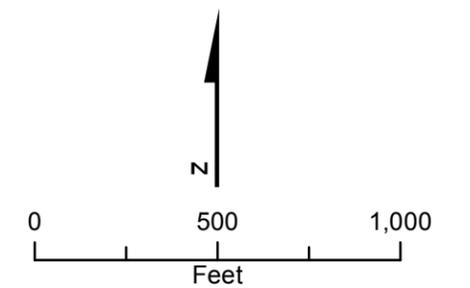
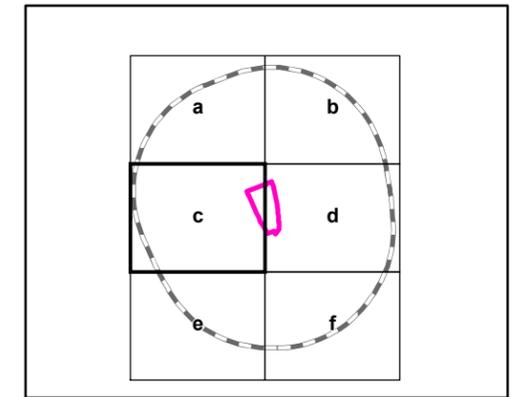
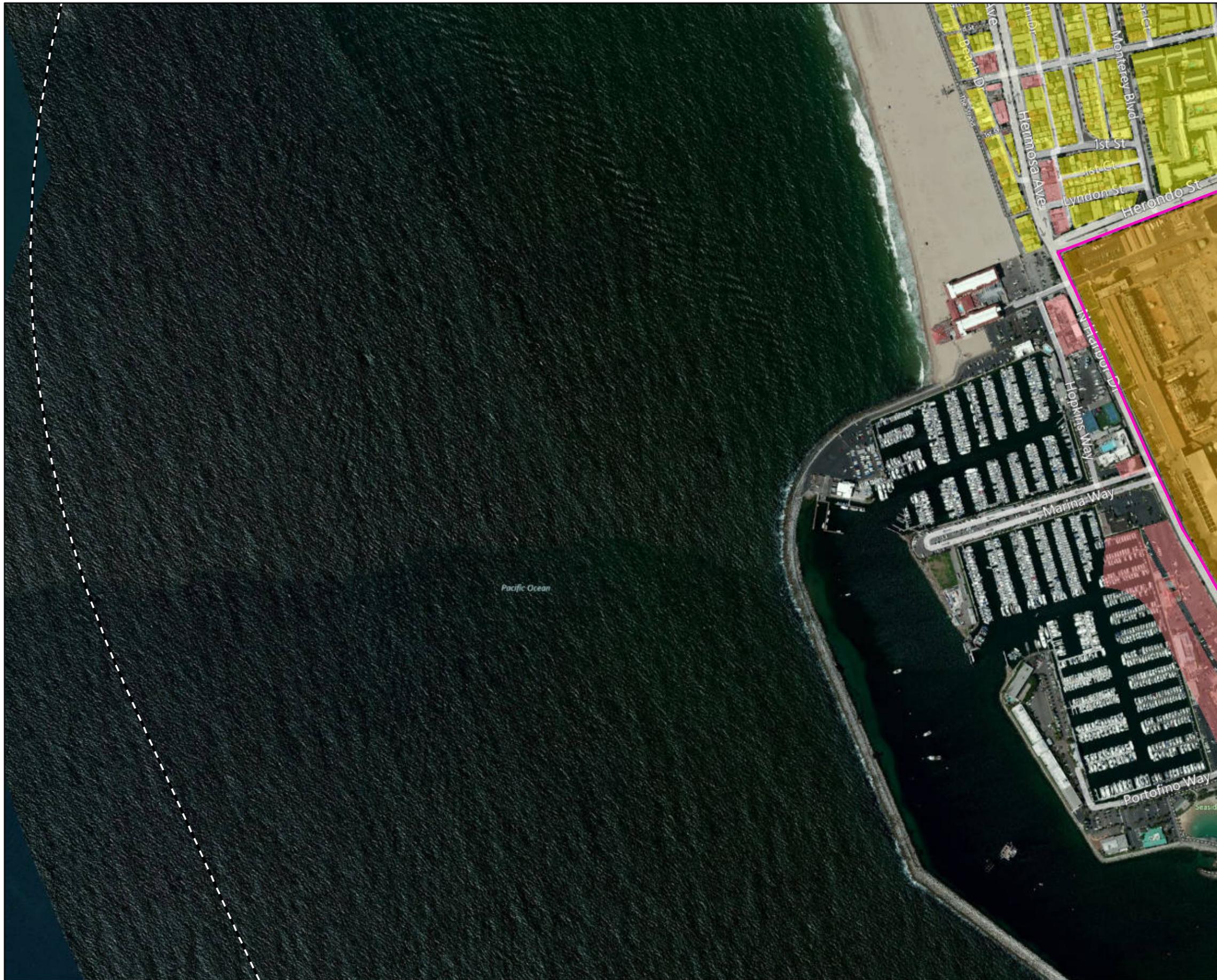


FIGURE 5.2-5b
Land Cover Types and
Vegetation Communities
 AES Redondo Beach Energy Project
 Redondo Beach, California



- Legend**
- AES RBEP Site and Survey Boundaries
 - 1- Mile Buffer From Project Site
 - Commercial
 - Industrial
 - Mixed Use
 - Park and Recreation
 - Public/Institutional
 - Residential

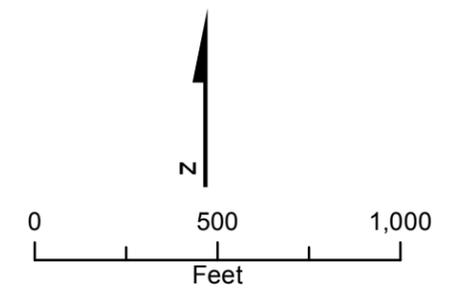
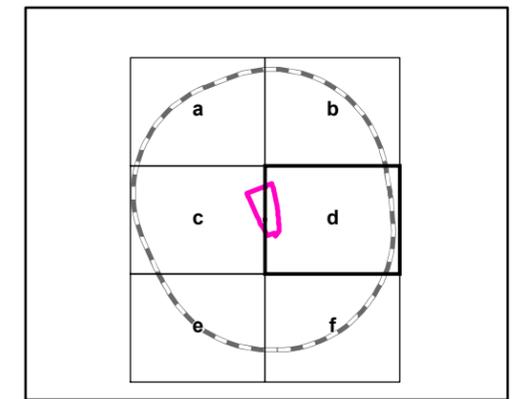


FIGURE 5.2-5c
Land Cover Types and
Vegetation Communities
 AES Redondo Beach Energy Project
 Redondo Beach, California



- Legend**
- AES RBEP Site and Survey Boundaries
 - 1- Mile Buffer From Project Site
 - Commercial
 - Industrial
 - Mixed Use
 - Park and Recreation
 - Public/Institutional
 - Residential

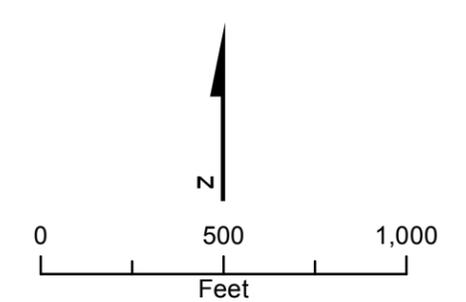
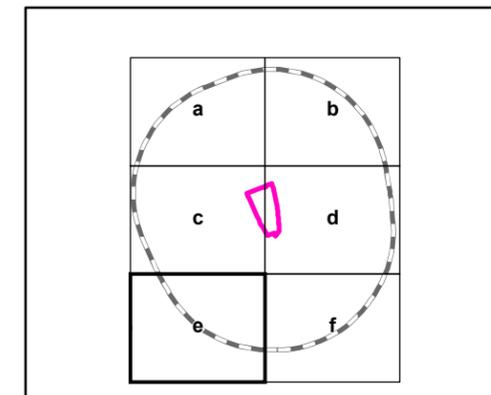


FIGURE 5.2-5d
Land Cover Types and
Vegetation Communities
 AES Redondo Beach Energy Project
 Redondo Beach, California



- Legend**
-  AES RBEP Site and Survey Boundaries
 -  1- Mile Buffer From Project Site
 -  Commercial
 -  Industrial
 -  Mixed Use
 -  Park and Recreation
 -  Public/Institutional
 -  Residential

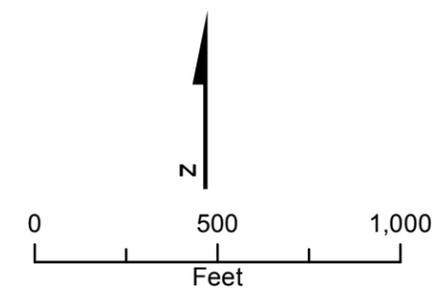
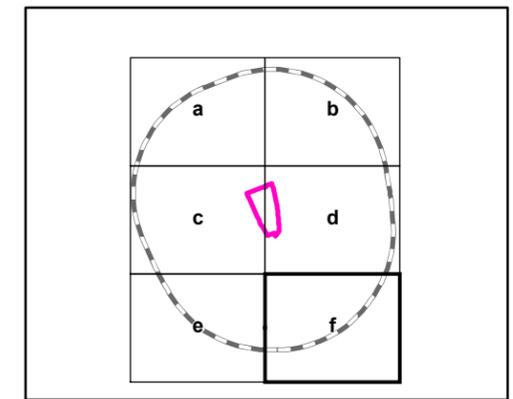


FIGURE 5.2-5e
Land Cover Types and
Vegetation Communities
 AES Redondo Beach Energy Project
 Redondo Beach, California



- Legend**
- AES RBEP Site and Survey Boundaries
 - 1- Mile Buffer From Project Site
 - Commercial
 - Industrial
 - Mixed Use
 - Park and Recreation
 - Public/Institutional
 - Residential

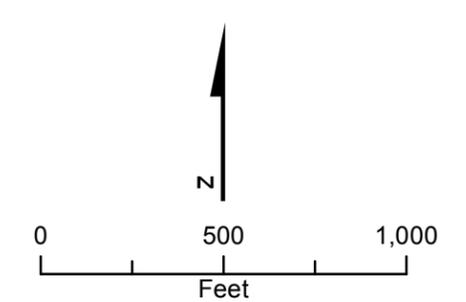


FIGURE 5.2-5f
Land Cover Types and
Vegetation Communities
 AES Redondo Beach Energy Project
 Redondo Beach, California

5.2.2.8 Special-status Wildlife Species

Four special-status wildlife species are known to occur or have occurred within 1 mile of the RBEP site: sandy beach tiger beetle (*Cicindela hirticollis gravida*), Pacific pocket mouse (*Perognathus longimembris pacificus*), Palos Verdes blue butterfly (*Glaucopsyche lygdamus palosverdesensis*), and El Segundo flower-loving fly (*Rhaphiomidas terminates terminates*) (CDFG, 2012b). Both the sandy beach tiger beetle and the El Segundo flower-loving fly are considered to be extirpated from the area (Brust et al., 2005; CDFG, 2012b; USFWS, 2007). In addition, the Pacific pocket mouse is presumed to be extinct in the area, and the only known populations are located in two general locations on the Marine Corps Base, Camp Pendleton in San Diego County and at the Dana Point Headlands (USFWS, 1998). Although the Palos Verdes blue butterfly can occur within the immediate vicinity of the project area, this species is not expected to occur because the RBEP site is located entirely within an existing developed area with no suitable habitat; therefore, the project will not affect any special-status wildlife species.

5.2.2.8.1 Migratory Bird Treaty Act Protected Species

RBEP could potentially provide nesting habitat for some species covered under the MBTA such as killdeer, gulls, mourning doves, and house finches that may nest in open areas, perimeter landscaping, and in unused structures on the site. The site has been an active power-generating facility since the early 1900s; therefore, most MTBA-protected species that have the potential to nest within the project area would be adapted to highly urbanized environments, and no special-status bird species were identified during site surveys.

5.2.2.8.2 Bald and Golden Eagle Protection Act

RBEP does not provide suitable nesting or foraging habitat for the bald eagle (*Haliaeetus leucocephalus*) or golden eagle (*Aquila chrysaetos*), and no bald or golden eagles were observed during the field survey. In addition, neither of these species has been documented in the CNDDDB within 10 miles of the project area (CDFG, 2012b); therefore, RBEP is not expected to adversely affect eagles.

5.2.2.8.3 Federal Endangered Species Act

Six species with potential to occur or have occurred in the 10-mile project region are protected under the federal ESA (see Appendix 5.2A). None of these listed species has been documented within the RBEP site. Critical habitat for western snowy plover occurs within 1 mile of the project area.

Western Snowy Plover. The western snowy plover is federally listed as endangered. This small shorebird is about 6 inches long. It has a thin, dark bill and is pale brown to gray above with a white or buff-colored underside with darker patches on its shoulders and head. Plovers typically forage for small invertebrates in wet or dry beach sand, in salt marshes, and within low foredune vegetation. The western snowy plover breeds primarily above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries from southern Washington to southern Baja California, Mexico. The breeding season extends from March 1 through September 30. As noted, critical habitat for western snowy plover occurs within 1 mile of the project site. However, the habitat has been designated for wintering flocks and does not support nesting flocks (USFWS, 2011a).

5.2.2.8.4 California Endangered Species Act

Four wildlife and three plant species protected under CESA have the potential to occur or have occurred within 10 miles of the project area (see Appendix 5.2A). None of these species is expected to occur within the RBEP site because there is a lack of suitable habitat for wildlife species, including foraging and nesting habitat.

5.2.2.8.5 State Fully Protected Species

Four animal species with potential to occur in 10 miles of RBEP are designated as Fully Protected under California Fish and Game Code Sections 3511, 4700, 5050, and 5515 (see Appendix 5.2A). None of these species is expected to occur within the RBEP site because there is a lack of suitable foraging and nesting habitat.

5.2.2.8.6 CDFG Species of Concern and Special Animals

One CDFG species of concern has been reported within 1 mile of the RBEP site. However, that species, the Pacific pocket mouse, is presumed to be extinct in the area (USFWS, 1998). In addition, suitable habitat for this species is not present within the RBEP site.

5.2.3 Environmental Analysis

Potential direct and indirect impacts on biological resources were evaluated to determine the permanent and temporary effects of RBEP construction, demolition, and operation. Results from the field surveys, habitat evaluations, literature review, and aerial imagery interpretation conclude that sensitive biological resources are not expected to occur in the immediate vicinity of or within the RBEP site.

No natural vegetation or habitat is present on the RBEP site. There are no project features that would support special-status plants, and the project site does not provide suitable habitat for any special-status wildlife species. Because there is a lack of sensitive biological receptors located within and immediately adjacent to the RBEP site, project implementation is not expected to cause any significant adverse impacts.

This section identifies biological resources that may be affected either directly or indirectly by RBEP. Direct and indirect impacts may be either permanent or temporary. These impact categories are defined below and are applied as part of the environmental analysis.

- **Direct:** The California Environmental Quality Act (CEQA) defines direct impacts as those impacts that result from the project and occur at the same time and place. Any alteration, disturbance, or destruction of biological resources that would result from project-related activities is considered a direct impact. Examples include loss of habitat resulting from clearing vegetation, encroaching into wetlands, diverting natural surface water flows, and the loss of individual species.
- **Indirect:** CEQA defines indirect impacts as those caused by the project but occur later in time or are farther removed in distance, though are reasonably foreseeable and are related to the project. As a result of project-related activities, biological resources also may be affected in a manner that is not direct. Examples include elevated noise and dust levels, increased human activity, decreased water quality, and introduction of invasive plants and wildlife.
- **Permanent:** All impacts that result in the irreversible removal of biological resources are considered permanent. Examples include constructing a building or permanent road on an area containing biological resources.
- **Temporary:** Any impacts considered to have reversible effects on biological resources can be viewed as temporary. Examples include increased vehicle movement and noise from temporary construction activities.

Potential direct and indirect impacts on biological resources were evaluated to determine the permanent and temporary effects of RBEP construction and associated demolition activities, and operation and maintenance of the project and supporting facilities.

5.2.3.1 Significance Criteria

The project would result in a significant impact on the environment if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as endangered, threatened, candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by CDFG or USFWS
- Have a substantial adverse effect on any wetland, riparian habitat, or other sensitive natural community or critical habitat identified in local or regional plans, policies, or regulations or by CDFG or USFWS
- Have a substantial adverse effect on federal or state protected waters of the United States (including wetlands) as defined by Sections 404 and 401 of the Clean Water Act or the Porter-Cologne Act, either through direct removal, filling, hydrological alteration, or other means

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory native wildlife corridors, or impede the use of wildlife nursery sites
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan
- Threaten to eliminate a plant or animal community

Section 15380 of the CEQA Guidelines provides that a plant or animal species may be treated as “rare or endangered” even if not on one of the official lists if the species can be shown to meet the criteria defined in 15380(b) (for example, if it is likely to become endangered in the foreseeable future).

5.2.3.2 Potential Impacts of Construction and Demolition

Construction and demolition activities at the project site are anticipated to last 60 months, from January 2016 until December 2020. The first activities to occur on site will be the dismantling and partial removal of existing Units 1-4. The major generating equipment, including steam turbines, generators, boilers, and duct work, will be removed, leaving the administration building and western portion of the building that houses Units 1-4 intact. These buildings will be left standing temporarily to provide screening between the construction site of the new power block and Harbor Drive. Construction of the new power block will begin in the first quarter of 2017 and continue through to the end of the second quarter 2019, when it will be ready for commercial operation. Although the power block will be operational, construction will continue through 2019, including construction of the new control building and the relocation of the Wyland Whaling Wall. The existing Units 5-8 and auxiliary boiler No. 17 will remain in service until the second quarter of 2018. Units 5-8 and auxiliary boiler No. 17 will be demolished starting the first quarter of 2019 through the fourth quarter of 2020. During the demolition and removal of Units 5-8, the Wyland Whaling Wall will be dismantled and moved to a new location directly in front of the new power block. Finally the remaining buildings and structures left standing will be demolished and removed by the end of 2020.

All construction and demolition activities will be located in existing developed areas where no additional clearing or grading of natural vegetation will be required. Furthermore, no new offsite linears will be needed as a result of this project; therefore, there would be no construction- or demolition-related disturbance to natural vegetation or habitats on offsite areas.

5.2.3.2.1 RBEP Site

All demolition and construction activities will be confined to the existing developed Redondo Beach Generating Station site, and generated noise will meet Redondo Beach and Hermosa Beach Municipal Code requirements, which set day and nighttime limits on exterior noise. RBEP construction and demolition of the existing Redondo Beach Generating units will not result in permanent loss of any natural vegetation or habitats that could be used by special-status species. Furthermore, because there is a lack of suitable habitat for special-status wildlife species within RBEP and the surrounding area, demolition- and construction-related noise impacts are not expected to occur.

5.2.3.2.2 Construction and Demolition Impacts on Special-status Plant Species

There are no sensitive or special-status plants with potential to occur within the RBEP site; therefore; the project is not expected to result in significant impacts on sensitive or special-status plant species.

5.2.3.2.3 Construction and Demolition Impacts to Special-status Wildlife Species

There is a lack of suitable habitat to support special-status wildlife species within the RBEP site. Therefore, construction and demolition activities would not result in the removal of any natural vegetation or sensitive wildlife habitat and would not result in any additional regional habitat fragmentation. Construction activities may result in temporary disturbance from noise and increased traffic, but there is a lack of sensitive receptors within

and adjacent to the project area. Potential effects on special-status species from construction and operation of RBEP are discussed in the following sections.

Noise from site preparation, construction, and demolition could temporarily discourage wildlife from foraging and nesting in areas adjacent to the project area; however, no special-status species were observed within the RBEP site. Furthermore, the existing conditions already include noise associated with the existing Redondo Beach Generating Station and highway traffic; therefore, it is expected that noise from construction/demolition of RBEP would not adversely impact wildlife, as wildlife (especially urban wildlife) usually becomes accustomed to routine background noise.

Foraging Habitat. The RBEP site does not provide foraging habitat for sensitive species, and the closest wintering habitat for the western snowy plover is Hermosa State Beach. However, there have not been any documented occurrences for this species in the CNDDDB (CDFG, 2012b). The Hermosa State Beach critical habitat is from Eleventh Street to First Street (USFWS, 2011a), which is approximately 1,500 feet from the center of the RBEP. Special-status bat species, including western mastiff bat and big-free tailed bat, also may use these areas for foraging, but there is more suitable foraging habitat in other portions of these species' range. Therefore, construction- and demolition-related noise is not expected to significantly impact foraging birds and bats. Additionally, construction and demolition noise will be further reduced with the implementation of noise reduction measures described in Section 5.7, Noise. However, the project will not result in the loss of any potential foraging habitat.

Nesting Birds. With the exception of onsite landscaping (trees and shrubs), there is no suitable nesting habitat on the RBEP site. Nonetheless, open sandy beaches in the immediate vicinity of RBEP could provide suitable nesting habitat for special-status birds and a number of other bird species that are protected by state and federal regulations, including the MBTA and CDFG codes. However, the RBEP is not expected to significantly impact nesting birds because suitable habitat within and adjacent to the project is marginal and species that would nest there anyway would have likely acclimated to the routine disturbance associated with the operation of the existing power plant.

The project will not result in the permanent loss of nesting habitat for any migratory or resident birds, and temporary impacts on nesting birds as a result of increased noise and construction/demolition activities is not expected to occur. Noise and activity associated with project construction/demolition could disturb nesting birds if nests are established relatively close to project-related noise sources. Sensitive bird species could abandon an established nest if disturbed during the breeding season during construction/demolition. This could be a significant impact without appropriate avoidance measures. Monitoring of nesting activities during construction/demolition activities may be necessary to determine whether nests could be significantly disturbed.

The western snowy plover wintering habitat is located approximately 1,500 feet from the center of RBEP. No impacts should occur because this is a wintering area and because the presence of buildings provides additional noise/disturbance barriers between the beach and RBEP.

Wildlife Corridors. The project is within the Pacific Flyway, a common bird migration route that extends along the west coast of North America and spans an area from the pelagic regions of the Eastern Pacific to the Great Basin. Construction/demolition activities are not expected to impede migration along the flyway. Terrestrial wildlife habitat in the project area has been significantly fragmented by urban development, and no terrestrial wildlife corridors are currently present in the project area. In addition, the RBEP site is located in a heavily developed area, and there would be no additional impacts resulting from habitat loss and fragmentation.

5.2.3.2.4 Wetlands and Waters of the United States

Project construction and demolition would not cause loss or fill of any wetlands. There are no natural rivers, streams, ponds, or wetlands onsite or within the immediate vicinity of the RBEP site (Figure 5.2-2a - Figure 5.2-2c). The NWI, a tool developed by USFWS to track the extent and status of the nation's wetlands, has identified three constructed retention ponds on the site. Only one of the retention ponds, a lined retention basin near the center of the site, is currently used to collect onsite runoff from storm drains, boilers, and sumps. This retention basin has a capacity of 1 million gallons. The retention basin in the northeast corner of the site is also lined, but is no

longer in use and will be part of the construction laydown and parking area. Immediately west of the out-of-service retention basin is the former chemical cleaning basin, which also will be used as part of the construction laydown and parking area. This basin is also lined and all of the associated drains have been closed off. Any water that collects in this area is pumped out to the operational pond near the center of the site. These constructed basins and retention ponds would not be considered jurisdictional wetlands or waters. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act, are not waters of the United States (40 CFR 122.2). Furthermore, erosion control best management practices (BMPs) will be implemented during construction and demolition in accordance with the stormwater pollution prevention plan (SWPPP) required by the State's General Construction Permit for construction projects over 1 acre in size. Additionally, the California Energy Commission (CEC) requires that project owners develop and implement a Drainage, Erosion, and Sediment Control Plan to reduce the impact of runoff from the construction site. Measures to avoid and minimize soil erosion during construction and demolition are described in more detail in Section 5.11, Soils.

Appropriate BMPs and existing onsite stormwater pollution prevention controls will be used to avoid any adverse effects on wetland resources in the vicinity of the RBEP site.

5.2.3.3 Potential Impacts of Operation

During operation, RBEP will produce air emissions, water discharge, noise, and light. In addition, the air-cooled condenser could pose a collision hazard to birds. The potential for each of these products of RBEP operation to adversely affect sensitive biological resources at the RBEP site is discussed in the following sections.

5.2.3.3.1 Air Emissions

Air emissions from the combustion turbine exhaust stacks include nitrogen oxides (NO_x), sulfur dioxide (SO₂), ozone, carbon monoxide (CO), unburned hydrocarbons, and particulates (PM₁₀ and PM_{2.5}). Nitrogen oxide gases (NO and NO₂) convert to nitrate particulates in a form that is suitable for uptake by most plants and could be used to promote plant growth and primary productivity.

RBEP involves replacing existing electrical generating facilities with newer more efficient combustion turbines that will be entirely located within an existing developed area. Sensitive natural communities within 10 miles of RBEP include southern coastal bluff scrub, southern coastal salt marsh, and southern dune scrub. Many ecosystems in the western United States are nitrogen limited and are expected to show growth responses to increased nitrogen deposition (Fenn et al., 2003). Most of the land use in the immediate vicinity of RBEP is urban development. Although critical habitat for the western snowy plover is within 1 mile of the RBEP site, there is generally a low percent of vegetation cover in the area. Most vegetation cover near RBEP consists of landscaping plants, and there is a general lack of natural habitats in the area. In addition, given the predominant easterly wind direction and photochemistry required to convert gaseous nitrogen-based air emissions to particles, it is expected that actual aerial nitrogen deposition would occur east of RBEP, including the greater Los Angeles metropolis, and is unlikely to affect any sensitive natural communities. In addition, existing vegetation systems have successfully developed in an environment that includes the emissions from the existing Redondo Beach Generating Station, which will be shut down with the startup of RBEP. Therefore, aerial deposition of nitrogen to the surrounding area from RBEP emissions is expected to result in a less-than-significant impact on soil-vegetation systems.

Particulate emissions will be controlled by inlet air filtration of the turbine air intakes and the use of low sulfur natural gas. The deposition of PM₁₀ can affect vegetation through either physical or chemical mechanisms. Physical mechanisms include the blocking of stomata so that normal gas exchange is impaired, as well as potential effects on leaf adsorption and reflectance of solar radiation. Information on physical effects is scarce, presumably in part because such effects are slight or not obvious except under extreme situations (Lodge et al., 1981). Sulfur dioxide can affect vegetation by degrading chlorophyll, reducing photosynthesis, raising respiration rates, changes in protein metabolism, lipid and water balance and enzyme activity (WHO, 2000). High concentrations cause leaf necrosis, while longer term exposure leads to chronic injury resulting in reduced plant growth and greater susceptibility to climatic extremes or pathogens (WHO, 2000).

Therefore, with the shutdown of the existing Redondo Beach Generating Station and the use of inherently low-sulfur natural gas, best combustion practices, emission controls, and monitoring that will be incorporated into the RBEP design (as detailed in Section 5.1, Air Quality), impacts from RBEP operating emissions of nitrogen oxides (NO_x), SO₂, CO, VOCs, and particulates (PM₁₀, and PM_{2.5}) will be less than significant and no additional mitigation measures are required.

5.2.3.3.2 Stormwater and Process Water Discharge

During construction/demolition and operations, the existing stormwater collection system will collect process stormwater from the RBEP site and route it to the oil/water separator before discharge to the Pacific Ocean via an existing permitted outfall. The Project Owner will prepare an SWPPP for RBEP operations that specifies BMPs to be implemented during all project activities to avoid stormwater discharges that would cause water quality degradation.

Because RBEP will draw process water from an existing water supply system and then discharge a small volume of wastewater through the existing ocean outfall, there will be no mechanism for entrainment of aquatic species. In addition, there will be a decrease in outfall discharge from current use levels in compliance with the Los Angeles Regional Water Quality Control Board's new waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) permit that will be required for RBEP operation. For the site monthly maximum average ambient temperature conditions, average discharge to the existing outfall will be approximately 11.2 gallons per minute or approximately 14.1 acre-feet per year. No treatment of the discharge stream is expected to be needed to control either biofouling or chemical concentrations in the effluent. The discharge of process and stormwater to the ocean via the existing permitted outfall will not result in a significantly adverse effect on aquatic resources and species during RBEP operations.

As described in Section 5.15 (Water Quality), RBEP will have overall beneficial effects on the marine environment as it will end the use of oceanwater for once-through cooling. Adverse effects associated with the existing intake of oceanwater for cooling and from the discharge would be reduced to zero in 2018. Water quality effects associated with the existing discharge are primarily related to temperature; RBEP would reduce thermal impacts to zero.

5.2.3.3.3 Noise and Light from Plant Operations

The site is adjacent to coastal commercial, commercial, and residential land uses and major transportation corridors including the Pacific Coast Highway. The existing Redondo Beach Generating Station, urban development, and roadways in the area result in several sources of light and noise emissions. Noise associated with RBEP operation is described in more detail in Section 5.7, Noise. Noise impacts on wildlife are difficult to measure; however, results of several studies summarized by Golden, et al. (1980) indicate there were no impacts from aircraft noise at 75 decibels (A-weighted scale, or dBA) for several wildlife species; however, Dooling and Popper (2007) suggest that traffic noise levels above 60 dBA could interfere with avian acoustic communication. The expected loudest composite noise levels from RBEP operations are approximately 89 dBA at 50 feet from the activity, which results in noise levels of approximately 77 and 71 dBA at distances of 200 and 400 feet from the activity, respectively. Potential nesting habitat within 400 feet of the project area consists primarily of landscaping trees and shrubs, but these areas are already associated with high and varying noise levels from traffic and existing Redondo Beach Generating Station operations. No impact from noise on western snowy plover habitat is anticipated because of its distance from the source and the presence of noise barriers, such as houses and other structures.

As stated previously, the RBEP is located within a heavily developed area that already has high light levels, and the Redondo Beach Generating Station already has security and operational lighting throughout the site. RBEP lighting will meet the requirements for security, operations and maintenance, and safety. Lighting will be shielded and pointed downward and away from areas outside the project area to minimize impacts on nesting birds and other nearby wildlife, and to reduce the potential for avian and bat attraction and collision. Also, night lighting will have switches to allow lights to be turned off when not in use. Therefore, impacts from lighting would be less than significant.

5.2.3.3.4 Potential for Avian Collisions

Direct and indirect impacts on birds, including potential for collision with structures, are expected to be minimal given the project location and existing tall structures and facilities on the site. RBEP will be electrically interconnected to the existing SCE switchyard via a short onsite transmission line. The transmission line will be onsite among the existing onsite electrical lines that connect into the SCE switchyard. Existing interconnection transmission lines from the existing generating units will also be removed, resulting in a net reduction in the number of towers and length of high-voltage transmission wire installed onsite. It is expected that resident and migrating wildlife in the area would be accustomed to maneuvering around structures and other features and the potential for avian collisions is expected to be minimal. Therefore, impacts for avian collisions would be less than significant.

5.2.3.3.5 Effects of Operation on Special-status Species

Impacts on Special-status Plants. There is no suitable habitat for sensitive or special-status plants at the RBEP site, and most of the area within 10 miles of the project area is developed. There are only a few locations within a 10-mile radius of the RBEP that support natural vegetation communities. Furthermore, RBEP involves replacing existing electrical generating facilities with cleaner and more efficient combustion turbines, and air emissions will be mitigated through the surrender of emission offsets at a ratio of greater than 1 to 1. Potential indirect impacts from the operation of the facility will be less than significant and therefore, RBEP is not expected to result in significant impacts on sensitive or special-status plant species.

Impacts on Sensitive and Special-status Wildlife Species. No potential impacts on sensitive and special-status wildlife are expected to occur as a result of disturbance from RBEP operations. No sensitive or special-status wildlife have been observed within the RBEP site. Although there is critical habitat for the western snowy plover at Hermosa Beach, it is approximately 1,500 feet from the center of RBEP. The project is not expected to result in significant impacts on sensitive and special-status wildlife species. Species-specific impacts are discussed in the following sections.

Foraging Birds and Bats. No potential impacts from operational activities on foraging birds and bats are expected to occur because there is a lack of foraging habitat within the RBEP site. RBEP would operate within the existing Redondo Beach Generating Station site, and operations and maintenance activities would be similar. Operational-related impacts are not expected to be significant.

Nesting Birds. There is limited nesting habitat at the RBEP site for bird species. Bird species that would utilize the landscaping trees would build nests while the RBEP is operating and would not be disturbed by operations; therefore, operational impacts on nesting birds are not expected to be significant.

5.2.3.3.6 Operation Phase Impacts on Wetlands and Waters of the United States

There are no natural rivers, streams, ponds, or wetlands in or around the project area; therefore, there will be no direct or indirect effects on wetlands and waters of the United States as a result of RBEP operation.

5.2.4 Cumulative Effects

A cumulative impact refers to a proposed project's incremental effect together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the proposed project (Public Resources Code Section 21083; 14 CCR 15064(h), 15065(c), 15130, and 15355).

Extensive urban development has occurred throughout the region, and the project involves the replacement of existing electrical generating facilities with cleaner and more efficient combustion turbines that will be entirely located within an existing developed area. The demolition of Redondo Beach Generating Station may temporarily increase potential construction-related impacts described above. However, demolition impacts will be temporary and/or mitigated to less-than-significant levels. The demolition and RBEP construction are not expected to cause significant, unmitigated impacts on biological resources. There would be no loss of natural habitat. Therefore, RBEP is not expected to cause any adverse cumulative impacts on biological resources.

5.2.5 Mitigation Measures

Although no significant impacts on biological resources are anticipated, the following measures are proposed to further avoid, minimize, and otherwise mitigate potential adverse effects of the project on biological resources that could occur from demolition-, construction-, and operation-related activities.

5.2.5.1 Preconstruction Survey

The Project Owner will conduct a preconstruction active nest survey within 100 feet of the RBEP site. If determined necessary, active nests will be monitored during construction/demolition activities if active nests will be significantly disturbed by RBEP activities.

5.2.5.2 Worker Environmental Awareness Program

A site-specific Worker Environmental Awareness Program (WEAP), intended to educate construction workers and operators regarding best management practices that will be implemented during demolition and construction, will be administered by the designated biologist. The WEAP will include an oral, video/PowerPoint, and/or written materials presentation that reviews BMPs for trash disposal, lighting, dust, and surface water runoff. The WEAP will also include appropriate contact information, procedures, and guidelines for reporting encounters with biological resources, such as wildlife observations.

5.2.6 Laws, Ordinances, Regulations, and Standards

The following sections describe the primary LORS that apply to potential impacts on biological resources in the project area, and list the agencies responsible for enforcing the regulations. A summary of the LORS is provided in Table 5.2-1.

5.2.6.1 Federal LORS

Federal Endangered Species Act (16 USC 153 et seq.). Applicants for projects that could result in adverse impacts on any federally listed species are required to consult with and mitigate potential impacts in consultation with USFWS. Adverse impacts are defined as “take,” which is prohibited except through authorization of a Section 7 or Section 10 consultation and Incidental Take Authorization. “Take” under federal definition includes “such act as may include significant habitat modification or degradation” (50 Code of Federal Regulations 17.3). Species that are not listed are not protected by the federal ESA, even if they are candidates for listing; however, USFWS advises that a candidate species (as well as species of concern) could be elevated to listed status at any time and, therefore, applicants should regard these species with special consideration.

Migratory Bird Treaty Act (16 USC 703 to 711) protects all migratory birds, including nests and eggs.

Bald and Golden Eagle Protection Act (16 USC 668) specifically protects bald and golden eagles from harm or trade in parts of these species.

5.2.6.2 State LORS

California Endangered Species Act (Fish and Game Code Section 2050 et seq.). Species listed under this act cannot be “taken” or harmed, except under specific permit. At present, “take” means to do or attempt to do the following: hunt, pursue, catch, capture, or kill.

Fish and Game Code Section 3511 describes bird species, primarily raptors, that are “fully protected.” Fully protected birds may not be taken or possessed, except under specific permit requirements.

Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.

TABLE 5.2-1
Laws, Ordinances, Regulations, and Standards for Biological Resources

| LORS | Requirements/Applicability | Administering Agency | AFC Section Explaining Conformance |
|--|---|----------------------|---|
| Federal | | | |
| Federal Endangered Species Act (Federal ESA, 16 United States Code [USC] 1531 et seq.) | Designates and protects threatened and endangered plants and animals and their critical habitat. Applicants for projects that could result in adverse impacts on any federally listed species are required to consult with and mitigate potential impacts in consultation with USFWS. | USFWS | RBEP is not likely to adversely affect the endangered western snowy plover. Informal discussions and coordination with USFWS will determine measures RBEP will undertake to avoid adverse effects on foraging and nesting habitat for these species in the vicinity of the project. (Section 5.2.2.8.3) |
| Migratory Bird Treaty Act (16 USC 703 to 711) | Protects all migratory birds, including nests and eggs. | USFWS | RBEP will include mitigation measures to reduce potential impacts on resident and migratory birds to a less-than-significant level. (Section 5.2.2.8.1) |
| Bald and Golden Eagle Protection Act (16 USC 668) | Specifically protects bald and golden eagles from harm or trade in parts of these species. | USFWS | RBEP is not likely to adversely affect eagles. Informal discussions and coordination with USFWS will determine whether mitigation measures are required to avoid adversely affecting eagles. (Section 5.2.2.8.2) |
| State | | | |
| California Endangered Species Act (Fish and Game Code Section 2050 et seq.). | Species listed under this act cannot be “taken” or harmed, except under specific permit. | CDFG | RBEP will include mitigation measures to reduce potential impacts on state-listed species to a less-than-significant level. (Section 5.2.2.8.4) |
| Fish and Game Code Section 3511 | Describes species, primarily birds, that are “fully protected.” Fully protected species may not be taken or possessed, except under specific permit requirements. | CDFG | RBEP will include mitigation measures to reduce potential impacts on fully protected species to a less-than-significant level. (Section 5.2.2.8.5) |
| Fish and Game Code Section 3503 | States that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. | CDFG | RBEP will include mitigation measures to reduce potential impacts on bird nests and eggs to a less-than-significant level. (Section 5.2.3.2) |
| Fish and Game Code Section 3503.5 | Protects all birds of prey and their eggs and nests. | CDFG | RBEP will include mitigation measures to reduce potential impacts on bird nests and eggs to a less-than-significant level. (Section 5.2.3.2) |
| Fish and Game Code Section 3513 | Makes it unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird. | CDFG | RBEP will include mitigation measures to reduce potential impacts on birds of prey to a less-than-significant level. (Section 5.2.3.2) |

TABLE 5.2-1
Laws, Ordinances, Regulations, and Standards for Biological Resources

| LORS | Requirements/Applicability | Administering Agency | AFC Section Explaining Conformance |
|--|---|-----------------------------|--|
| Fish and Game Code Sections 4700, 5050, and 5515 | Lists mammal, amphibian, and reptile species that are fully protected in California. | CDFG | RBEP will include mitigation measures to reduce potential impacts on fully protected mammal, amphibian, or reptile species to a less-than-significant level. (Section 5.2.2.8.5) |
| Fish and Game Code Sections 1900 et seq. | The Native Plant Protection Act lists threatened, endangered, and rare plants. | CDFG | No plants that are state listed as threatened, endangered or rare will be affected by RBEP. (Section 5.2.3.2) |
| Title 14, California Code of Regulations, Sections 670.2 and 670.5 | Lists animals designated as threatened or endangered in California. | CDFG | RBEP will include mitigation measures to reduce potential impacts on threatened and endangered animals to a less-than-significant level. (Section 5.2.3.2) |
| California Fish and Game Code (Sections 1601 through 1607) | Prohibits alteration of any stream, including intermittent and seasonal channels and many artificial channels, without a permit from CDFG. | CDFG | No streams, including intermittent and seasonal channels, will be affected by RBEP. (Section 5.2.3.2.4) |
| CEQA (Public Resources Code Section 15380) | CEQA requires that the effects of a project on environmental resources must be analyzed and assessed using criteria determined by the lead agency. | CEC | The AFC analysis and process is CEQA equivalent. All requirements under CEQA are met with the analysis in the RBEP AFC. (Section 5.2.3) |
| Warren-Alquist Act (Public Resources Code Section 25000, et seq.) | Warren-Alquist Act is a CEQA-equivalent process implemented by the CEC. | CEC | The AFC analysis and process is CEQA equivalent. All requirements under the Warren-Alquist Act are met with the analysis in the RBEP AFC. (Section 5.2.6.2) |
| Local | | | |
| City of Redondo Beach General Plan/Coastal Land Use Plan | Regulates new development through design review and permit issuance to ensure consistency with California Coastal Act requirements and minimize adverse impacts on identified environmentally sensitive habitats and wetland areas. | City of Redondo Beach | RBEP construction and operation will be located entirely within an existing developed area that has been designated for industrial uses in the Redondo Beach General Plan. (Section 5.2.6.3.1) |

Note:

AFC = Application for Certification

Fish and Game Code Section 3503.5 protects all birds of prey and their eggs and nests.

Fish and Game Code Section 3513 makes it unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird.

Fish and Game Code Sections 4700, 5050, and 5515 lists mammal, amphibian, and reptile species that are fully protected in California.

Fish and Game Code Sections 1900 et seq. The Native Plant Protection Act lists threatened, endangered, and rare plants.

Title 14, California Code of Regulations, Sections 670.2 and 670.5 lists animals designated as threatened or endangered in California. California Species of Special Concern (CSC) is a category conferred by CDFG on those species that are indicators of regional habitat changes or are considered potential future protected species. CSC-designated species do not have any special legal status, but the designation is intended by CDFG for use as a management tool to take these species into special consideration when decisions are made concerning the future of any land parcel.

California Fish and Game Code (Sections 1601 through 1607) prohibits alteration of any stream, including intermittent and seasonal channels and many artificial channels, without a permit from CDFG. CDFG jurisdiction is limited to areas within the 100-year floodplain. Within this zone, CDFG jurisdiction is subject to the judgment of the department. This applies to any channel modifications that would be required to meet drainage, transportation, or flood control objectives of a project.

California Environmental Quality Act (Public Resources Code Section 15380) defines “rare” in a broader sense than the definitions of threatened, endangered, or species of special concern. Under this definition, CDFG can request additional consideration of species not otherwise protected. CEQA requires that the effects of a project on environmental resources must be analyzed and assessed using criteria determined by the lead agency.

Warren-Alquist Act (Public Resources Code Section 25000, et seq.) is a CEQA-equivalent process implemented by the CEC. Preparation of this application will result in an assessment prepared by the CEC staff to fulfill the requirements of CEQA.

5.2.6.3 Local LORS

5.2.6.3.1 City of Redondo Beach General Plan/Coastal Land Use Plan

The City of Redondo Beach regulates new development through design review and permit issuance to ensure consistency with the California Coastal Act requirements and minimize adverse impacts on identified environmentally sensitive habitats and wetland areas. Development within and adjacent to environmentally sensitive habitats, parks, and recreation areas shall be sited and designed to prevent impacts that would significantly affect these areas (City of Redondo Beach, 2010).

5.2.7 Agencies and Agency Contacts

Involved agencies and agency contacts are listed in Table 5.2-2. The City of Redondo Beach has been contacted to coordinate the avoidance of potential impacts on coastal wetlands. Informal consultation will occur with USFWS and CDFG to coordinate the avoidance of impacts on federally and state-listed species and other special-status species that are known from or that may occur in the vicinity of RBEP.

TABLE 5.2-2
Agency Contacts for Biological Resources

| Issue | Agency | Persons Contacted |
|--|--|---|
| State-listed species | California Department of Fish and Game | Terri Dickerson Senior Environmental Scientist 4949 Viewridge Avenue San Diego, CA 92123 (949) 363-7538 tdickerson@dfg.ca.gov Kelly Schmoker Staff Environmental Scientist 25164 Via Terracina Laguna Niguel, CA 92677 (626) 792-1680 kschmoker@dfg.ca.gov |
| Federally listed species | U.S. Fish and Wildlife Service | Jonathan Snyder, Division Chief 6010 Hidden Valley Road, Suite 101 Carlsbad, CA 92011 (760) 431-9440 x307 jonathan_d_snyder@fws.gov Christine Medak, Biologist 6010 Hidden Valley Road, Suite 101 Carlsbad, CA 92011 (760) 431-9440 x298 Christine_Medak@fws.gov |
| City of Redondo Beach General Plan – Local Coastal Element | City of Redondo Beach | Aaron Jones, Planning Director 415 Diamond Street Redondo Beach, CA 90277 (310) 318-0637 x1-2200 aaron.jones@redondo.org |

5.2.8 Permits and Permit Schedule

No federally or state-listed or other special-status species will be significantly affected by RBEP. Therefore, no biological resource permits or authorizations are required.

5.2.9 References

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