

8.2 Biological Resources

8.2.1 Introduction

The City of Vernon (City) proposes to develop a power plant (VPP) on a 13.7-acre property at the southeast corner of Fruitland and Boyle avenues. The VPP will be a 914-megawatt (MW) net (at 65 degrees Fahrenheit [°F] with duct burners and evaporative cooling)/943-MW (gross) combined-cycle generating facility configured using three natural-gas-fired combustion turbines and one steam turbine. Two transmission line options are being considered to connect the plant to Southern California Edison's (SCE) Laguna Bell Substation. Natural gas for the facility will be delivered via approximately 2,300 feet of new 24-inch pipeline that will connect to Southern California Gas Company's (SoCalGas) existing gas transmission line (Line 765). Potable water for drinking, safety showers, fire protection, service water, and sanitary uses will be served from the City's potable water system through two 10-inch pipelines connecting to the City's water mains. One would connect in Boyle Avenue and one in Fruitland Avenue. Recycled water for industrial purposes will be provided by the Central Basin Municipal Water District (CBMWD) through a nominal 16-inch carbon steel (or if using high density polyethylene [HDPE], a 20-inch) water line connecting to its recycled water line in Boyle Avenue, adjacent to the plant site. The blowdown will be sent to Sanitation Districts of Los Angeles County (LACSD) via a new 2,400-foot section of City sanitary sewer line.

This subsection describes the laws, ordinances, regulations, and standards (LORS) that apply to biological resource protection, the environmental setting and conditions of the affected site, the methods that were used to evaluate the potential presence of special-status species, and the potential adverse impacts on biological resources that could occur as a result of project construction and operation. It also presents protection and mitigation measures that would avoid, minimize, or compensate for adverse impacts when required.

8.2.2 Applicable Laws, Ordinances, Regulations, and Standards

The following subsections and Table 8.2-1 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.

8.2.2.1 Federal

Federal Endangered Species Act (FESA, 16 USC 1531 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 the U.S. Fish and Wildlife Service (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 CFR §17.3). Species that are candidates for listing are not protected by the Federal Endangered Species Act (FESA); 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.

TABLE 8.2-1
Laws, Ordinances, Regulations, and Standards Applicable to VPP Biological Resources.

LORS	Purpose	Regulating Agency	Permit or Approval	Applicability (AFC Section Explaining Conformance)
Federal				
Endangered Species Act of 1973 and implementing regulations, Title 16 United States Code (USC) §1531 et seq. (16 USC 1531 et seq.), Title 50 Code of Federal Regulations (CFR) §17.1 et seq. (50 CFR 17.1 et seq.)	Designates and protects federally threatened and endangered plants and animals and their critical habitat.	USFWS	Issues, Biological Opinion, or Authorization with Conditions after review of project impacts	Applicant has sited facility to avoid habitat for endangered species. Critical habitat has not been designated in the project area. Potential habitat for special-status species does not exist on the project site. Implementation of protection measures will reduce impacts to less than significant (Subsections 8.2.3.2, 8.2.4, and 8.2.5).
Section 404 of Clean Water Act of 1977	Requires permit to fill jurisdictional wetlands.	USACE	Section 404 Permit	Activities within the Los Angeles River are considered minor and would not require 404 permitting (Subsection 8.2.3.4.1).
Section 401 of Clean Water Act of 1977	Requires the Applicant to conduct water quality impact analysis for the project when using 404 permits and for discharges to waterways.	RWQCB	Water Quality Certification	Activities within the Los Angeles River are considered minor and would not require 401 certification (Subsection 8.2.3.4.1).
Migratory Bird Treaty Act 16 USC §§703-711	Prohibits the non-permitted take of migratory birds.	USFWS and CDFG	CEC Conditions	Applicant has sited the facility in an area that is not expected to attract migratory birds. Applicant will avoid the take of migratory birds (Subsection 8.2.3.1).

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Laws, Ordinances, Regulations, and Standards Applicable to VPP Biological Resources.

LORS	Purpose	Regulating Agency	Permit or Approval	Applicability (AFC Section Explaining Conformance)
State				
California Endangered Species Act of 1984, Fish and Game Code, §2050 through §2098	Protects California's endangered and threatened species.	CDFG	Comments as cooperating agency on Section 7 or Issues 2081 incidental take permit for state-listed species.	No state-listed species will be "taken" as a result of the project (Subsections 8.2.4.2 and 8.2.5).
Title 14, California Code of Regulations (CCR) §§670.2 and 670.5	Lists plants and animals of California declared to be threatened or endangered.	CDFG	N/A	N/A
Fish and Game Code Fully-Protected Species §3511: Fully Protected birds §4700: Fully Protected mammals §5050: Fully Protected reptiles and amphibians §5515: Fully Protected fishes	Prohibits the taking of listed plants and animals that are Fully Protected in California.	CDFG	N/A	Applicant will avoid take of state-listed plants and wildlife species (Subsections 8.2.4.2 and 8.2.5).
Fish and Game Code §1930, Significant Natural Areas (SNA)	Designates certain areas such as refuges, natural sloughs, riparian areas, and vernal pools as significant wildlife habitats. Listed in the CNDDB.	CDFG	N/A	There are no SNAs in the project area (Subsection 8.2.2.3).
Fish and Game Code §1580, Designated Ecological Reserves (DERs)	The CDFG commission designates land and water areas as significant wildlife habitats to be preserved in natural condition for the general public to observe and study.	CDFG	N/A	There are no DERs in the project area (Subsection 8.2.2.3).
Fish and Game Code §1600, Streambed Alteration Agreement (SAA)	Reviews projects for impacts to waterways, including impacts to vegetation and wildlife from sediment, diversions, and other disturbances.	CDFG	Issues conditions of the SAA that reduces and minimizes effects on vegetation and wildlife downstream of construction areas.	Applicant has sited the facility to avoid impacts to streams/streambeds. (Subsections 8.2.3.2 and 8.2.3.3).
Native Plant Protection Act of 1977, Fish and Game Code, §1900 et seq.	Designates state rare and endangered plants and provides specific protection measures for identified populations.	CDFG	Reviews mitigation options if there will be significant project effects on threatened or endangered plant species	There are no rare or endangered plants on the project site (Subsections 8.2.3.4 and 8.2.5).

TABLE 8.2-1
Laws, Ordinances, Regulations, and Standards Applicable to VPP Biological Resources.

LORS	Purpose	Regulating Agency	Permit or Approval	Applicability (AFC Section Explaining Conformance)
Public Resource Code §§25500 and 25527	Siting of facilities in certain areas of critical concern for biological resources, such as ecological preserves, wildlife refuges, estuaries, and unique or irreplaceable wildlife habitats of scientific or educational value, is prohibited, or when no The City of Vernon (City) proposes to develop a power plant (VPP) on a 13.7-acre property at the southeast corner of Fruitland and Boyle avenues. The VPP will be a 914-megawatt (MW) net (at 65 degrees Fahrenheit [°F] with duct burners and evaporative cooling)/943-MW (gross) combined-cycle generating facility configured using three natural-gas-fired combustion turbines and one steam turbine. Two transmission line options are being considered to connect the plant to Southern California Edison's (SCE) Laguna Bell Substation. Natural gas for the facility will be delivered via approximately 2,300 feet of new 24-inch pipeline that will connect to Southern California Gas Company's (SoCalGas) existing gas transmission line (Line 765). Potable water for drinking, safety showers, fire protection, service water, and sanitary uses will be served from the City's potable water system through a 10-inch pipeline connecting to the City's water mains in Boyle and Fruitland avenues. Recycled water for industrial purposes will be provided by the Central Basin Municipal Water District (CBMWD) through a nominal 16-inch carbon steel (or if using high density polyethylene (HPDE), a 20-inch) water line connecting to its recycled water line in Boyle Avenue, adjacent to the plant site. The blowdown will be sent to Sanitation Districts of Los Angeles County (LACSD) via a new 2,400-foot section of City sanitary sewer line.	USFWS and CDFG	Issues Biological Opinion or Authorization with Conditions after review of project impacts	There are no areas of critical biological concern in the project area (Subsections 8.2.3 and 8.2.4).
Title 20 CCR §§1702 (q) and (v)	Protects "areas of critical concern" and "species of special concern" identified by local, state, or federal resource agencies in the project area, including the California Native Plant Society (CNPS).	USFWS and CDFG	Issues Biological Opinion or Authorization with Conditions after review of project impacts.	There are no areas of critical biological concern in the project area (Subsections 8.2.3 and 8.2.4).

TABLE 8.2-1
Laws, Ordinances, Regulations, and Standards Applicable to VPP Biological Resources.

LORS	Purpose	Regulating Agency	Permit or Approval	Applicability (AFC Section Explaining Conformance)
Title 14 CCR Section 15000 et seq.	Describes the types and extent of information required to evaluate the effects of a proposed project on biological resources of a project site.	USFWS and CDFG	Review and comment on AFC.	AFC provides this information (Subsection 8.2.4).
Suggested Guidelines for Raptor Protection (APLIC, 1996)	Describes design measures to avoid and reduce impacts to raptors from electrical transmission and other facilities.	CEC	CEC Conditions of Approval	Although raptors are not expected in the area, applicant will implement design measures to protect raptors from collision and electrocution (Subsection 8.2.4.2.7).

Local

Element	Goal/Policy	Conformance
Vernon General Plan		
Natural Resources Element	Goal 2 Policy 2.1: Encourage water conservation in all development and by all industries.	The VPP will use recycled water which will cycle through the cooling tower five times. This conforms to the City's policy on water conservation (Subsection 8.2.3.3.3).
Natural Resources Element	Goal 2 Policy 2.3: Continue to enforce all federal and state environmental protection laws and regulations.	The project is not located in an environmentally sensitive area. All pertinent state and federal regulations regarding natural resource protection/conservation have been addressed (Subsections 8.2.3 and 8.2.4).

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

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

Clean Water Act (33 U.S.C. 1251 et seq.). The objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters (Section 10[a]). Section 404 of the Clean Water Act (CWA) establishes a program to regulate and permit the discharge of dredged or fill material into waters of the United States (U.S.), including wetlands.

Section 401 of the CWA requires that federal agencies issuing licenses or permits for construction or other activities get a written certification that the activity will not cause or contribute to a violation of the state or tribe's water quality standards. After receiving the certification, the federal agency issuing the permit must include conditions in the permit to prevent the project from degrading water quality of a downstream state or tribe.

8.2.2.2 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. 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.

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 listed by the state.

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 the California Department of Fish and Game (CDFG) on those species that are indicators of regional habitat changes or are considered potential future protected species. CSCs do not have any special legal status, but are 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. The limit of CDFG jurisdiction is subject to the judgment of the department, up to the 100-year flood level. This applies to any channel modifications that would be required to meet drainage, transportation, or flood control objectives of the project.

California Environmental Quality Act (CEQA) (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 be analyzed and assessed using criteria determined by the lead agency.

Warren-Alquist Act is a CEQA-equivalent process implemented by the California Energy Commission (CEC). Preparation of this application will result in an assessment prepared by the CEC staff to fulfill the requirements of CEQA.

8.2.2.3 Local and Other Jurisdictions

8.2.2.3.1 Applicable Habitat Conservation Plans and Critical Habitat Designations

Portions of Los Angeles County fall within the geographical area covered under the West Mojave Plan (BLM, 2005). The West Mojave Plan serves as a Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the Federal Endangered Species Act of 1973 (FESA), as well as a Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001. However, the proposed site for the VPP is located outside of the covered area for this plan. The City of Vernon is highly developed and does not contain any native habitat.

Critical habitat has been designated under the FESA in Los Angeles County for five listed species; thread-leaved brodiaea (*Brodiaea filifolia*), Palos Verdes blue butterfly (*Glaucopsyche lygdamus palosverdesensis*), Santa Ana sucker (*Catostomus santaanae*), southwestern arroyo toad (*Bufo microscaphus californicus*), and the California coastal gnatcatcher (*Polioptila californica*). The closest Critical Habitat Unit (CHU) for the California coastal gnatcatcher was designated in the Montebello, Chino-Puente Hills, and the East and West Coyote Hills areas. This unit is approximately 9 miles away from the proposed project site (USFWS, Critical Habitat Portal) and would not be affected by the proposed project.

8.2.2.3.2 Vernon General Plan

The City of Vernon General Plan was adopted in 1989 and revised in 1992. The Natural Resource element in this plan addresses the preservation of those resources and open space amenities that are important to the health and welfare of persons living and working in Vernon. In a fully developed community such as Vernon, natural resources are limited to air and water. Open space resources include public parks and private landscaped areas developed by businesses or residents.

8.2.3 Environmental Setting

The following subsections describe the biological conditions of the proposed site, beginning with a regional overview, the vegetation types and habitat present in the project area, a description of wildlife typical to the area, and a discussion of specific special-status species known to occur in the Los Angeles Basin (see Figure 8.2-1; figures are located at the end of this subsection).

8.2.3.1 Regional Overview

The proposed site is located in the City of Vernon in Los Angeles County, California. This area lies within the Los Angeles Basin, which is situated between the Transverse and Peninsular Ranges of California. The region is influenced by the nearby Pacific Ocean to produce a Mediterranean climate where winters are moderate and typically rainy while summers are warm to hot. The Los Angeles Basin is bounded by the Santa Monica Mountains to the north, the Whittier Fault to the east, the San Joaquin Hills to the south, and the Pacific Ocean to the west.

The Basin is contained within the South Coast Section of the California Coastal Chaparral Forest and Shrub Province (Stuart 2001). This area historically contained woodlands consisting of California walnut (*Juglans californica*), coast live oak (*Quercus agrifolia*), and Engelmann oak (*Quercus engelmannii*) along the slopes of coastal scrubs, chaparrals, and grasslands. Coastal scrub habitat, which was historically dominant, consists of black sage (*Salvia mellifera*), California buckwheat (*Eriogonum fasciculatum*), Brittlebush (*Encelia farinosa*), California sagebrush (*Artemisia californica*), and white sage (*Salvia apiana*). Many slopes were historically covered with chamise (*Adenostoma fasciculatum*) or scrub oak (*Quercus berberidifolia*) or a mixture of shrubs, including many species of ceanothus, manzanita (*Arctostaphylos* sp.), and oak (*Quercus* sp.). Native habitats within the Los Angeles Basin have been dramatically altered, invaded with non-native species, and/or replaced by urban development. Native animal populations have also greatly diminished, been displaced, or have been extirpated from the area. Native vegetation has been eliminated from the project vicinity (Figure 8.2-2).

8.2.3.2 Project Site and Laydown Area

The City of Vernon proposes to develop a power plant on approximately 13.7 acres of land at the southeast corner of Boyle and Fruitland Avenues, at 3200 Fruitland Avenue, Vernon, California. The City will make available 13.3 additional acres adjacent to the site for laydown, storage, and parking.

The VPP will be a net 914-MW at 65 °F with duct burners and evaporative cooling) combined-cycle generating facility configured using three natural-gas-fired combustion turbine generators (CTGs) and one steam turbine generator (STG) (see Section 2.0).

8.2.3.3 Linear Corridors

8.2.3.3.1 Electrical Transmission Line

The VPP will connect to the SCE electrical transmission grid (see Section 5, Electric Transmission) via one of two options:

The River Route

The River Route exits the site to the east, crosses Alcoa, and approaches the Los Angeles Department of Water and Power (LADWP) right-of-way. It continues by crossing the LADWP right-of-way and turning north on an easement on the east side of the LADWP right-of-way. The route turns north on this new easement along the LADWP right-of-way and then proceeds east between the south side of the Leonis substation and the north side of the Fire Station to the west side of Downey Road. Once on Downey the route turns north to District Boulevard. The route crosses Downey Road to the northeastern corner of District

Boulevard and continues on the north side of District Boulevard, turning northeast (toward the Los Angeles River) between 4713 and 4717 District Boulevard. The route then crosses the Los Angeles River and railroad facilities, and turns south along the Los Angeles River to the Randolph Street junction on right-of-way currently occupied by two 66-kV circuits serving Vernon (Laguna Bell-Leonis #2 and Laguna Bell-Ybarra). Finally, the route turns east, crosses the 710 Freeway, and proceeds to the Laguna Bell Substation along Randolph Street on the right-of-way currently occupied by the Laguna Bell-Container-Pulpgen-Vernon and the Laguna Bell-Leonis-Vernon circuits, for a total distance of 4.8 miles.

Randolph Route

The Randolph Route exits the site to the east and crosses Alcoa Avenue. It continues south along the east side of Alcoa on the right-of-way currently occupied by the Laguna Bell-Leonis-Vernon 66-kV circuit. The route continues east, crosses the LADWP transmission line, and proceeds to Laguna Bell along the Randolph Street corridor on the right-of-way currently occupied by the Laguna Bell-Container-Pulpgen-Vernon and the Laguna Bell-Leonis-Vernon circuits. Finally, the route crosses the Los Angeles River, the LADWP 230-kV circuits from Haynes, and the 710 Freeway, and proceeds to Laguna Bell for a total distance of 4.4 miles.

8.2.3.3.2 Natural Gas

Natural gas for the facility will be delivered via approximately 2,300 feet of new 24-inch pipeline that will connect to SoCalGas's existing gas transmission line (Line 765). The project will include an onsite fuel gas compressor station.

The optimal trench to install the gas line will be approximately 36 inches wide and 5 to 10 feet deep, depending on the location of existing utilities in the road. With loose soil, a trench up to 8 feet wide at the top and 3 feet wide at the bottom may be required. The pipeline will be buried to provide a minimum cover of 36 inches. The excavated soil will be piled on one side of the trench and used for backfilling after the pipe is installed. The pipeline will be installed through trenching at all locations.

8.2.3.3.3 Recycled Water

For cooling tower make-up, the VPP will use approximately 6,266 acre feet per year (afy) of recycled water provided by CBMWD through a 16- or 20-inch water line connecting to its recycled water line in Boyle Avenue, adjacent to the site. Cooling water will be cycled in the cooling tower five times. The blowdown will be returned to LACSD via a new 2,400-foot section of City sanitary sewer line.

8.2.3.3.4 Potable Water

Potable water for drinking, safety showers, fire protection water, service water, and sanitary uses will be served from the City's potable water system through a 10-inch pipeline connecting to City water mains located in Boyle and Fruitland avenues (see Section 7.3).

8.2.3.3.5 Sanitary Sewer

An 18-inch sanitary sewer line would exit the plant site from the southeast corner, follow the east edge of the parcel and along the railroad right-of-way to Alcoa Avenue, turning south on Alcoa, for approximately 2,400 feet of new sanitary sewer line. The line would be 21 inches in diameter to the point where it connects to the Sanitation Districts of Los Angeles County's 24-inch line at Alcoa and Slauson Avenues.

8.2.3.4 Habitat and Vegetation Communities

The following is a discussion of the habitat community types found within the project area and vicinity. Figure 8.2-2 shows the habitat types surrounding the power plant site. Because the area is primarily industrial, biological resources such as natural habitat communities, denning or nesting sites, migration corridors, breeding habitats, and the presence of special-status species are extremely limited. Habitat types potentially affected in the project area are comprised of Stormwater Canals/Rivers and Ornamental-Industrial, Commercial, and Residential Landscapes (Figure 8.2-2).

8.2.3.4.1 Stormwater Canals/Rivers

The Los Angeles River, located approximately 0.75 mile north of the site, has been channelized into a fully-lined concrete canal. Riparian and freshwater habitats have not been present in the Los Angeles River for many years. Within the project area, the River consists of a wide, trapezoidal channel, with a flat bottom and sloping sides, and a small rectangular low-flow channel in the center of the main channel. No permanent vegetation is present within the concrete channel. However, during the low-flow season a thin sheet of water flows over this area, which can support a substantial algae mat. This mat supports invertebrates, which in turn can support foraging by a variety of shorebirds. Gulls (*Larus* sp.) and black-crowned night herons (*Nycticorax nycticorax*) were observed in the River during the January 30, 2006 survey.

8.2.3.4.2 Ornamental-Industrial, Commercial, and Residential Landscaped Communities

Man-made structures within the project impact area and adjacent communities include roadways, levees, residential areas, and various infrastructure support features. Compared to vegetated habitats, these developed areas support a low diversity of wildlife. Non-native ornamental landscaping including rose (*Rosa* sp.), olive (*Olea europea*), eucalyptus (*Eucalyptus* sp.), pepper tree (*Schinus* sp.), and palm (*Washingtonia* sp.) are typical in these areas. The availability of water, shady cover, and insects make the yards and landscaping around urban areas attractive to certain adaptable species, many of which are non-native. American crows (*Corvus brachyrhynchos*), Brewer's blackbirds (*Euphagus cyanocephalus*), mourning dove (*Zenaidura macroura*), northern mockingbird (*Mimus polyglottos*), house finch (*Carpodacus mexicanus*), and house sparrows (*Passer domesticus*) are common in these areas.

Mammal species include house mouse (*Mus musculus*), California ground squirrels (*Spermophilus beecheyi*), and domestic or feral cats and dogs. These species tend to be highly adaptable, widespread, and common. Industrial and commercial landscapes dominate the project impact area.

8.2.3.5 Special-Status Species

The designation of special-status species includes federal and state-listed species under the FESA and California Endangered Species Act (CESA); species proposed for those listings; federal fully-protected and species of concern; California species of special concern; and plant species designated as Rare, Threatened, or Endangered by the California Native Plant Society (CNPS).

The CEC guidelines call for the identification of special-status species potentially affected by a proposed power project within one mile of the plant site and 1,000 feet from the outer edge of linear facilities.

A list of special-status plant and animal species was compiled for the project area based upon the following references: the CDFG California Natural Diversity Data Base (CNDDDB); CNPS Electronic Inventory; correspondence with the USFWS (a letter of concurrence); and project-specific onsite field surveys. A number of special-status species either historically occurred in the area or may still be present in the general vicinity of the lower Los Angeles Basin. A comprehensive list of special-status species with the potential to occur in the regional vicinity of the lower Los Angeles River is presented in Table 8.2-2, (due to its size, this table is at the end of this subsection). The list includes species listed as threatened or endangered that have special requirements under the FESA and CESA and other non-listed special-status species that could become listed in the future and includes the habitat types that could support these species as well as the potential for occurrence in the project area.

Species were included if they had historically or recently been recorded in the regional vicinity (CNDDDB 2005). These species are associated with natural habitats that were once prevalent in the area but have since been lost to extensive urban development.

Biological surveys for the project area and general vicinity were performed by biologists from CH2M HILL on September 22, 2005 and January 30, 2006. No special-status species were observed during the biological survey. Surveyors' qualifications are provided in Appendix 8.2A.

Preliminary surveys, habitat evaluations, and aerial photographs suggest that the site is not located in a sensitive area. The majority of land use within the one-mile radius of the power plant is used for industrial purposes and has been completely developed. The highly developed nature of the project vicinity would not support special-status species except for occasional foraging or other transient uses by migratory species. Based on a review of the CNDDDB, there are no special-status species within a one-mile radius of the power plant site, or from 1,000 feet of either side of the natural gas, sewer, and recycled water pipeline routes, as well as the transmission line. In addition, based on a review of the area surrounding the power plant, there is no native habitat that would support special-status species within the project impact areas.

8.2.3.6 Wetlands and Water Resources

A field survey of the site and within the one-mile radius indicates that there are no wetland resources present. The nearest water resource is the Los Angeles River, located approximately 0.75-mile north of the site. The River has been channelized into a fully-lined concrete channel. Riparian and freshwater habitats have not been present for over 60 years.

Surveys within 1,000 feet of either side of the centerline of the natural gas pipeline route, as well as the transmission line routes and sewer line, indicate there are no wetland resources present. However, the River Route transmission line option crosses Downey Road to the northeastern corner of District Boulevard and continues on the north side of District Boulevard, turning northeast (toward the Los Angeles River) between 4713 and 4717 District Boulevard. The route then crosses the Los Angeles River and railroad facilities, and turns south along the Los Angeles River where it then follows the existing 66-kV subtransmission line along the east side of the River. The 66-kV line will be removed and replaced with Vernon's spare circuit and the idle SCE circuit. At Randolph Street, the route turns east and proceeds to the Laguna Bell Substation. To connect the transmission line, the stringing crew

would cross (enter) the paved concrete bed of the Los Angeles River with light to medium duty trucks (with conductor reels mounted on them).

8.2.3.7 Biological Surveys

Biological resources evaluated for project impacts include vegetation communities, wetlands, wildlife, and wildlife habitats in all the temporary and permanent project impact locations. The field survey was aided by the results of the CNDDDB, CNPS Inventory, and aerial photographs, which helped identify land uses. Although the survey was conducted during the fall/winter season, spring surveys are not proposed due to the highly developed nature of the site and lack of natural habitat to support special-status species.

The surveyed areas include the 13.7-acre parcel proposed for the plant site and the 13.3 acres for which the city will make available to the contractor for parking/lay down areas, the area one mile out from the plant site, and areas within 1,000 feet of either side of the proposed natural gas, recycled water pipelines, sewer line, and both proposed and alternative transmission line routes. Construction of the gas pipeline and the transmission line requires a construction zone of 50 to 75 feet; therefore, a 2,150-foot wide corridor was evaluated along the routes. The field surveys focused on a 75-foot construction zone along either side of the pipeline and transmission routes and immediate construction areas on the site and laydown area.

The general project vicinity is dominated by industrial use and all linear corridors traverse highly developed urban areas.

8.2.4 Environmental Analysis

Potential direct and indirect impacts to biological resources were evaluated to determine the permanent and temporary effects of project construction, operation, maintenance, and decommissioning of the VPP and supporting facilities. A summary of project impacts is listed in Table 8.2-3. Due to the highly-developed nature of the project area, no impacts to biological resources will occur from construction or operation of the plant and associated transmission and pipelines.

8.2.4.1 Standards of Significance

Impacts on biological resources are considered significant if one or more of the following conditions could result from implementation of the proposed project:

- Substantial effect, reduction in numbers, restricted range, or loss of habitat for a population of a state or federally listed threatened or endangered species.
- Substantial effect, reduction in numbers, restricted range, or loss of habitat for a population of special-status species, including fully protected, candidate proposed for listing, CSC, and certain CNPS list designations.
- Substantial interference with the movement of any resident or migratory fish or wildlife species.

TABLE 8.2-3
Summary of Permanent and Temporary VPP Project Impacts on Biological Resources During Construction.

Location	Project Work	Construction Zone Size	Time Requirements	Habitat Type	Sensitive Biological Resources	Impacts	
						Temporary	Permanent
Power plant site	Grading for footprint construction	13.7 acres	Up to 24 months	Dirt lot	None	None	13.7 acres
Access roads (main and emergency access)	Main entrance is on Fruitland Avenue. Secondary access is on Boyle Avenue.	0 acres	Part of site development	Existing paved roads	None	None	None
Construction laydown and parking area	Construction parking, equipment and material storage	13.3 acres	Up to 24 months	Dirt lot	None	13.3 acres	None
Natural gas pipeline	Trench and install 24-inch gas pipeline	2,300 feet	4 months	Paved road and road shoulders	None.	0.2 acres	None
Potable water supply line	Trench to tie into City main on Boyle Avenue adjacent to the site.	N/A	Part of site development	N/A	None	None	None
Recycled water supply	Trench to tie into recycled water pipeline adjacent to site on Boyle Avenue.	N/A	Part of site development	N/A	None	None	None
Sewer Line	Trench to install 21-inch sewer line	2,400 feet	3 months	Paved road/parking areas and road shoulders	None	0.12 acres	None
230-kV transmission lines	Randolph Route: Remove 66 kV circuits and Install a double-circuit 230-kV transmission line on one set of poles	4.4 miles	4 months	None	None	None	None
	River Route: Remove 66-kV circuits and Install a double-circuit 230-kV transmission line on one set of poles	4.8 miles					

- Substantial reduction of habitat for native fish, wildlife, or plants.
- Substantial disturbance of wetlands, marshes, riparian woodlands, and other wildlife habitat.
- Removal of trees designated as heritage or significant under County or local ordinances.

8.2.4.2 Potential Impacts to Special-Status Species from Construction and Operation of VPP Project Site and Associated Pipelines

8.2.4.2.1 Impacts from Site Construction

The VPP will require the installation of new equipment. No vegetation, other than landscape plant species, is currently located within the fenceline of the power plant site, laydown, or parking areas. Thus, no sensitive biological resources are expected to be disturbed.

8.2.4.2.2 Impacts from Pipeline Installation

Potential impacts from pipeline installation will be minimal due to placement of the pipelines in existing city streets within the industrial area. The new natural gas pipeline will go east from the plant site along Fruitland Avenue about 2,300 feet to existing gas line 765 in South Downey Road

The recycled water will be obtained via pipelines in Boyle Avenue. Plant wastewater will be disposed of using a new 2,400-foot sanitary sewer line that would exit the plant site from the southeast corner, follow along the railroad right-of-way to Alcoa Avenue, turning south on Alcoa Avenue the line would be 21 inches in diameter to the point where it connects to the Sanitation Districts of Los Angeles County's 24-inch line at Alcoa and Slauson Avenues. Impacts to biological resources are not expected to occur.

8.2.4.2.3 Impacts from Transmission Line Installation

Potential impacts from transmission line installation will be minimal due to the placement of the lines within a developed industrial area.

The River Route option transmission line segment would run from the plant's switchyard to SCE's Laguna Bell substation, approximately 4.8 miles away in the City of Commerce. This transmission line would follow existing, developed roadways and right-of-ways as it exits east between 5151 and 5233 Alcoa, crosses Alcoa, and approaches the LADWP right-of-way through the parking lot at 5208 Alcoa. It continues by crossing the LADWP right-of-way and turning north on an easement on the east side of the LADWP right-of-way. The route turns north on this new easement along the LADWP right-of-way, then proceeds east between the south side of the Leonis substation and the north side of the Fire Station to the west side of Downey Road. Once on Downey the route turns north to District Boulevard. The route crosses Downey Road to the northeastern corner of District Boulevard and continues on the north side of District Boulevard, turning northeast (toward the Los Angeles River) between 4713 and 4717 District Boulevard. The route then crosses the Los Angeles River and railroad facilities, and turns south along the Los Angeles River to the Randolph Street junction on the right-of-way currently occupied by two 66-kV circuits serving Vernon (Laguna Bell-Leonis #2 and Laguna Bell-Ybarra). Finally, the route turns east, crosses the 710 Freeway, and proceeds to the Laguna Bell Substation along Randolph Street on the right-of-way currently

occupied by the Laguna Bell-Container-Pulpgen-Vernon and the Laguna Bell-Leonis-Vernon circuits.

The Randolph Route option transmission line segment would also run from the plant's switchyard to SCE's Laguna Bell Substation, approximately 4.4 miles. This transmission line option would follow existing developed roadways and right-of-ways as it exits the site east between properties 5233 and 5383 Alcoa. It crosses Alcoa Avenue and continues south along the eastside of Alcoa on the right-of-way currently occupied by the Laguna Bell-Leonis-Vernon 66-kV circuit. The route continues east, crosses the Century to Velasco 230-kV LADWP transmission line, and proceeds to Laguna Bell along the Randolph Street corridor on the right-of-way currently occupied by the Laguna Bell-Container-Pulpgen-Vernon and the Laguna Bell-Leonis-Vernon circuits. Finally, the route crosses the Los Angeles River, the LADWP 230-kV circuits from Haynes, and the 710 Freeway, and proceeds to Laguna Bell. The route is sited through industrial areas with no natural habitat. Some agricultural uses are located within the LADWP transmission line corridor on 50th Street just south of the termination point of the proposed line.

Due to the highly-developed nature of the area and lack of biological resources, construction of the project, ancillary pipelines, and the transmission line (along either corridor) will not cause adverse biological impacts. Native fish and wildlife species of commercial and/or recreational value are not present in the area and, therefore, would not be impacted by the project.

8.2.4.2.4 Impacts from Cooling Tower Drift

Cooling tower drift is the fine mist of water droplets that escape the cooling tower's mist eliminators and emitted into the atmosphere. Cooling towers concentrate the particulates (total dissolved solids) during the cooling process and produce a salt mist. Salts can physically damage a leaf cell, which affects the photosynthetic ability of plants. Other effects include blocking the stomata (leaf pores) so that normal gas exchange is impaired, as well as affecting leaf adsorption and solar radiation reflectance. These effects can reduce productivity in crops, trees, and sensitive special-status plant species in a deposition area.

Studies performed by Lerman and Darley (1975) concluded that particulate deposition rates of 365 grams per square meter per year ($\text{g}/\text{m}^2/\text{year}$) caused damage to fir trees, but rates of 274 $\text{g}/\text{m}^2/\text{year}$ and 400 to 600 $\text{g}/\text{m}^2/\text{year}$ did not cause damage to vegetation at other sites. Pahwa and Shipley (1979) exposed vegetation (corn, tobacco, and soybeans) to varying salt deposition rates to simulate drift from cooling towers that use saltwater (20 to 25 parts per thousand) in the circulation water. Salt stress symptoms on the most sensitive crop plants (soybeans) were barely perceptible effects at a deposition rate of 2.98 $\text{g}/\text{m}^2/\text{year}$ (Pawha and Shipley, 1979).

Assuming a particulate deposition rate of 2 centimeters per second and a maximum salt concentration of 0.0895 microgram per cubic meter (the cooling tower particulate matter deposition rate), the expected deposition rate is 0.056 $\text{g}/\text{m}^2/\text{year}$, which is significantly less than levels expected to cause barely perceptible effects to the most sensitive crop plants.

8.2.4.2.5 Impacts from Cooling Water Supply and Effluent

Recycled water for industrial purposes will be provided by CBMWD through a 16- or 20-inch water line connecting to its recycled water line in Boyle Avenue, adjacent to the

plant site. The blowdown will be sent to LACSD via a new 2,400-foot section of City sanitary sewer line. Since the VPP will acquire water from CBMWD, there will be no mechanism to affect fish or other biota from securing water for operations.

8.2.4.2.6 Impacts from Noise and Lights from Plant Operations

The VPP site is zoned industrial and there are several industrial facilities adjacent to the site. These facilities typically operate 24 hours per day, 7 days per week and have standard industrial lighting and significant noise. Operation of the plant would produce some noise, as described in Subsection 8.5. Noise and construction activities could temporarily prevent wildlife from foraging and nesting in areas adjacent to the site. However, due to the highly developed nature of this area, few nesting or foraging sites exist. In addition, noise from operations generally would not adversely impact wildlife, as wildlife usually becomes accustomed to routine background noise.

Bright night lighting could disturb wildlife (e.g., nesting birds, foraging mammals, and flying insects). Night lighting is also suspected to attract migratory birds to areas and, if the lights are on tall buildings or heat recovery steam generator (HRSG) stacks, collisions could occur. Although the HRSG stack height will be taller than the existing electric transmission lines, any lighting (if required) will be pointed down to minimize impacts.

8.2.4.2.7 Impacts from Collision and Electrical Transmission Lines

The project would construct three exhaust stacks as high as 180 feet and would involve the installation of electric transmission lines that could potentially result in bird collisions. Most bird collisions involve nocturnal migrants flying at night in inclement weather and low-visibility conditions, colliding with tall guyed television or radio transmission towers (CEC 1995; Kerlinger 2000 in Final Staff Assessment for Contra Costa Power Plant). Migratory birds generally fly at an altitude that would avoid ground structures, except when crossing over topographic features (e.g., ridge tops) or when inclement weather forces them down closer to the ground. The project area is not known to be a path for nocturnally migrating birds. There are no topographic or ecological features that would attract birds to this location or “funnel” them into the vicinity of exhaust stacks or other elevated features of the project. Because the proposed transmission lines would be located in corridors of existing transmission lines and because of the relatively low structure height and lack of guy wires, the potential for bird collisions with stacks, poles, electric conductor wires, structures, and towers of the project is considered less than significant.

Large raptors can be electrocuted by transmission lines when a bird’s wings simultaneously contact two conductors of different phases, or a conductor and a ground. The installation of transmission lines or poles will be constructed according to “raptor-friendly” guidelines (Avian Power Line Interaction Committee [APLIC 1996]). The 230-kV electrical transmission lines for the project will be constructed with at least a 5.5-foot span between conductor wires to ensure raptors cannot touch two conductor wires at the same time. The additional segments would not increase avian electrocutions in the area. Risk of electrocution is not expected to be significant since the area does not attract large numbers of birds. In addition, the “raptor-friendly” design would reduce potential impacts to less than significant.

8.2.4.3 Abandonment/Closure

No adverse biological impacts would occur due to the closure of the power plant site. Likewise, there would be no impacts to biological resources from abandonment in place or removal of the ancillary pipelines or transmission lines.

8.2.4.4 Conflicts with Regional Habitat Conservation Plans

There are no countywide or regional HCPs that affect this project. The City of Vernon is almost exclusively industrial. Therefore, construction of the project would not conflict with goals of any HCP or other regional conservation plan.

8.2.4.5 Cumulative Impacts

Due to the highly developed nature of the area and lack of biological resources, cumulative impacts from the proposed project would not occur. The VPP project would not cause any new habitat disturbance. Because the proposed site was previously developed and is located in an industrial zoned area, no significant individual or cumulative impacts would occur.

8.2.5 Proposed Mitigation and Monitoring

As there are no biological resources within the property boundary, mitigation measures are not proposed. Measures such as off-site mitigation, educational programs, and compliance or monitoring programs are not required.

8.2.6 Involved Agencies and Agency Contacts

The individuals and agencies contacted in association with this project are listed in Table 8.2-4. The U.S. Army Corps of Engineers and RWQCB were contacted to ensure 401 and 404 permitting are not required since all construction activities would be located outside of jurisdictional waters (Table 8.2-4).

TABLE 8.2-4
Contacts for the VPP Project

Biological Resource Agency	Person Contacted	Issue	Phone
U.S. Fish and Wildlife Service	Ken Corey U.S. Fish and Wildlife Service 2730 Loker Avenue West Carlsbad, CA 92008	Federal threatened or endangered species	(760) 431-9440 ext 269
California Department of Fish and Game	Mini Elayath CA Dept. of Fish and Game 4949 Viewridge Avenue San Diego, CA 92123	\$1600, Streambed Alteration Agreement	(562) 594-4450
Regional Water Quality Control Board	Dana Cole RWQCB 320 W 4th Street, Suite 200 Los Angeles, CA 90013	401 Certification	(213) 576-6600
U.S. Army Corps of Engineers	Ken Wong	404 Permitting	(213) 452-3290

8.2.7 Required Permits and Permit Schedule

The River Route option electrical transmission line corridor would cross the concrete-lined Los Angeles River. Due to the lack of habitat, the crossing is not expected to disturb special-status species; therefore, a USFWS biological opinion is not required (Table 8.2-5).

TABLE 8.2-5
Required Permits and Schedule

Permit/Authorization	What Is Required to Complete Consultations	Date Application Submitted
Biological Opinion pursuant to Section 7 of the FESA, issued by USFWS Letter of Concurrence, from CDFG	Not needed	Not applicable
CDFG Streambed Alteration Agreement potentially required for transmission line construction across Los Angeles River	Notification must be sent to the CDFG regarding the proposed project so an investigator can determine if a Streambed Alteration Agreement is required.	3 months prior to project startup
Clean Water Act Section 404 Permit potentially required for transmission line construction across Los Angeles River	Not needed	Not applicable
Water Quality Certification	Not needed	Not applicable

8.2.8 References

Avian Power Line Interaction Committee (APLIC). 1996. Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996. Edison Electric Institute/Raptor Research Foundation. Washington, DC.

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Lerman, S.L., and E.F. Darley. 1975. "Particulates." In J.B. Mudd and T.T. Kozlowski (eds.), *Responses of Plants to Air Pollution*. pp. 141-158. Academic Press, New York, NY.

Pahwa, S. and B. Shipley. 1979. *A Pilot Study to Detect Vegetation Stress around a Cooling Tower*. Presented at the 1979 Cooling Tower Institute Annual Meeting, Houston, Texas. Paper TP7903.

Stuart, J.D. and J.O. Sawyer. 2001. *Trees and Shrubs of California*.

TABLE 8.2-2
Special-Status Species Potentially Occurring in the Regional Vicinity of the VPP Project Area.

Common Name	Scientific Name ^a	Status ^b	Season ^c	Primary Habitat ^d	Potential Occurrence in Project Area	Comments
Plants						
Brand's phacelia	<i>Phacelia stellaris</i>	CNPS:1B	Mar-Jun	Found in coastal dunes and scrub.	Unlikely to occur due to the highly developed nature of the project area and lack of suitable habitat.	Known from fewer than 5 occurrences, extirpated by development.
California Orcutt grass	<i>Orcuttia californica</i>	CNPS:1B	Apr-Aug	Found in association with vernal pools in Los Angeles County.	Unlikely to occur due to the highly developed nature of the project area and lack of suitable habitat.	Known from fewer than 20 occurrences.
Prostrate navarretia	<i>Navarretia prostrata</i>	CNPS:1B	Apr-Jul	Found in association with wetlands/vernal pools in coastal scrub and valley and foothill alkali grasslands.	Unlikely to occur due to the highly developed nature of the project area and lack of suitable habitat.	There are no wetlands or vernal pools within the project impact area.
Smooth tarplant	<i>Centromadia pungens</i> ssp. <i>laevis</i>	CNPS 1B	Apr-Sept	Occurs in a variety of habitats including alkali scrub, alkali playas, riparian woodland, watercourses, and grasslands with alkaline affinities.	Unlikely to occur due to the highly developed nature of the project area and lack of suitable habitat.	Found in southwestern California and northwestern Baja California, Mexico at low elevations.
Southern tarplant	<i>Centromadia parryi</i> ssp. <i>australis</i>	CNPS 1B	May-Nov	Found on the margins of marshes and swamps and in association with vernal pools in valley foothills and grasslands.	Unlikely to occur due to the highly developed nature of the project area and lack of suitable habitat.	Many historical populations have been extirpated.
Threadleaf brodiaea	<i>Brodiaea filifolia</i>	FT/CE CNPS:1B	May-Aug	Occurs on gentle hillsides, valleys, and floodplains in semi-alkaline mudflats, vernal pools, mesic southern needlegrass grassland, mixed native-nonnative grassland and alkali grassland plant communities in association with clay, loamy sand, or alkaline silty-clay soils.	Unlikely to occur due to the highly developed nature of the project area and lack of suitable habitat.	Endemic to southwestern cismontane California from near sea level to 600 meters (2,000 feet).

TABLE 8.2-2
Special-Status Species Potentially Occurring in the Regional Vicinity of the VPP Project Area.

Common Name	Scientific Name ^a	Status ^b	Season ^c	Primary Habitat ^d	Potential Occurrence in Project Area	Comments
Fish						
Arroyo chub	<i>Gila orcutti</i>	CSC	RES	Prefer slow moving or backwater sections of warm to cool streams with substrates of sand or mud. The depth of the stream is typically greater than 40 centimeters.	Unlikely to occur within the project impact area. However, likely to occur in the Santa Ana River tributaries.	Spawning typically begins in late December and can extend into April.
Santa Ana sucker	<i>Catostomus santaanae</i>	FT, CSC	RES	Generally lives in small, shallow streams, less than 7 meters in width, with currents ranging from swift in the canyons to sluggish in the bottom lands.	Unlikely to occur within the project impact area. However, likely to occur in the Santa Ana River	The native range of <i>C. santaanae</i> is southern California including the San Gabriel (east, north and west forks), Los Angeles, and Santa Ana River drainages.
Invertebrates						
Palos Verdes blue butterfly	<i>Glaucopsyche lygdamus palosverdesensis</i>	FE	RES	The Palos Verdes Blue is restricted to a single host plant, California locoweed (<i>Astragalus trichopodes</i> var. <i>lonchus</i>) in coastal scrub communities.	Unlikely to occur within the project impact area due to lack of required host plant.	There is no native habitat within the project impact area.
Amphibians						
Arroyo toad	<i>Bufo californicus</i>	FE, CSC	RES	Found in foothill canyons and intermountain valleys where the river is bordered by low hills and the stream gradient is low.	Unlikely to occur within the project impact area due to lack of suitable breeding habitat.	The species is currently thought to be restricted to the headwaters of large streams with persistent water from March to mid-June that have shallow, gravelly pools less than 18 inches deep, and adjacent sandy terraces.
California red-legged frog	<i>Rana aurora draytonii</i>	FT, CSC	RES	Deep water ponds with dense stands of overhanging willows and a fringe of cattails (<i>Typha latifolia</i>) between the willow roots and overhanging willow limbs.	Unlikely to occur within the project impact area due to lack of suitable breeding habitat.	Few populations remain in Southern California, one was discovered in East Las Virgenes Creek near the Ventura and Los Angeles county border, adjacent to the Santa Monica Mountains National Recreation Area. Two additional populations have been confirmed, one at the Santa Rosa Reserve in western Riverside County and another in Los Angeles County at Sierra Pelona near Palmdale.

TABLE 8.2-2
Special-Status Species Potentially Occurring in the Regional Vicinity of the VPP Project Area.

Common Name	Scientific Name ^a	Status ^b	Season ^c	Primary Habitat ^d	Potential Occurrence in Project Area	Comments
Reptiles						
San Diego Horned Lizard	<i>Phrynosoma coronatum blainvillei</i>	SC/CSC	RES	This species occupies coastal sage scrub and chaparral and other open habitats, including sandy washes. It prefers areas with friable, rocky, or shallow sandy soils.	Unlikely to occur within the project impact area due to lack of suitable habitat.	There are no sandy washes or other open habitats within the project impact area.
Southwestern pond turtle	<i>Emys (=Clemmys) marmorata pallida</i>	CSC	RES	The only native freshwater turtle in the Pacific Coast states. Highly aquatic and associated with riparian habitat including streams, rivers, sloughs, ponds, and artificial water bodies. Deep pools, basking sites, and aquatic vegetation are important habitat components.	Unlikely to occur within the project impact area due to lack of suitable habitat.	Breeding season is typically between April to August. Eggs laid in an excavated chamber in upland habitat as much as 100 meters from the water. Hatchlings emerge in late summer or fall or over-winter in the nest to emerge the following spring. Adults hibernate in the winter by burying themselves in muddy bottoms underwater or in upland soil and vegetative litter.
Two-striped garter snake	<i>Thamnophis hammondi</i>	CSC	RES	Typically associated with wetland habitats such as streams, creeks and pools. It is closely associated with streams with rocky beds and bordered by willows	Unlikely to occur within the project impact area due to lack of suitable habitat.	Annual activity range is between January and November. During hot weather, <i>T. hammondi</i> may be crepuscular or nocturnal.
Birds						
Bell's sage sparrow	<i>Amphispiza belli belli</i>	FSC, CSC, MB	RES	Dry chaparral and coastal sage scrub along the coastal lowlands, inland valleys, and in the lower foothills of local mountains.	Unlikely to breed or nest in the project area due to lack of primary habitat.	Bell's sage sparrow usually nests in sagebrush or chaparral.
Coastal California gnatcatcher	<i>Poliioptila californica californica</i>	FT, CSC	RES	Strongly associated with Coastal and Riversidean sage scrub habitats, particularly those dominated by California sagebrush stands on mesas, gently sloping areas, and along the lower slopes of the coast ranges	Unlikely to occur within the project impact area due to lack of suitable habitat.	This small, insectivorous songbird occurs almost exclusively in several distinctive subassociations of the coastal sage scrub plant community and is threatened by habitat loss and fragmentation occurring in conjunction with urban and agricultural development.

TABLE 8.2-2
Special-Status Species Potentially Occurring in the Regional Vicinity of the VPP Project Area.

Common Name	Scientific Name ^a	Status ^b	Season ^c	Primary Habitat ^d	Potential Occurrence in Project Area	Comments
Cooper's hawk	<i>Accipiter cooperii</i>	CSC	RES	Found in woods and the edges of woods, often hunts around houses and birdfeeders. Nests in tall trees especially pines.	Unlikely to breed in the project vicinity due to the lack of significant wooded areas.	The Cooper's hawk breeds primarily in riparian areas and oak woodlands and apparently is most common in montane canyons.
Least Bell's Vireo	<i>Vireo bellii</i> ssp <i>pusillus</i>	FE, CE, MB	SPR	Primarily occupies riverine riparian habitats that typically feature dense cover within 1-2 meters of the ground and a dense, stratified canopy. It inhabits low, dense riparian growth along water or along dry parts of intermittent streams.	Unlikely to occur within the project impact area due to lack of suitable habitat.	The breeding season for least Bell's vireo is typically mid-March to September and is known to breed almost exclusively within riparian habitats. Nesting sites are typically selected within structurally heterogeneous woodlands, forests and scrubs that support dense vegetation near the ground, and dense horizontally separated vegetation higher up in the canopy.
Loggerhead shrike	<i>Lanius ludovicianus</i>	FSC, CSC, MB	RES	Typically associated with open lowland and foothill scrub or riparian woodland habitats with adequate hunting perches.	Unlikely to occur within the project impact area due to lack of suitable habitat.	Largely nonmigratory and has been known to defend year-round territories. Nests are typically well-concealed and built in dense shrubs or trees. In California the breeding period typically begins in March and may extend into August.
Peregrine Falcon	<i>Falco peregrinus anatum</i>	SE, MB	WNTR	This species forages for birds including waterfowl and shorebirds, typically in coastal areas or other wetlands with large concentrations of prey. It nests on natural cliff faces or artificial structures, including bridges and large buildings.	Unlikely to occur within the project impact area due to lack of suitable foraging or nesting habitat.	This species may occasionally forage along the Los Angeles River.
Sharp-shinned hawk	<i>Accipiter striatus</i>	CSC, MB	WNTR	Prefers, but not restricted to, riparian habitats. North-facing slopes, with plucking perches are critical requirements. Often forages in openings at edges of woodlands, hedgerows, brushy pastures, and shorelines, especially where migrating birds are found. Uses dense stands in close proximity to open areas.	Unlikely to occur within the project impact area due to lack of suitable habitat.	Sharp-shinned hawks favor conifers for nesting and typically bring their prey near the nest to pluck.

TABLE 8.2-2
Special-Status Species Potentially Occurring in the Regional Vicinity of the VPP Project Area.

Common Name	Scientific Name ^a	Status ^b	Season ^c	Primary Habitat ^d	Potential Occurrence in Project Area	Comments
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE, CE, MB	SUMR	Restricted to riparian woodlands along streams and rivers with mature, dense stands of willows, cottonwoods or smaller spring fed or boggy areas with willows or alders.	Unlikely to occur within the project impact area due to lack of suitable habitat.	The southwestern willow flycatcher is an insectivore and forages within and above dense riparian vegetation.
Western burrowing owl	<i>Athene cunicularia hypugaea</i>	FSC, CSC, MB	RES	Habitats includes open grassland habitat with fossorial mammal burrows, often associated with ground squirrels.	Unlikely do to the highly developed nature of the project area.	Utilize small mammal burrows for cover and natal dens. Breeding season is typically from February through August.
Yellow warbler	<i>Dendroica petechia brewsteri</i>	CSC, MB	WNTR	Occurs in lowland and foothill woodland habitats such as desert oases, riparian woodlands, oak woodlands, mixed deciduous-coniferous woodlands, suburban and urban gardens and parks, groves of exotic trees, farmyard windbreaks, and orchards.	Unlikely to occur within the project impact area due to lack of suitable habitat.	The yellow warbler is an insect feeder but occasionally supplements the diet with berries.
Mammals						
Los Angeles pocket mouse	<i>Perognathus longimembris brevinasus</i>	CSC	RES	Habitat of the Los Angeles pocket mouse has never been specifically defined, although Grinnell (1933) indicated that the subspecies "inhabits open ground of fine sandy composition".	Unlikely due to the highly developed nature of the project area.	The geographic range of Los Angeles Pocket Mice is restricted to lower elevation grasslands and Coastal Sage associations in the Los Angeles Basin, from approximately Burbank and San Fernando on the northwest to San Bernardino on the northeast, and Cabazon, Hemet, and Aguanga on the east and southeast. Their geographic limits on the southwest are not clear, but probably lie somewhere near the Hollywood Hills.

TABLE 8.2-2

Special-Status Species Potentially Occurring in the Regional Vicinity of the VPP Project Area.

Common Name	Scientific Name ^a	Status ^b	Season ^c	Primary Habitat ^d	Potential Occurrence in Project Area	Comments
Pacific Pocketmouse	<i>Perognathus longimembris pacificus</i>	FE/ CSC	RES	This species seems to prefer fine alluvial sands near the ocean, but its habitat is not well known. The presence of feral cats would likely preclude the colonization by this species on the project site.	Historical CNDDDB records have been documented for the Wilmington area of Los Angeles in 1865. Generally considered extirpated from regional vicinity. Not likely to occur.	Pacific pocket mice are only found within 4 kilometers of the coast on fine-grained sandy substrates in coastal sage scrub, coastal strand, and river alluvium.

Notes:

^a Scientific names are based on the following sources: AOU (1983); Jennings (1983); Zeiner *et al.* (1990a-c).^b Status. Status of species relative to the Federal and California State Endangered Species Acts and Fish and Game Code:Federal Status

FE Federally listed as endangered.
 FT Federally listed as threatened.
 FPE Proposed endangered.
 FPT Proposed threatened.

Candidate for listing as federally endangered or threatened. Proposed rules have not yet been issued because they have been precluded at present by other listing activity.

FD Delisted from Federal threatened or endangered status.

FSC Federal Species of Concern. Proposed rules have not yet been issued because they have been precluded at present by other listing activity.

MB Migratory Bird Treaty Act. of 1918. Protects native birds, eggs, and their nests.

California Status

CE State listed as endangered. Species whose continued existence in California is jeopardized.

CT State listed as threatened. Species that although not presently threatened in California with extinction is likely to become endangered in the foreseeable future.

CSC California Department of Fish and Game "Species of Special Concern." Species with declining populations in California.

FP Fully protected against take pursuant to the Fish and Game Code Sections 3503.5, 3511, 4700, 5050, 5515.

Other Status.

CNPS California Native Plant Society Listing (does not apply to wildlife species).

Plants, rare, threatened or endangered in California and elsewhere and are rare throughout their range. According to CNPS, all of the plants constituting List 1B meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection) of the California Department of Fish and Game Code and are eligible for state listing.

^c Season. Blooming period for plants. Season of use for animals. RES = Resident; SPR = Spring; SUMR = Summer; WNTR = Winter.^d Primary Habitat. Most likely habitat association.

Source: California Dept. of Fish and Game, California Natural Diversity Database, September 2005; California Native Plant Society, Inventory of Rare and Endangered Vascular Plants of California, 2001.

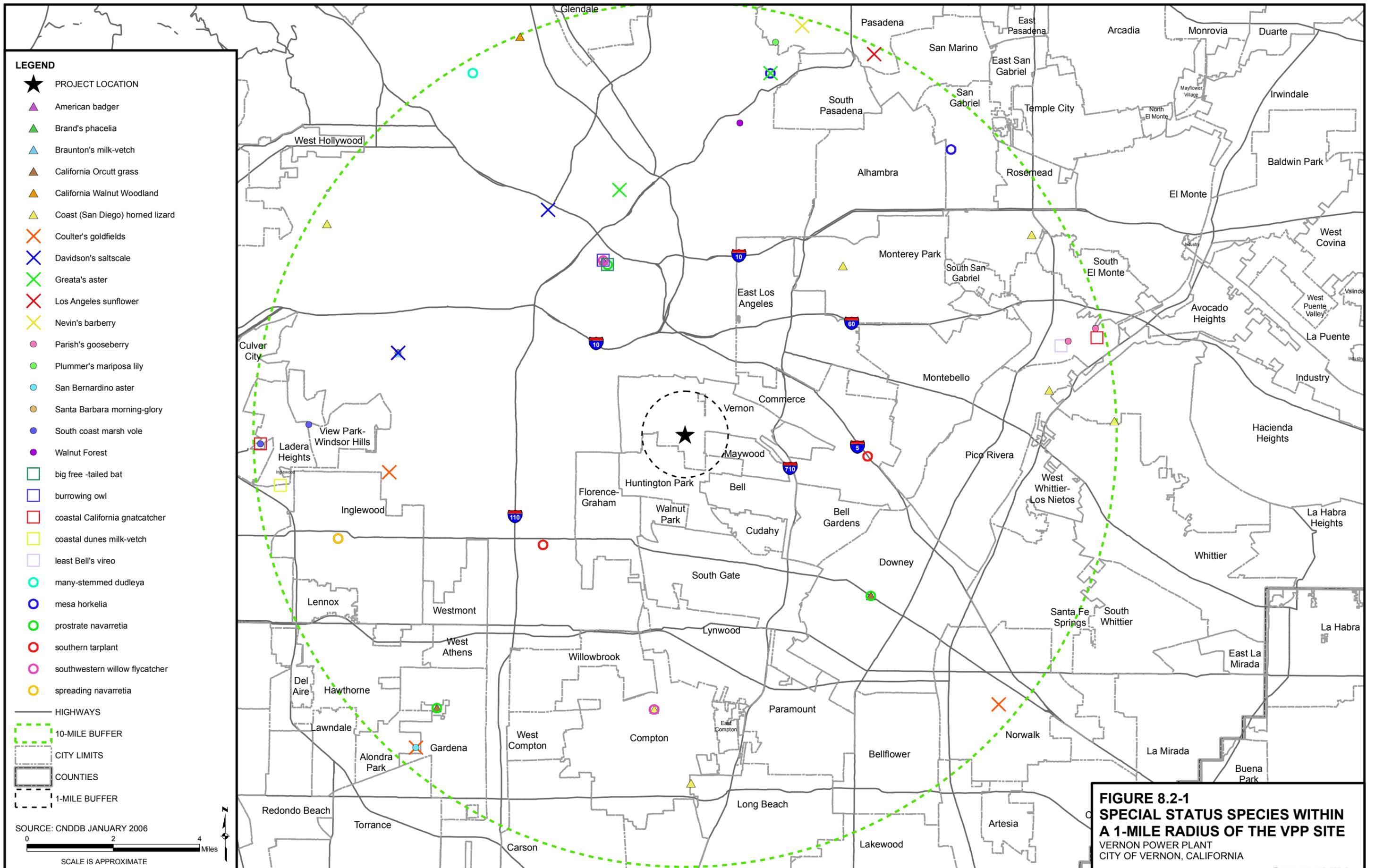


FIGURE 8.2-1
SPECIAL STATUS SPECIES WITHIN
A 1-MILE RADIUS OF THE VPP SITE
 VERNON POWER PLANT
 CITY OF VERNON, CALIFORNIA

