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5.6 BIOLOGICAL RESOURCES

As proposed by Watson Cogeneration Company (Applicant), the Watson Cogeneration Steam and Electric Reliability Project (Project) is situated on the site of the existing Watson Cogeneration Facility (Figure 3-1, Regional Map), which has been providing process steam and electric power to the adjacent BP Carson Refinery for over 20 years.

The Project Site is a 2.5-acre brown field site located within the boundary of the existing Watson Cogeneration Facility, which is a 21.7-acre area within the 428-acre parcel further described as Assessors Parcel Number (APN) 7315-006-003, 1801 Sepulveda Boulevard, Carson, California, 907445 and is integral to BP's existing Carson Refinery (BP Refinery). The street address of the Project Site is located within the boundary of the existing Watson Cogeneration Facility at 22850 South Wilmington Avenue, Carson, California. Figure 3-1, Regional Map, depicts the Project Site and surrounding area. An existing warehouse/maintenance shop on a portion of the site will be removed as part of the Project. The Project Site is located approximately 0.7 mile south of the 405 Freeway, roughly bounded by Wilmington Avenue to the west, East Sepulveda Boulevard to the south, and South Alameda Street to the east.

The Project Site elevation is approximately 32 feet above mean sea level. Because the site is located within the existing refinery property boundary, the Project Site and surrounding areas are highly developed, and have been subject to disturbance for many years.

The Project's primary objective is to provide additional process steam in response to the refinery's process steam demand. The Project complements the existing cogeneration facility located within the confines of the refinery. The existing facility has four GE 7EA combustion turbine generators (CTGs), four heat recovery steam generators (HRSGs), and two steam turbine generators. The Project consists of adding a fifth CTG/HRSG to the existing configuration and is referred to as the "fifth train."

The Construction Laydown and Parking Area is a paved 25-acre parcel located approximately 1 mile southeast of the Project Site, at the northeast corner of East Sepulveda Boulevard and South Alameda Street. The area is owned by BP and is currently used as a truck parking and staging area.

No off-site improvements associated with the Project, such as water supply, natural gas or wastewater pipelines, are currently planned for the Project. The Project will connect to the existing supply pipelines currently located at the facility.

The existing biological resources within the study area, within a 1-mile radius, and within a 5-mile radius around the Project Site are the subject of this section. In addition, the potential effects to biological resources as a result of the Project are assessed. Refer to Figure 5.6-1, California Natural Diversity Database (CNDDB) Sensitive Species and Vicinity Map, for the location of the Project Site and vicinity.

5.6.1 Affected Environment

Together, the Project Site and the surrounding refinery constitute an industrial facility devoid of native vegetation. The refinery area is open and dry and completely hardscaped. Vegetation present on-site consists of scattered landscape plants and ruderal invasive species. The Project disturbance will be localized and contained mainly to the areas designated for the additional train

and the two additional cooling tower cells. No off-site linears will be constructed. The Project Construction Laydown and Parking Area will be used only for storage and equipment parking, with no ground disturbance.

5.6.1.1 Survey Methods

Biological field surveys were conducted by URS biologist Wayne Vogler on 4 June 2008, according to the California Energy Commission (CEC) regulations (CEC 2000). Appendix N, Biology Resources, provides a copy of the biologist's resume. The Project Site is defined as the area that could be directly disturbed during Project construction, and includes the power facility site, and Construction Laydown and Parking Area. The Project survey area includes the Project Site and a 1-mile radius buffer surrounding the cogeneration facility where field surveys were conducted for botanical and wildlife resources.

Before conducting field surveys, a review of literature was performed including a search of the California Native Plant Society (CNPS) Inventory of Rare Plants Database (CNPS 2008), and the CNDDB, to determine special-status species known to occur or that could occur within the Project survey area. The following United States Geological Survey 7.5-minute quadrangles were searched for records of special-status species: Long Beach, Torrance, San Pedro, Seal Beach, Los Alamitos, Inglewood, South Gate, and Whittier. The Project survey area is within the Long Beach quadrangle, and all of the surrounding quadrangles were searched (see Figure 5.6-1, CNDDB Sensitive Species and Vicinity Map).

The reconnaissance field survey included walking transects through the facility site and Construction Laydown and Parking Area, and visually scanning areas within the 1-mile buffer (see Figure 5.6-1, CNDDB Sensitive Species and Vicinity Map). All native botanical and wildlife species observed were documented, and all plant communities and habitat that could support potentially occurring special-status species listed in Table 5.6-1, Special-Status Species with Low Potential to Occur in the Project Area, were described. All plant and wildlife species observed during the survey within the Project and buffer areas are listed in Table 5.6-2, Plant Species and Wildlife Observed During Field Survey. Plant nomenclature follows Hickman (1993).

Table 5.6-1
Special-Status Species with Low Potential to Occur in the Project Area

Common Name	Scientific Name	Status[1] Federal/State/Other	Occurrence within 5 miles	Preferred Habitat	Likelihood of Occurrence in Project Area
PLANTS					
Parish's brittlescale	*Atiplex parishii*	1B.1	Date last seen unknown, over 4 miles east of Project Site, approximately 1 mile east of 710 freeway in Bixby.	Found in alkali meadows, vernal pools, chenopod scrub, playas usually with fine soils from 3 to 420 feet in elevation.	Potential is low to none for this species to occur within the Project Area.
Southern tarplant	*Centromadia parryi* ssp. *Australis*	1B.1	Last seen in 2001 at Harbor Lake Regional Park and Naval Defense Fuel Support Point, 4.5 miles southwest of the Project Site.	Found in marshes and swamp margins, valley and foothill grasslands from 0 to 1,281 feet in elevation.	Potential is low to none for this species to occur within the Project Area.
South coast saltscale	*Atriplex pacifica*	1B.2	Last seen in 1992 Palos Verdes Peninsula approximately 5 miles southwest of the Project Site.	Found in coastal scrub, coastal bluff, playas, and chenopod scrub with alkaline soils on the mainland and also the Channel Islands from 1 to 1,500 feet in elevation.	Potential is low to none for this species to occur within the Project Area.
Saltmarsh bird's beak	*Cordylanthus martimus* ssp. *maritimus*	FE/SE/1B.2	Last seen in 1980 on Terminal Island, San Pedro Harbor 3.5 miles south of the Project Site.	Found in coastal marshes and coastal dunes from 0 to 900 feet in elevation.	Potential is low to none for this species to occur within the Project Area.
Prostrate vernal pool navarretia	*Navarretia prostrata*	1B.1	Last seen in 1882 approximately 0.75 mile southeast of the Project Site in an unknown location.	Found in coastal scrub, valley and foothill grasslands, and vernal pools generally with mesic, alkaline soils from 45 to 2,100 feet in elevation.	Potential is low to none for this species to occur within the Project Area.
Coast woolly-heads	*Nemacaulis denudata* var. *denudata*	1B.2	Last documented in the area in 1905 3 miles southwest of the Project Site.	Found in coastal dunes from 0 to 300 feet in elevation.	Potential is low to none for this species to occur within the Project Area.
Lyon's pentachaeta	*Pentachaeta lyonii*	FE/SE/1B.1	Last documented 1889 in the area of San Pedro 5 miles from the Project Site.	Found in chaparral and valley/foothill grasslands typically along ecotones or edges between the two habitat types from 90 to 1,890 feet in elevation.	Potential is low to none for this species to occur within the Project Area.

Table 5.6-1
Special-Status Species with Low Potential to Occur in the Project Area

Common Name	Scientific Name	Status[1] Federal/State/Other	Occurrence within 5 miles	Preferred Habitat	Likelihood of Occurrence in Project Area
Estuary seablite	*Suaeda esteroa*	1B.2	Last documented in 1904 in the San Pedro area 5 miles from the Project Site.	Found in marshes and swamps, generally coastal salt marshes in clay, silt, and sand substrates from 0 to 15 feet in elevation.	Potential is low to none for this species to occur within the Project Area.
WILDLIFE					
Birds					
California least tern	*Sternula antillarum browni*	FE/SE	Nesting site last documented on Terminal Island landfill in 1996 approximately 5 miles from the Project Site.	Nest sites found on bare or sparsely vegetated, flat substrates, sand beaches, alkali flats, landfills, or paved areas.	Potential is low to none potential for this species to occur within the Project Area.
Coastal California gnatcatcher	*Polioptila california californica*	FT/SC	Multiple documented sightings in 2006 outside the 5 mile range and one occurrence in 2005 approximately 5 miles southwest of the Project Site.	Found in coastal sage scrub below 2,500 feet in elevation in Southern California. It inhabits low, coastal sage scrub in arid washes, on mesas and slopes.	Potential is low to none for this species to occur within the Project Area.
California brown pelican	*Pelecanus occidentalis californicus*	FE/SE	Colony documented in 2000 on the eastern and middle Long Beach Harbor breakwaters over 5 miles from the Project Site.	Nests found on small to moderately sized islands that afford protection from attack by ground predators.	Potential is low to none for this species to occur within the Project Area.
Tricolored blackbird	*Agelaius tricolor*	SC	Last documented in 1980s 4 miles southwest of the Project Site.	Breeds near open water with protected nesting substrate, and foraging area with insect prey nearby the colony. Foraging habitats in all seasons include pastures, dry seasonal pools, and agricultural fields.	Potential is low to none for this species to occur within the Project Area.

Table 5.6-1
Special-Status Species with Low Potential to Occur in the Project Area

Common Name	Scientific Name	Status[1] Federal/State/Other	Occurrence within 5 miles	Preferred Habitat	Likelihood of Occurrence in Project Area
Western snowy plover	*Charadrius alexandrinus nivosus*	FT/SC	Last documented in 1971 in Sunset Park, Huntington Beach, over 7 miles away.	Occurs and breeds on sandy beaches, saltpond levees, and shores of large alkali lakes. It requires sandy, gravelly, or friable soils for nesting on the mainland coast, peninsulas, offshore islands, adjacent bays, estuaries, and coastal rivers.	Potential is low to none for this species to occur within the Project Area.
Burrowing owl	*Athene cunicularia*	SC	Observed in refinery's 503 Reservoir approx ¼ mile southwest of the Project Site. One burrowing owl found injured at the Cogen facility in 2006 (Sauer pers. comm., 2008).	Occurs in open, dry grassland and desert habitats.	May pass through Project Area. No suitable nesting or denning sites observed. Not likely to use Project Area for nesting (protected activity).
Reptiles					
Coast (San Diego) horned lizard	*Phrynosoma coronatum (blainvilli population)*	SC	Last documented in 1957 3 miles north of Long Beach State University, 3 miles southeast of the Project Site.	Found in coastal sage scrub and chaparral in arid and semiarid climate conditions. It prefers friable, rocky, or shallow sandy soils.	Potential is low to none for this species to occur within the Project Area.
Mammals					
Pacific pocket mouse	*Perognathus longimembris pacificus*	FE/SC	Last documented in 1931 in Clifton, east of Redondo State Beach, over 7 miles away from the Project Site.	Historically found along the narrow coastal plains with fine-grained, sandy substrates in open coastal sage scrub, coastal strand, coastal dune, and river alluvium.	Potential is low to none for this species to occur within the Project Area.
Pocketed free-tailed bat	*Nyctinomops femorosaccus*	SC	Last seen near Harbor City in 1985, 4 miles west of the Project Site.	Found in arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian habitats typically with rocky areas and high cliffs. Occasionally human-made structures.	Potential is low for this species to occur within the Project Area.

Table 5.6-1
Special-Status Species with Low Potential to Occur in the Project Area

Common Name	Scientific Name	Status[1] Federal/State/Other	Occurrence within 5 miles	Preferred Habitat	Likelihood of Occurrence in Project Area
Silver-haired bat	*Lasionycteris noctivagans*	IUCN:LC WBWG:M	Last documented in 1986 west of the intersection of 20th Street and Maine Avenue, Long Beach.	Found along coastal and montane forests and feeds over streams, ponds, and open brushy areas. It roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. It requires drinking water in close vicinity. Hibernates in hollow trees, under sloughing bark, in rock crevices, and occasionally under wood piles, in leaf litter, under foundations, and in buildings, mines, and caves.	Potential is low for this species to occur within the Project Area.
Invertebrates					
Western beach tiger beetle	*Cicindela latesignata latesignata*	No listing	Last documented in an unknown year along the Long Beach shoreline approximately 2 miles from the Project Site.	Found along mudflats and beaches in coastal Southern California.	Potential is low to none for this species to occur within the Project Area.
Western tidal-flat tiger beetle	*Cicindela gabbii*	No listing	Last documented in 1998 in the Seal Beach area over 5 miles from the Project Site.	Inhabits estuaries and mudflats along the coast of Southern California in the dark-colored mud zone and occasionally dry saline flats of estuaries.	Potential is low to none for this species to occur within the Project Area.

Table 5.6-1
Special-Status Species with Low Potential to Occur in the Project Area

Common Name	Scientific Name	Status[1] Federal/State/Other	Occurrence within 5 miles	Preferred Habitat	Likelihood of Occurrence in Project Area
Sandy beach tiger beetle	*Cicindela hirticollis gravida*	No listing	Last documented in 1979 at Terminal Island over 4.5 miles from the Project Site.	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico in clean, dry, light-colored sand in the upper zone. Subterranean larvae prefer moist sand not affected by wave action.	Potential is low to none for this species to occur within the Project Area.

Notes:
Based on lists generated by the USFWS, CNDDB, CNPS Database, and species known to occur in Los Angeles and Orange County, 2008.
U.S. Fish and Wildlife Service (Federal)
BLM = Bureau of Land Management Sensitive Species
FE = Endangered (In danger of becoming extinct throughout all or a significant portion of its range.)
FC = Federal Candidate (Candidate for FT or FE listing.)
FSC = Species of Concern (Sufficient information exists that warrants concern over that species' status and warrants study.)
FT = Threatened (Likely to become endangered in the foreseeable future in the absence of special protection.)
California Department of Fish and Game (State)
CSC = Species of Concern (Information exists that warrants concern over that species' status and warrants study.)
SE = Endangered (In danger of becoming extant throughout all or a significant portion of its range.)
SC = State Candidate (Candidate for SE or State Threatened [likely to become endangered in the foreseeable future in the absence of special protection.])
California Native Plant Society (CNPS)
CNPS 1B = plants that are rare, threatened, or endangered in California and elsewhere
The World Conservation (IUCN)
LC = Least Concern; widespread and abundant but lacking information on breeding populations
Western Bat Working Group (WBWG)
M = Medium Priority; needing more work to determine the distribution of breeding populations

Table 5.6-2
Plant Species and Wildlife Observed
During Field Survey

Common Name	Scientific Name
Birds	
Rock dove	*Cloumba livia*
Plants	
Tumbleweed	*Amaranthus albus**
Mule fat	*Baccharis salicifolia*
Fan palm	*Washingtonia filifera*

Source: England, Cletis B. and Vogler, Wayne, June 4, 2008.
Note:
*Non-native species.

5.6.1.2 Plant Communities

No natural or viable habitat occurs within the Project Site. The Project survey area is industrial and highly disturbed in nature. The Project Site and surrounding refinery are hardscaped with roadbase, rock, asphalt, or concrete with no natural habitat. Plant species that were observed included ruderal vegetation with very few native species.

The adjacent stormwater retention basins are maintained and devoid of any habitat or plant species. The small basin southwest of the main basin was observed to contain approximately 6 inches of clear water, at the time of the field survey.

The Construction Laydown and Parking Area was observed to have only scattered ruderal species present along the asphalt berm. The remaining parking area is completely devoid of vegetation. Mulefat (*Bacharis salicifolia*), tumbleweeds (*Amaranthus albus*), and ornamental grasses were observed along the berm.

Mulefat, tumbleweeds, and ornamental grasses were also observed along the dirt access road, which follows the Dominguez Channel east of the Construction Laydown and Parking Area. Fan palms (*Washingtonia filifera*) were also observed along the road.

No plant communities or species were associated with the Dominguez Channel. No native/ natural bank habitat is present. The bank of the channel is armored with large granite boulders.

It is unlikely the Project will cause a disturbance to any natural habitat or plant communities in addition to the current conditions. The addition of the Project will incrementally increase any effects related to the existing facility.

5.6.1.3 Waters

No jurisdictional waters are present within the Project Site. Adjacent to the Project Site, the Dominguez Channel flows in a southeasterly direction east of the Project Site and adjacent to the parking area. A formal determination of the Dominguez Channel with the federal and state agencies was not conducted; however, the Dominguez Channel is considered jurisdictional water. No effects or disturbances to the channel are anticipated either during construction or

operation of the facility. Discharges to the channel are not planned either during construction or operation of the Project.

5.6.1.4 Wetlands

No jurisdictional wetlands occur within the Project Site. No wetland habitats were observed adjacent or near the Project Site.

5.6.1.5 Wildlife Community

The Project Site and surrounding refinery provide no habitat for wildlife species due to the existing site activities. It is unlikely that vertebrate species utilize the Project Site or surrounding refinery due to the lack of vegetative cover and continual elevated levels of disturbance. The noise, lights, and human activity resulting from typical refinery operations create an environment unsuitable for species to forage or breed. A common pigeon or rock dove (*Columba livia*) walking along the ground, was the only vertebrate observed during the field survey. Species such as house finch (*Carpodacus mexicanus*), European starling (*Sturnus vulgaris*), American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), and black phoebe (*Sayornis nigricans*) are typically found in disturbed/developed areas and may have some low potential to occur in the Project Site. No evidence of avian breeding activity was found in the Project survey area and no sign of other wildlife such as reptiles or mammals was observed.

The construction or operation of the Project would not significantly increase effects to the surrounding environment beyond those currently associated with the facility's operation.

5.6.1.6 Special-Status Species

As previously stated, species of rare, threatened, or endangered status do not occur on or in the immediate Project vicinity, although special-status species are recorded within 1 and 5 miles of the Project Site. Operation of the Project would not cause significant effects to biologic resources or special-status species. Potential effects would be an insignificant change from any existing effects.

Plants

No special-status plant species were observed during the field survey and no record exists of any special-status species within the Project survey area; however, the CNDDB lists records of special-status plants within 1 and 5 miles of the Project Site. The CNDDB lists eight special-status plant species (Table 5.6-1, Special-Status Species with Low Potential to Occur in the Project Area). No native plant species were observed within the Project Site. Although these observations are limited due to conducting the survey in late summer outside of the blooming period for many annual plant species, no special-status annual plant species are known or have the potential to occur in the Project study area due to a high amount of soil disturbance, hardscaping, and maintenance activity associated with the Watson facility and the surrounding refinery.

Wildlife

No special-status wildlife species were observed during the field survey and the CNDDB has none recorded within the Project survey area; however, records exist of special-status wildlife species within 1 and 5 miles of the Project Site. The CNDDB lists nine sensitive wildlife species as

historically present and potentially occurring in the Project vicinity (Table 5.6-1, Special-Status Species with Low Potential to Occur in the Project Area). All but two of these species have little to no potential to occur in the Project Site. Two species have a low potential to occur in the Project survey area. These sensitive species are the pocketed free-tailed bat (*Nyctinomops femorosaccus)* and the silver-haired bat *(Lasionycteris noctivagans)*. All nine special-status species that have any potential to occur in the Project survey area are further discussed in the following subsections.

Many sensitive plant and animal species documented in the Long Beach area occupy the same habitats: southern coastal bluff scrub, southern coastal salt marsh, southern dune scrub, southern foredunes, chenopod scrub, grassland, and alkali playa. These habitats represent a fragmented and highly impacted area of endemism in California. Farming, urbanization, land reclamation, pest control, industrial development, and other human disturbance have eliminated much of the habitat that once dominated the region, and many of the plants and animals that once ranged widely throughout the area have been decimated, and many now only occur in a few scattered populations in the remaining natural areas.

Parish's Brittlescale

Parish's brittlescale (*Atiplex parishii*) is listed as a List 1B species, plants that are rare, threatened, or endangered in California and elsewhere, by the CNPS. This species is known to occur in alkali meadows, vernal pools, chenopod scrub, and playas usually with fine soils from 3 to 420 feet in elevation. This species blooms June through October.

Parish's brittlescale is threatened by development, agricultural conversion, and grazing.

This species was last seen on an unknown date well away from the Project survey area, over 4 miles east of the Project Site and approximately 1 mile east of the 710 Freeway in the City of Long Beach. Because the Project Site is hardscaped, low to no potential exists for this species to occur.

Southern Tarplant

Southern tarplant *(Centromadia parryi* ssp. *australis)* is listed as a CNPS List 1B species. This species is known to occur in marshes, swamp margins, and valley and foothill grasslands from 0 to 1,281 feet in elevation. This species blooms May through November.

Population fragmentation presents a serious problem for species continuation. Populations continue to be threatened by urbanization, vehicles, development, foot traffic, grazing, habitat disturbance, and competition from non-native plants.

This species was last documented in 2001 at Harbor Lake Regional Park and Naval Defense Fuel Support Point, 4.5 miles southwest of the Project Area. Because the Project Site is hardscaped, low to no potential exists for this species to occur.

South Coast Saltscale

South coast saltscale *(Atriplex pacifica)* is listed as a CNPS List 1B species. This species is known to occur in coastal scrub, coastal bluff, playas, and chenopod scrub with alkaline soils on the mainland and also the Channel Islands from 1 to 1,500 feet in elevation. The species blooms March through October.

Populations of this species have been greatly reduced by urbanization on the mainland.

This species was last documented in 1992 on the Palos Verdes Peninsula approximately 5 miles southwest of the Project Site. Because the Project Site is hardscaped, low to no potential exists for this species to occur.

Salt Marsh Bird's-Beak

Salt marsh bird's-beak (*Cordylanthus martimus* ssp. *maritimus*) is listed as federal and state endangered and as a CNPS List 1B species. This species is known to occur in coastal marshes and coastal dunes from 0 to 900 feet in elevation. This species blooms from May through October.

This species is threatened by vehicles, road construction, foot traffic, non-native plants, and loss of salt marsh habitat.

The species was last documented in 1980 on Terminal Island, San Pedro Harbor 3.5 miles south of the Project Site. Because the Project Site is hardscaped, low to no potential exists for this species to occur.

Prostrate Vernal Pool Navarretia

Prostrate vernal pool navarretia *(Navarretia prostrata*) is listed as a CNPS List 1B species. This species is known to occur in coastal scrub, valley and foothill grasslands, and vernal pools generally with mesic, alkaline soils from 45 to 2,100 feet in elevation. This species blooms from April through July.

This species is threatened by loss of vernal pool habitat from urban development.

Prostrate vernal pool navarretia was last documented in 1882 approximately 0.75 mile southeast of the Project Site in an unknown location. Because the Project Site is hardscaped, low to no potential exists for this species to occur.

Coast Woolly-Heads

Coast woolly-heads *(Nemacaulis denudata* var. *denudate)* is listed as a CNPS list 1B species. This species is known to occur in coastal dunes from 0 to 300 feet in elevation. This species blooms from April through September.

Populations of this species have been greatly reduced by coastal development.

Coast woolly-heads was last documented in the area in 1905, 3 miles southwest of the Project Site. Because the Project Site is hardscaped, low to no potential exists for this species to occur.

Lyon's Pentachaeta

Lyon's pentachaeta *(Pentachaeta lyonii)* is listed as federal and state endangered and as a CNPS List 1B species. This species occurs in chaparral and valley/foothill grasslands typically along ecotones or edges between the two habitat types from 90 to 1,890 feet in elevation. The species blooms from March through August.

Populations of this species are known from fewer than 20 extant occurrences in the Santa Monica Mountains. It is threatened by development, alteration of fire regimes, trampling, vehicles, non-native plants, and recreational activities.

Lyon's pentachaeta was last documented in 1889 in the San Pedro area 5 miles from the Project Site. Because the Project Site is almost completely hardscaped, low to no potential exists for this species to occur.

Estuary Seablite

Estuary seablite *(Suaeda esteroa)* is listed as a CNPS List 1B species. This species occurs in marshes and swamps, generally coastal salt marshes in clay, silt, and sand substrates from 0 to 15 feet in elevation. The species blooms from May through October.

Populations of this species are potentially threatened by development and recreational activities.

Estuary seablite was last documented in 1904 in the San Pedro area 5 miles from the Project Site. Because the Project Site is hardscaped and suitable habitat for this species is absent, low to no potential exists for this species to occur.

California Least Tern

California least tern *(Sternula antillarum browni)* is a federal and state endangered species. California least tern is one of three subspecies of least terns that breed in North America. California least tern typically nests in colonies on bare or sparsely vegetated, flat substrates, sand beaches, alkali flats, landfills, or paved areas. It nests from April through August along the western coast of North America from the San Francisco Bay area, California, to Baja California Sur, Mexico.

The subspecies was listed as endangered under the federal Endangered Species Act on October 13, 1970, and by the California Endangered Species Act on June 27, 1971. The progressive loss during the early part of this century of undisturbed sandy beaches resulted in a severe reduction in population. By the 1940s, terns were gone from most Orange and Los Angeles counties beaches and were considered sparse elsewhere. The proximity of nesting sites to human-modified habitats has resulted in increased threats of predation. For example, feral cats and dogs, free-roaming house cats, introduced red foxes, and animals whose populations benefit from human presence (e.g., American crow) have exerted strong predation pressures at many nesting sites (http://www.dfg.ca.gov/habcon/info/bm_research/bm_pdfrpts/2000_01.pdf).

A nesting site was last documented on Terminal Island landfill in 1996 approximately 5 miles from the Project Site. Because the Project Site is highly disturbed, developed, and continually active, little to no potential exists of California least terns occurring or breeding in the Project Site.

Coastal California Gnatcatcher

Coastal California gnatcatcher *(Polioptila california californica)* is a federal threatened species and is listed as a state species of concern. Coastal California gnatcatcher is an obligate, permanent resident of coastal sage scrub below 2,500 feet in elevation in Southern California. It inhabits low, coastal sage scrub in arid washes, on mesas and slopes. The gnatcatcher preys on arthropods, including insects such as leafhoppers and spiders. The United States population of the coastal California gnatcatcher is restricted to coastal Southern California from Ventura and San Bernardino counties, California, south to the Mexican border below 3,000 feet in elevation.

Coastal California gnatcatcher was considered locally common in the mid-1940s, but by the 1960s this species had apparently experienced a significant population decline in the United

States that has been attributed to widespread destruction of its habitat mainly by urbanization and agricultural development. The species was listed by the United States Fish and Wildlife Service (USFWS) in 1993 (http://www.fws.gov/carlsbad/Rules/GnatCatcher_Documents/PDF/cagn%20pch%20and%20pdps.pdf) (USFWS 2008).

Multiple sightings in 2006 are documented outside the 5-mile range and one occurrence in 2005 approximately 5 miles southwest of the Project Site. Due to the noise, lack of habitat, and continual disturbance at the Project Site, little to no potential exists of coastal California gnatcatchers occurring on the Project Site.

California Brown Pelican

California brown pelican *(Pelecanus occidentalis californicus)* is listed as a federal and state endangered species. California brown pelicans are colony nesters on coastal islands just outside the surf line. The colonies occur on small to moderately sized islands that afford protection from attack by ground predators. Nonbreeding California brown pelicans range from the Gulf of California to southern British Columbia. They nest on islands in the Gulf of California and along the coast to West Anacapa and Santa Barbara islands. California brown pelicans make spectacular headfirst dives into the water to catch fish. They have long bills with big pouches for catching and holding the fish. They feed on sardines, mackerels, and anchovies.

California brown pelican was first listed in 1970 on the United States List of Endangered Native Fish and Wildlife, before the Endangered Species Act of 1973. The biggest threat to California brown pelicans was the pesticide dichlorodiphenyltrichloroethane (DDT). California brown pelicans were listed as endangered in 1970. DDT was banned in 1972. On February 20, 2008, due to the recovery of the species the USFWS proposed the species for delisting (http://www.fws.gov/sacramento/es/animal_spp_acct/ca_brown_pelican.pdf). The state listing remains without change.

A colony was documented in 2000 on the eastern and middle Long Beach Harbor breakwaters over 5 miles from the Project Site. Due to the level of disturbance and the distance from known breeding habitat, only a low potential exists of the California brown pelican occurring in the Project Site.

Tricolored Blackbird

Tricolored blackbird (*Agelaius tricolor)* is a state species of concern. Tricolored blackbird is a colony nester that is most numerous in the Central Valley and the surrounding vicinity. It is largely endemic to California and requires open water, protected nesting substrate, and foraging area with insect prey nearby the colony. Tricolored blackbird foraging habitats in all seasons include pastures, dry seasonal pools, agricultural fields (such as large tracts of alfalfa with continuous mowing schedules), rice fields, feedlots, and dairies. Tricolored blackbirds also forage occasionally in riparian scrub, saltbush (*Atriplex* spp.) scrub, marsh borders, and grassland habitats. Weed-free row crops and intensively managed orchards and vineyards do not serve as regular foraging sites. During nesting, tricolored blackbirds forage away from their nest sites, often well out of sight of the colony.

The elimination of the vast wetland complexes of the Central Valley of California and in other areas greatly reduced the habitat available to tricolored blackbirds. Predation, weather, brood parasitism, and starvation are all effects to the species (http://www.dfg.ca.gov/habcon/info/bm_research/bm_pdfrpts/97_07.pdf).

Tricolored blackbirds were last documented in the 1980s 4 miles southwest of the Project Site. Due to the noise, lack of habitat, and continual disturbance at the Project Site, little to no potential exists of tricolored blackbirds occurring on the Project Site.

Western Snowy Plover

Western snowy plover *(Charadrius alexandrinus nivosus)* is listed as a federal threatened species and a state species of concern. Western snowy plover occurs and breeds on sandy beaches, salt pond levees, and shores of large alkali lakes. It requires sandy, gravelly, or friable soils for nesting. The Pacific coast population of the snowy plover is defined as those individuals that nest adjacent to tidal waters of the Pacific Ocean, and includes all nesting birds on the mainland coast, peninsulas, offshore islands, adjacent bays, estuaries, and coastal rivers. The current known breeding range of this population extends from Damon Point, Washington, to Bahia Magdelena, Baja California, Mexico. Pacific coast plovers typically forage for small invertebrates in wet or dry beach-sand, among tide-cast kelp, and within low foredune vegetation. Some plovers use dry salt ponds and river gravel bars. The breeding season in the United States extends from March 1 through September 30, although courtship activities have been observed during February.

The greatest threats to breeding populations of western snowy plovers are human activities, such as walking, jogging, running pets, horseback riding, and vehicle use. The nesting season of the western snowy plover (March through September) coincides with the period of greatest human use (Memorial Day through Labor Day) on beaches of the west coast. Intensive beach use by humans may result in abandonment of nest sites, reductions in nest density, and reductions in nesting success (http://www.fws.gov/arcata/es/birds/WSP/plover.html).

Western snowy plovers were last documented in 1971 in Sunset Park, Huntington Beach, over 7 miles away. Due to the noise, lack of habitat, and continual disturbance at the Project Site, little to no potential exists of snowy plovers occurring on the Project Site.

Burrowing Owl

Burrowing owl *(Athene cunicularia)* is a state species of concern. Burrowing owl is a year-round resident of open, dry grassland and desert habitats. They are also found as residents in grass, forb, and open shrub stages of pinyon-juniper and ponderosa pine habitats. This small owl is found the length of California in appropriate habitats and has been found as high as 5,300 feet in Lassen County. They are not found in the humid northwestern coastal forests. Outside California, this bird is found in southwestern Canada, the western U.S., Florida, and northern Alaska (http://www.delta.dfg.ca.gov/gallery/ burowl.asp).

The decline of this species was recognized as early as the 1940s. The decline is attributable to the conversion of grasslands and pasturelands to agriculture and to the destruction of ground squirrel colonies by plowing and poisoning. The burrowing owl is unique because it lives in the abandoned burrows of ground squirrels. They modify the burrows to suit their needs by digging. It is one of the few diurnal owls and can be seen in the day perched on fenceposts or near the entrance to their burrow.

Burrowing owls occur in the refinery property surrounding the Project facility. Approximately 0.25 mile southwest of the Project Site is the 503 Reservoir where burrowing owls have been observed to occupy burrows within dirt mounds in the bottom of the reservoir. In 2005, a

burrowing owl was observed occupying a stormwater drain in the refinery parking lot north of the Project facility. In 2006, a wounded burrowing owl was recovered by facility workers and relinquished to a BP Environmental Field Coordinator. The wounded burrowing owl was taken to a Long Beach rehabilitation center. The extent of the injuries or where the burrowing owl was recovered is not known. No burrowing owls have been seen in the Project vicinity since 2006. (Sauer, pers. comm. 2008). No suitable or occupied dens or burrows were observed during URS's survey activities.)

The CNDDB last documented record of the burrowing owl was in 1993 in the vicinity of Bolsa Chica Ecological Reserve, Huntington Beach, over 7 miles away.

Coast (San Diego) Horned Lizard

The coast horned lizard (*Phrynosoma coronatum [blainvilli* population]*)* is a state species of concern that inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions. It prefers friable, rocky, or shallow sandy soils. The San Diego coast horned lizard was historically distributed from the Transverse Ranges in Kern, Los Angeles, Santa Barbara, and Ventura counties southward throughout the Peninsular Ranges of Southern California to Baja California, Mexico, occurring as far south as San Vicente. The known elevational range of this subspecies is 30 feet at the El Segundo dunes to approximately 6,400 feet at Tahquitz Meadow on Mt. San Jacinto. In California, this subspecies ranges from the Transverse Ranges to the Mexican border west of the deserts, though it occurs at scattered sites along the extreme western desert slope of the Peninsular Ranges. It hibernates until late March and is active at the surface from April through July, after which most adults aestivate. Coast horned lizards then reappear again briefly in August, disappearing into overwintering sites from late August through early October, depending on elevation. Coast horned lizards are oviparous and lay one clutch of 6 to 17 eggs each year, from May through early July. Incubation requires approximately 2 months and hatchlings first appear in late July and early August. Coast horned lizards have an insectivorous diet that consists mostly of native harvester ants *(Pogonomyrmex* spp) and do not appear to eat exotic Argentine ants (*Iridomyrmex humilis*), which have been introduced to the western United States and have replaced native ants over much of central and Southern California.

This subspecies is unable to survive in habitats altered through urbanization, agriculture, off-road vehicle use, or flood control structures. The specialized diet and habitat requirements, a high degree of site fidelity, and a defensive behavior based on crypsis, make the coast horned lizard vulnerable. This subspecies was heavily exploited for the curio trade at the turn of the century, and later by biological supply companies and the pet trade before commercial collecting was banned in 1981. These factors, coupled with extensive habitat loss from agriculture and urbanization, have been the main reasons cited for the decline of this subspecies. A combination of other factors that include fires, off-road vehicles, livestock grazing, pets (especially domestic cats), and various types of development affect them further. Perhaps the most insidious threat to the coast horned lizard is the progressive elimination of its food base by exotic ants that have invaded upland habitats.

The coast horned lizard was last documented in 1957 at a location about 3 miles north of Long Beach State University and 3 miles southeast of the Project Site. Due to the limited habitat and foraging requirements of the species, the site conditions, noise, and level of human activity, little to no potential exists for the coast horned lizard to occur at the Project Site.

Pacific Pocket Mouse

The Pacific pocket mouse *(Perognathus longimembris pacificus)* is a federal endangered species and a state species of concern that inhabits narrow coastal plains. The Pacific pocket mouse historically occurred on fine-grain, sandy substrates in open coastal sage scrub, coastal strand, coastal dune, and river alluvium habitats. The Pacific pocket mouse ranged from the immediate coast of Southern California (from Marina del Rey and El Segundo in Los Angeles County) south to the vicinity of the Mexican border in San Diego County. The subspecies has been recorded to occur up to approximately 2.5 miles inland. The Pacific pocket mouse was rediscovered in 1993 after a 20-year period during which it was not detected. The subspecies is currently known to occur at the Dana Point Headlands and the San Joaquin Hills (http://ecos.fws.gov/docs/recovery_plans/1998/980928c.pdf), Orange County, and two locations on the Camp Pendleton Marine Corps Base in San Diego County. The Pacific pocket mouse is estimated to occur in an area totaling less than 1,000 acres at each of the three known locations. The extant populations at the three known locales occur within open coastal sage scrub habitats. It forages almost exclusively at night and spends the day in a simple burrow. The species enters torpor during periods of low temperatures and/or low food availability and is not active aboveground during much of the winter. Pocket mice are among the smallest mammals known to hibernate. They hibernate in winter, typically from September to April. Pocket mice feed on seed caches stored in their burrows. They emerge from hibernation in spring (typically in March), which correlates with the availability of forb and grass seeds. Relatively little is known about the breeding biology of Pacific pocket mice. Pregnant and lactating females have been found from April through June with immature individuals noted from June through September.

The subspecies is imminently threatened by habitat destruction and fragmentation, depredation by domestic cats, and recreational activities. None of the nine historical locations where the subspecies occurred are permanently protected and all have been damaged or are threatened by habitat destruction or fragmentation, human-caused fire, or other disturbances. Populations at six of the historical localities have apparently been extirpated. No records of Pacific pocket mice exist from Los Angeles County since 1938 (Erickson 1993; Brylski 1993).

The subspecies was last documented in 1931 in Clifton, east of Redondo State Beach, over 7 miles away from the Project Site. Due to the noise, lack of habitat, the hardscape nature of the substrate, the continuous disturbance at the Project Site, and the distance to known historical and current breeding populations, little to no potential exists for Pacific pocket mice to occur on the Project Site.

Bats

The following list of special-status bats are known to occur in California.

- Pacific western big-eared bat (*Corynorhinus townsendii townsendii*), a federal and California species of concern.
- Yuma myotis bat (*Myotis yumanensis*), a federal and California species of concern.
- Long-legged myotis bat (*Myotis volans*), a federal species of concern and California proposed species.
- Fringed myotis (*Myotis thysanodes*), a federal species of concern and California proposed species.

- Long-eared myotis (*Myotis evotis*), a federal species of concern.
- Small-footed myotis (*Myotis ciliolabrum*), a federal species of concern.
- Hoary bat (*Lasiurus cinerus*), a federal species of concern.
- Pocketed free-tailed bat (*Nyctinomops femorosaccus*) a state species of concern.
- Pallid bat (*Antrozous pallidus*), a California species of concern.

These bat species are generally widespread throughout many regions of California. Bats are commonly found in association with open forests and woodlands, where often a water source is present over which they feed. Suitable roosting and nesting areas include caves, mines, tree snags, buildings, and other human-made structures. In California, these species generally mate during the late fall and give birth to their young between early May and the end of July (Jameson and Peeter 1988). Bat populations in the state are declining, and the loss of riparian foraging areas and roosting habitat presents the biggest threat to bat populations in the state.

No evidence of bat roosts within the existing warehouse building was observed. Based on the cleanliness and orderliness of the materials within the building, it is unlikely bats would be allowed to reside within the building. Some of these bat species may travel over the Project Site. No foraging areas, particularly those over wet areas, such as canals, vernal pools, and seasonal drainages, are found in the Project Site. The Project Site lacks natural bat roost habitat, such as shags, cliffs, or caves.

Tiger Beetles

Three species of tiger beetle are documented as occurring in the vicinity of the Project. These *Cicindela* beetles are extremely habitat specific and range in occurrence from the mud flats and lower zones of estuaries to the upper zones and dry sand above areas of wave action and influence. Although the CNDDB does not list these species as special status, they are known to occur historically in the regional vicinity of the Project Site. They currently do not have a special status.

These three species of tiger beetle occur outside of the Project Site. The nearest documented sighting of any of these species is the western beach tiger beetle (*Cicindela latesignata latesignata*) approximately 2 miles away at an unknown date.

The most recent sighting of the group is the western tidal-flat tiger beetle (*Cicindela gabbii*) in 1998 over 5 miles away from the Project Site. The sandy beach tiger beetle (*Cicindela hirticollis gravida*) was last documented on an unknown date 4.5 miles from the Project Site. Due to the specific type of habitat required by these species, low to no potential exists for these species to occur at the Project Site.

Aquatic Biota

The Dominguez Channel is within the Project vicinity and adjacent to the Project Site, it flows in a southeasterly direction east of the Project Site and adjacent to the parking area. The location of the Dominguez Channel is shown on Figure 5.6-1, CNDDB Sensitive Species and Vicinity Map. The channel is a flat-bottomed, manipulated canal that is armored with loose rock along the banks. The reach of the channel in the vicinity of the Project Site is tidal in nature and because of the inflow and outflow, the salinity in this reach fluctuates widely. The Dominguez Channel does support a variety of aquatic organisms.

Development of the Project Site will result in similar or reduced amounts of clean stormwater runoff relative to that of existing conditions. A maintenance building currently occupies much of the Project Site, but after construction of the Project, more surface area will be exposed for infiltration, and thus less runoff will occur.

A National Pollution Discharge Elimination System permit requires that a Stormwater Pollution Prevention Plan be prepared and implemented to control stormwater during construction. All stormwater discharges from construction activities are subject to Best Management Practices designed and implemented for construction activities.

As noted earlier, neither Project construction nor Project operation will significantly increase any effects to the Dominguez Channel beyond those currently associated with the operation of the BP Carson Refinery. No additional disturbance of the channel will occur and discharges to the channel are not planned either during construction or operation of the Project. Consequently, there is little to no potential for impacts to aquatic species in the Dominguez Channel to occur.

5.6.1.7 Special Environmental Areas in the Project Vicinity

As described above, the Dominguez Channel flows southeast in the vicinity of the Project Area. The location of the Dominguez Channel is shown on Figure 5.6-1, CNDDB Sensitive Species and Vicinity Map. The channel is a flat-bottomed, manipulated canal that is armored with loose rock along the banks. The reach of the channel in the vicinity of the Project Site is tidal in nature. Because of the inflow and outflow, the salinity in this reach fluctuates widely. Little or no vegetation occurs within the banks of the channel.

Neither Project construction nor Project operation will significantly increase any effects to the Dominguez Channel beyond those currently associated with the operation of the BP Carson Refinery. No additional disturbance of the channel will occur.

5.6.2 Environmental Consequences

This section discusses potential and expected direct and indirect effects to biological resources. Significant effects are those that would involve the loss of a sensitive plant or wildlife species or degradation of their habitat. The Project would have significant effects to vegetation and wildlife if it would cause the following to happen.

- Cause a fish or wildlife population to drop below self-sustaining levels (California Environmental Quality Act [CEQA] Guidelines, Section 15065[a]).
- Threaten to eliminate a plant or animal community (CEQA Guidelines, Section 15065[a]).
- Substantially affect, reduce the number of, or restrict the range of a unique, rare, or endangered species of animal or plant or the habitat of the species (CEQA Guidelines, Section 15065[a], Appendix G [c], Appendix I [II.4.b] and [II.5.b]).
- Substantially diminish or reduce habitat for fish, wildlife, or plants (CEQA Guidelines, Section 15065[a], Appendix G [t]).
- Interfere substantially with the movement of resident or migratory fish or wildlife species (CEQA Guidelines, Appendix G [d]).

- Change the diversity of species or number of any species of plants (including trees, shrubs, grass crops, and aquatic plants) or animals (birds, land animals, including reptiles, fish and shellfish, benthic organisms, or insects) (CEQA Guidelines, Appendix I [II.4.1] and [II.5.a]).
- Introduce new species of plants or animals into an area or act as a barrier to the normal replenishment of existing species (CEQA Guidelines, Appendix I [II.4.c] and [II.5.c]).
- Cause a deterioration of existing fish or wildlife habitat (CEQA Guidelines, Appendix I [II.5.d]).
- Conflict with any regional Habitat Conservation Plans.

The above criteria are used to evaluate the effects of the Project on plant communities and wildlife. The potential effects associated with the construction and operation of the Project are discussed below.

5.6.2.1 Summary of Effects

The Project will not result in significant effects to biological resources because it will not cause the following.

- Cause a fish or wildlife population to drop below self-sustaining levels.
- Threaten to eliminate a plant or animal community.
- Substantially affect, reduce the number of, or restrict the range of a unique, rare, or endangered species of animal or plant, or the habitat of the species.
- Substantially diminish or reduce habitat for fish, wildlife, or plants.
- Interfere substantially with the movement of resident or migratory fish or wildlife species.
- Change the diversity of species or number of any species of plants (including trees, shrubs, grass crops, and aquatic plants) or animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, or insects).
- Introduce new species of plants or animals into an area or act as a barrier to the normal replenishment of existing species.
- Cause the deterioration of existing fish or wildlife habitat.
- Conflict with any regional Habitat Conservation Plans.

The less-than-significant effects associated with Project construction and operation are discussed further below.

Site Preparation and Construction Effects

The Project includes the installation of one steam electrical turbine, two cooling tower cells, and applicable connections to the infrastructure of the existing Watson Cogeneration Facility. No off-site improvements are proposed. The Project Site is already graded to provide the proper drainage. All areas disturbed during construction will be graded to a smooth surface and paved. Construction of the Project will have no additional effects to native plant species because the Project Site has no native vegetation.

A shop and maintenance building is currently present on the Project Site. Bats may potentially utilize this structure and could be affected by the removal of the building.

No additional effects will occur to common native wildlife species at the Project Site because the site is completely disturbed, no additional area will be disturbed beyond the Project Site, and little sign of animal activity was detected at the Project Site during the field survey. Beyond the potential of Project construction to affect bat species, the potential effects of Project construction and operation are incremental and not significant due to the conditions at the Project Site.

An increase in air emissions (Section 5.2, Air Quality) and noise (Section 5.12, Noise) as a result of Project construction is not expected to cause significant effects to wildlife. The Project survey area provides very poor to no habitat for wildlife due to the high amount of activity and development. The wildlife observed at the Project Site were species that are often found in disturbed or developed areas, and these species are expected to adapt to the new noise levels and air emissions.

Operation and Maintenance Effects

The potential effects of Project operation and maintenance on biological resources include incremental increase in air emissions, noise, and collision hazards beyond existing conditions. These potential effects are discussed further below.

Air Emissions

The sources of emissions associated with Project operation include one turbine/HRSG stack that will generate criteria pollutants from the combustion of both natural gas and low sulfur refinery gas. Additionally, two cooling tower cells will be added to the existing seven cell cooling tower and will produce emissions of particulate matter. Effects to wildlife in the area as a result of these emissions are incremental and less than significant because the common wildlife that occurs in the vicinity of the Project Site is already adapted to these conditions. Modeled ground-level concentrations of criteria air pollutants, including particulate matter (PM_{10} and $PM_{2.5}$), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and carbon monoxide are well below the California and National Ambient Air Quality Standards as well as the South Coast Air Quality Management District significance levels. Additionally, these modeled concentrations are less than all known published threshold limits for sensitive plant species. Significance levels for air emissions, along with ambient air quality standards, are set to protect human health and ecosystems. Because native vegetation is minimal within a 1-mile radius of the Project Site, no significant additional effects to native vegetation are associated with Projects' emissions.

However, since plant species are particularly sensitive to the effects of nitrogen, sulfate, and particulate deposition, these were calculated based on the annual average concentrations of NO_2, SO_2, and PM, by assuming 100 percent conversion into the depositional species. This concentration was converted into a flux by multiplying the concentration by 0.02 meters/second (worst-case deposition velocity, as recommended by the California Air Resources Board). Using this technique, the maximum annual deposition of nitrogen species would be 0.542 kilograms per hectare per year (kg/ha/yr). The sulfate deposition would be 0.391 kg/ha/yr. The maximum annual concentration of PM from the turbine/HRSG and cooling tower (all nine cells) was used to calculate a maximum depositional rate of 1.22 kg/ha/yr. Thus, the deposition of nitrogen, sulfate, and PM species are well below any published thresholds.

Noise

The operation of the existing Watson Cogeneration Facility in the Project Area generates some noise. The Project would generate a slightly greater level of noise than currently exists. However, this increase in noise levels is projected to be relatively undetectable at the Project Site boundary. Also, no sensitive wildlife noise receptors are present. The potential noise effects of Project operation are considered less than significant because the area is already disturbed by intense industrial use.

Collision Hazards

The additional 100-foot-tall HRSG exhaust stack associated with the Project may present a collision hazard for birds. The Project will also involve the construction of two cooling tower cells. Birds that would most likely be affected by these structures include migrating waterfowl and other species and some migratory songbirds that tend to migrate at night. Fog or low cloud cover can further add to the problem. The addition of the HRSG exhaust stack and two cooling tower cells will not significantly increase the potential for bird collisions beyond that of the current trains and cooling tower cells at the existing cogeneration facility. The exhaust stack will not incorporate lights because under Federal Aviation Administration guidelines lighting of 100-foot stacks is not necessary for aviation safety. Because the area has low-quality habitat for birds, the collision hazards in the area of the Project Site are anticipated to be low and less than significant. The additional potential for collisions beyond the current potential is insignificant.

Stormwater

Stormwater from the Project Site will be routed to the existing oily water system at the BP Refinery.

Effects on Special-Status Species

No federal-listed threatened or endangered species is expected to occur at the Project Site or associated construction areas due to lack of suitable habitat, so no effects are anticipated as a result of the Project.

Two state species of concern, the pocketed free-tailed bat and the burrowing owl, may potentially use the maintenance building that currently exists where the Project will be constructed. However this species was not observed during survey of the Project Site. This species has a low potential to occur at the Project Site. The other state species of concern, the burrowing owl's nest sites, may occur within the Project Area. However, no known nests are within the Project Area and known or assumed burrows are 0.25 mile away. Burrowing owls are protected from direct harm under the Migratory Bird Treaty Act; the State's protection is not afforded to the burrowing owl individual, rather the nest and nesting activities of the burrowing owl. Measures typically employed to avoid effects to burrowing owls involve no work activities within 150 feet of an active burrow. All previously known burrowing owl burrows have been greater than 150 feet from the Project Areas. Therefore, it is not anticipated that the Project will have any effect to burrowing owls.

Effects to Wildlife Corridors

No substantial wildlife movement occurs through the Project Site, and the Project Site is not part of a significant wildlife corridor, so no significant effects to wildlife movement are expected as a result of the Project.

5.6.2.2 Construction Laydown and Parking Area

The Construction Laydown and Parking Area is an existing asphalt parking area with no vegetation present. Therefore, the Project is not expected to have any effects on vegetation.

5.6.2.3 Project Linears

No new linears are required for the Project.

5.6.3 Cumulative Effects

The purpose of the cumulative effects discussion for the Project are listed below.

- Identify past, present, and reasonably foreseeable actions within the Project vicinity that could affect the same resource(s) as the Project.
- Determine if the effects of the Project and the other actions would overlap in time or geographic extent.
- Determine if the effects of the Project would interact with, or intensify, the effects of the other actions.
- Determine if this Application for Certification overlaps another existing or planned Application for Certification.
- Identify any potentially significant cumulative effects.

The assessment of cumulative effects for this Project includes a review of other projects where an application has been filed with the City of Carson.

Projects that could potentially contribute to cumulative effects in conjunction with the Project are those within the same geographic area of influence. For this cumulative effects assessment, the area of influence is within a 1-mile radius of the Watson Cogeneration Facility. Also, projects with potential for regional significance are included in the analysis. Information was gathered on projects that (1) have submitted an application for required approvals and permits; (2) have been previously approved and may be implemented in the near future; and (3) are contemplated and reasonably anticipated, but have not been formally proposed. Information for the cumulative effects assessment was obtained primarily through personal communications. Information obtained from the Internet was also reviewed.

Several projects have been identified within the surrounding area of the Watson Cogeneration Facility (see Section 5.9.3 of the Land Use section of this AFC). Both the project site and the proposed projects are within heavily industrialized and developed areas of limited biological use. The proposed neighboring projects are primarily of a change or improvement to an existing development. Effects to the natural habitat surrounding the Project Site occurred in the previous century during the initial development of the surrounding areas. No cumulative impacts are

anticipated from the development of the cogeneration facility when evaluated with the development of the proposed neighboring projects.

5.6.4 Avoidance and Minimization Measures

Project construction has the potential for effects to bat species that may utilize the maintenance building currently located on the Project Site.

Immediately before disturbance of the Project Site, a qualified biologist will survey the Project Areas to ensure that no wildlife species are present in any of the disturbance areas.

No other biological effects are expected to occur as a result of the Project. Therefore, no other avoidance or minimization measures are required to protect this resource.

5.6.5 Mitigation Measures

No mitigation measures are proposed for biological resources because native vegetation is lacking at the Project Site and no special-status species are expected to occur in the Project Site.

5.6.6 Applicable Laws, Ordinances, Regulations, and Standards

The laws, ordinances, regulations, and standards (LORS) that are applicable or potentially applicable for biological resources associated with the Project are discussed below. Table 5.6-3, Summary of LORS – Biological Resources, lists all applicable LORS. Project construction and operation will adhere to the LORS pertinent to biological resources.

Table 5.6-3
Summary of LORS – Biological Resources

LORS	Applicability	Administering Agency	Conformance (AFC Section)
Federal			
Endangered Species Act of 1973; 16 USC 1531 *et seq.;* 50 CFR Parts 17 and 222	Protection and management of federal-listed threatened or endangered plants and animals and their designated critical habitats (terrestrial and avian species). Section 7 Endangered Species Act consultation with USFWS (or Section 10A)	USFWS	5.6.6.1
National Environmental Policy Act; 42 USC 4321 *et seq.*	Analysis of impacts of federal action	USFWS	5.6.6.1
Migratory Bird Treaty Act; 16 USC 703-711; 50 CFR Subchapter B.	Protection of migratory birds	USFWS	5.6.6.1
Fish and Wildlife Coordination Act; 16 USC 661-666	Conservation of fish and wildlife	USFWS	5.6.6.1
Clean Water Act of 1977; 33 USC 1251-1376; 30 CFR 330.5(a)(26)	Protection of wetlands and limiting of thermal discharges to the marine environment	USACE and the RWQCB	5.6.6.1

Table 5.6-3
Summary of LORS – Biological Resources

LORS	Applicability	Administering Agency	Conformance (AFC Section)
State			
California Endangered Species Act of 1984; California Fish and Game Code 2050-2098	Consultation requirement	CDFG	5.6.6.2
California Species Preservation Act of 1970; California Fish and Game Code 900-903	Protection and enhancement of the birds, mammals, fish, amphibians, and reptiles of California	CDFG	5.6.6.2
California Fish and Game Code 4700 and 5515	No taking of mammals listed as fully protected	CDFG	5.6.6.2
California Fish and Game Code 3503	No taking or possessing of the nests or eggs of birds	CDFG	5.6.6.1 5.6.6.2
CEQA; California Public Resources Code 21000 *et seq.*	Protection of environment	CEC	5.6.2.2 5.6.2.3 5.6.6.2
California PRC 25523(a); 20 CCR 1752, 1752.5, 2300-2309; Chapter 2, Subchapter 5, Article I, Appendix B, Part (I)	Protection of environmental quality	CEC	5.6.6.2
Local			
City of Carson 2004 General Plan, Conservation Element, and the Open Space Element	Ensure that proposed development projects demonstrate a high degree of compatibility with any threatened or endangered species and sensitive biological resources	City of Carson Planning Department	5.6.6.3
Southern California Association of Governments 2008 Regional Conservation Plan	Minimize future effects to biological resources by conserving natural lands that are necessary to preserve the ecological function and value of the region's ecosystems; conserving wildlife linkages as critical components of the region's open space infrastructure	Southern California Association of Governments Regional Council	5.6.6.3

Source: As listed in table.
Notes:
AFC = Application for Certification
CDFG = California Department of Fish and Game
CEC = California Energy Commission
CEQA = California Environmental Quality Act
CFR = Code of Federal Regulations
LORS = laws, ordinances, regulations, and standards
PRC = Public Resources Code
RWQCB = Regional Water Quality Control Board
USACE = United States Army Corps of Engineers
USC = United States Code
USFWS = United States Fish and Wildlife Service

5.6.6.1 Federal Authorities and Administering Agencies

Endangered Species Act of 1973: 16 United States Code Section 1531 et seq.; *50 Code of Federal Regulations Parts 17 and 222*

The Endangered Species Act provides for the protection of threatened or endangered plants and animals and their determined critical habitats. The USFWS is the agency responsible for administering the act, designating critical habitat, and determining if a species should have a change in listing status. The Project will not impact any federal-listed threatened or endangered plants or animals or their designated critical habitats, so the Project will not violate the Endangered Species Act.

National Environmental Policy Act: 42 United States Code Section 4321 et seq.

The National Environmental Policy Act requires an evaluation of the environmental impacts of projects taking place on federal lands or receiving federal funding. The USFWS is the administering agency for this authority. This analysis has determined that low to no potential exists for the Project to have significant effects on common plants and wildlife. With the addition of the avoidance measures listed in Section 5.6.3, Avoidance and Minimization Measures, the Project will only incrementally increase effects above current conditions. The Project is in compliance with National Environmental Policy Act.

Migratory Bird Treaty Act: 16 United States Code Sections 703–711; 50 Code of Federal Regulations Subchapter B

The Migratory Bird Treaty Act protects most native birds, their eggs, and their nests, and prohibits any taking not in accordance with federal regulation. The USFWS is responsible for administering this act. Because the Project will not result in the deaths of birds or the destruction of any active nests, the Project will not violate the Migratory Bird Treaty Act.

Fish and Wildlife Coordination Act: 48 Stat. 401, amended; 16 United States Code 661 et seq.

The Fish and Wildlife Coordination Act requires all federal agencies to coordinate with the USFWS to preserve fish and wildlife when implementing federal actions. The USFWS is responsible for administering this Act. Because the Project will not cause significant additional effects to biological resources beyond existing conditions, the Project will comply with this act.

Clean Water Act of 1977: 33 United States Code Sections 1251–1376; 30 Code of Federal Regulations Section 330.5(a)(26)

The Clean Water Act protects wetlands, regulates discharges of pollutants, requires set water quality standards for individual pollutants, and provides a framework for permitted pollutant discharge from a point source. The administering agencies for the act are the United States Army Corps of Engineers and the relevant California Regional Water Quality Control Board. No wetlands occur within the Project vicinity. The potential impacts associated with the Project will be an incremental increase over the existing conditions of currently permitted operations. Thus, the Project will not be in violation of this act.

5.6.6.2 State Authorities and Administering Agencies

California Endangered Species Act of 1984: California Fish and Game Code Sections 2050–2098

The California Endangered Species Act provides for the protection and management of plant and animal species listed as threatened or endangered, or designated as candidates for such listing. This act requires consultation between the California Department of Fish and Game (CDFG) and other state agencies to ensure that projects do not jeopardize the continued existence of threatened or endangered species or habitats essential for the continued survival of any threatened or endangered species. The administering agency for this act is the CDFG. By implementing the avoidance and minimization measures specified in Section 5.6.3, Avoidance and Minimization Measures, any potential effects to species listed under this act will be avoided or minimized and thus the Project will not be in violation of this act.

California Species Protection Act of 1970: California Fish and Game Sections 900–903

The California Species Protection Act includes provisions for the protection and enhancement of the birds, mammals, fish, amphibians, and reptiles of California. The administering agency for this act is the CDFG. Because the Project will result in only temporary minor effects to common wildlife, the Project will comply with this act.

California Fish and Game Code Section 3503

This code section prohibits the taking and possessing of bird eggs and nests. The administering agency for this authority is the CDFG. Because the Project will not disturb nesting birds, the Project will be in compliance with this law.

California Fish and Game Code Sections 3511, 4700, 5050, and 5515

This code section prohibits the taking of birds, mammals, reptiles, and fish listed as fully protected. The administering agency for these authorities is the CDFG. Because only a low potential exists for listed birds, mammals, reptiles, or fish to occur in the vicinity of the Project Site, and avoidance and minimization measures are identified in Section 5.6.3, Avoidance and Minimization Measures, any potential effects will be less than significant, and the Project will be in compliance with this law.

California Environmental Quality Act, Public Resources Code Section 21000 et seq.

CEQA provides for protection of the environment in the state of California. The administering agency for CEQA for this Project is the CEC. Because very few natural resources exist at the Project Site and avoidance and minimization measures are identified in Section 5.6.3, Avoidance and Minimization Measures, any potential effects will be less than significant, and the Project will be in compliance with CEQA.

California Public Resources Code Section 25523(a): 20 California Code of Regulations Sections 1752, 1752.5, 2300–2309, and Chapter 2, Subchapter 5, Article I, Appendix B, Part (i)

These code sections require the CEC to protect environmental quality. The administering agency for this authority is the CEC, with comment by the CDFG. Because no rare or endangered species occur at the Project Site, the Project will be in compliance with these code sections.

5.6.6.3 Local Authorities and Administering Agencies

City of Carson

The Project is consistent with the City of Carson 2004 General Plan, Conservation Element, and the Open Space Element Objectives and Policies (City of Carson 2004). The main objectives of the Native Plants and Wildlife section are as listed below.

- To provide for long-term preservation, enhancement, and enjoyment of plant, wildlife, and aquatic resources in the City of Carson by protecting, improving, and restoring these resources.
- To support and implement the goals and policies of the Southern California Association of Governments, as discussed below.

The administering agency for the City of Carson is the Planning Department. The Project is in compliance with these objectives and associated policies because it does not cause significant effects to natural resources.

Southern California Association of Governments

The Southern California Association of Governments Regional Conservation Plan, Open Space Resources Component, addresses goals and policies related to encouraging the existence of an open space element in city or county general plans that are reviewed for maintaining large blocks of habitat with open space element interconnection among them. The Open Space Resources Component addresses the conservation, development, and use of natural, generally undeveloped and/or vacant lands with some natural vegetation and/or wildlife value, including lands used for grazing. These lands may include large and small blocks of habitat and the open space that links those blocks together. This component includes habitat that has some level of existing protection (protected open space) or needs to be protected to preserve the ecological function and value of protected open space, especially areas that serve as wildlife linkages and areas with sensitive habitats not covered by existing conservation programs (SCAG 2008).

The Open Space Resources Component is designed to plan and provide for the conservation of the region's open space resources by focusing on these criteria.

1. Interconnections among resources.
2. Future land use decisions that will either strengthen or impair the region's ability to sustain the resources.
3. Opportunities for inter-jurisdictional planning.

5.6.6.4 Agencies and Agency Contacts

No permits are required for biological resources.

5.6.6.5 Applicable Permits

No permits are required for biological resources.

5.6.7 References

CDFG (California Department of Fish and Game). 2008. California Natural Diversity Data Base.

CEC (California Energy Commission). 2000. Rules of Practice and Procedure and Plant Site Certification Regulations.

City of Carson. 2004. General Plan. Conservation and Open Space Elements. Available at http://ci.carson.ca.us/content/files/pdfs/GenPlan/os_cons_chapter8.pdf.

CNPS (California Native Plant Society). 2008. Rare Plant Database.

Hickman, J.C. 1993. *The Jepson Manual: Higher Plants of California*. Berkeley and Los Angeles: University of California Press, 1,400 pp.

Jameson, Jr., E.W. and J.J. Peeter. 1988. *California Mammals*. University of California Press, Berkeley, California.

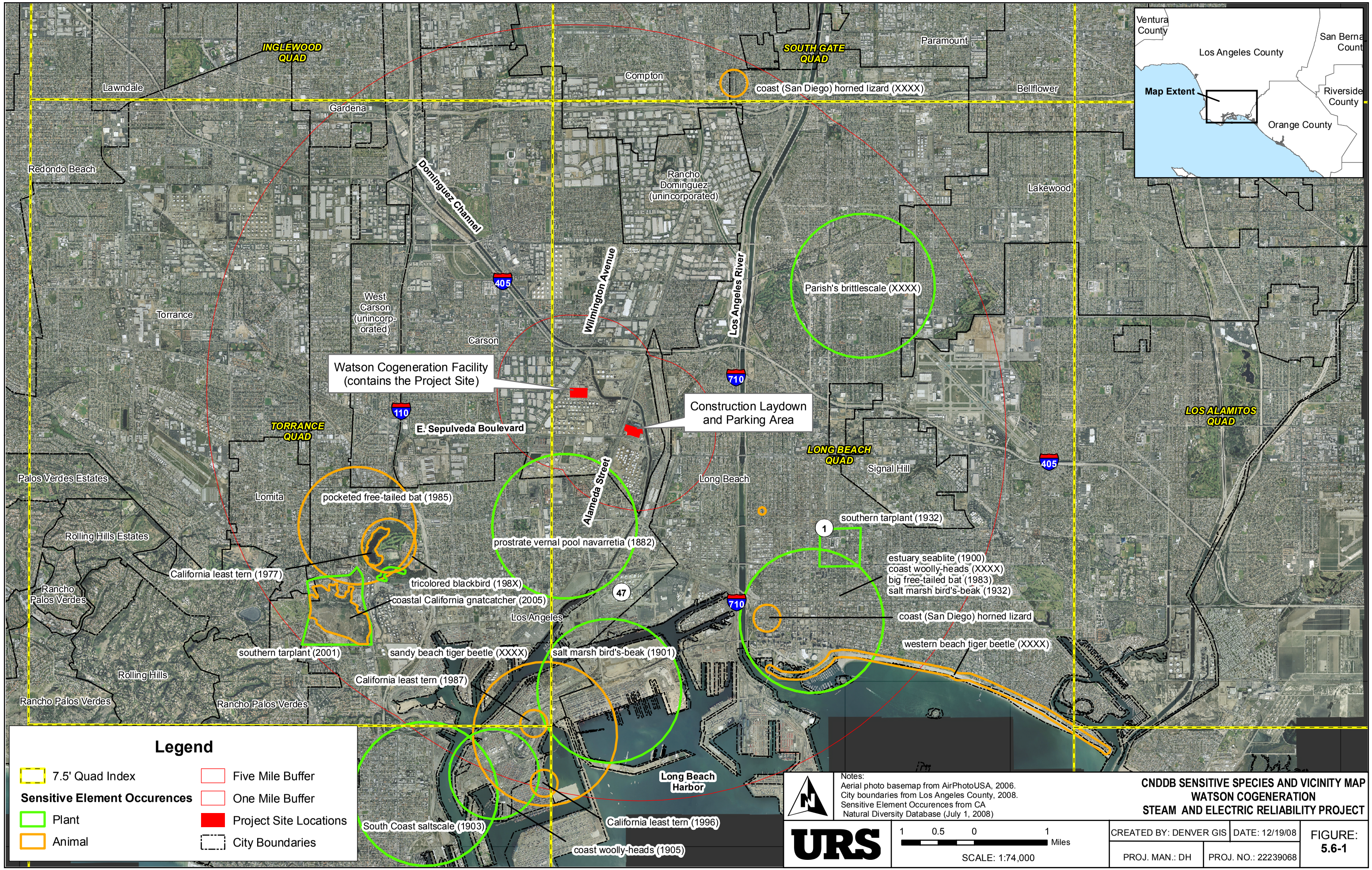
North American Breeding Bird Survey. 2006. Available at http://www.mbr-pwrc.usgs.gov/bbs/grass/.
a4740.htm.

Sauer, Maxine. BP Environmental Field Coordinator. Personal communication. September 4, 2008.

SCAG (Southern California Association of Governments). 2008. Available at http://www.scag.ca.gov/.

U.S. Fish and Wildlife Service. 2008. Website. Available at http://www.fws.gov.

Western Bat Working Group. 2008. Available at http://wbwg.org/species_accounts/vespertilonidae/lano.pdf.



Notes:
Aerial photo basemap from AirPhotoUSA, 2006.
City boundaries from Los Angeles County, 2008.
Sensitive Element Occurences from CA Natural Diversity Database (July 1, 2008)

CNDDB SENSITIVE SPECIES AND VICINITY MAP
WATSON COGENERATION
STEAM AND ELECTRIC RELIABILITY PROJECT

URS

1 0.5 0 1 Miles

SCALE: 1:74,000

CREATED BY: DENVER GIS | DATE: 12/19/08

PROJ. MAN.: DH | PROJ. NO.: 22239068

FIGURE: **5.6-1**

Path: Y:\GIS\Projects\BP_Carson_Cogen\mxds\fig5-6-1_CNDDB_Species.mxd

Adequacy Issue: Adequate ____ Inadequate ____ DATA ADEQUACY WORKSHEET Revision No. 0 Date ____

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Project Manager: ____ Docket: ____ Technical Senior: ____

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	...provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 5.6.1; pages 5.6-1 through 5.6-18 Section 5.6.2; pages 5.6-18 through 5.6-22 Section 5.6.3; pages 5.6-22 through 5.6-23 Section 5.6.4; page 5.6-23		
Appendix B (g) (13) (A)	A regional overview and discussion of terrestrial and aquatic biological resources, with particular attention to sensitive biological resources within ten (10) miles of the project. Include a map at a scale of 1:100,000 (or other suitable scale) showing sensitive biological resource location(s) in relation to the project site and related facilities and any boundaries of a local Habitat Conservation Plan or similar open space land use plan or designation. Sensitive biological resources include the following:	Section 5.6.1; pages 5.6-1 through 5.6-18 Section 5.6.1.6; pages 5.6-9 through 5.6-18 Figure 5.6-1 Section 5.6.1.1, Table 5.6-1; pages 5.6-3 through 5.6-7		
Appendix B (g) (13) (A) (i)	species listed under state or federal Endangered Species Acts;	Section 5.6.1.6; pages 5.6-9 through 5.6-18 Section 5.6.1.1, Table 5.6-1; pages 5.6-3 through 5.6-7		
Appendix B (g) (13) (A) (ii)	resources defined in sections 1702(q) and (v) of Title 20 of the California Code of Regulations;	Section 5.6.1.6; pages 5.6-9 through 5.6-18 Section 5.6.1.1, Table 5.6-1; pages 5.6-3 through 5.6-7		

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SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (A) (iii)	species identified as state Fully Protected;	Section 5.6.1.6; pages 5.6-9 through 5.6-18 Section 5.6.1.1, Table 5.6-1; pages 5.6-3 through 5.6-7		
Appendix B (g) (13) (A) (iv)	species covered by Migratory Bird Treaty Act;	Section 5.6.1.6; pages 5.6-9 through 5.6-18 Section 5.6.1.1, Table 5.6-1; pages 5.6-3 through 5.6-7		
Appendix B (g) (13) (A) (v)	species and habitats identified by local, state, and federal agencies as needing protection, including but not limited to those identified by the California Natural Diversity Database, or where applicable, in Local Coastal Programs or in relevant decisions of the California Coastal Commission; and	Section 5.6.1.3; pages 5.6-8 through 5.6-9 Section 5.6.1.6; pages 5.6-9 through 5.6-18 Section 5.6.1.1, Table 5.6-1; pages 5.6-3 through 5.6-7 Figure 5.6-1		
Appendix B (g) (13) (A) (vi)	fish and wildlife species that have commercial and/or recreational value.	None expected to be present		
Appendix B (g) (13) (B)	Include a list of the species actually observed and those with a potential to occur within 1 mile of the project site and 1,000 feet from the outer edge of linear facility corridors. Maps or aerial photographs shall include the following:	Section 5.6.1.2; page 5.6-8 Section 5.6.1.5; page 5.6-9 Section 5.6.1.1, Table 5.6-2; page 5.6-8		

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SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (B) (i)	Detailed maps at a scale of 1:6,000 or color aerial photographs taken at a recommended scale of 1 inch equals 500 feet (1:6,000) with a 30 percent overlap that show the proposed project site and related facilities, biological resources including, but not limited to, those found during project-related field surveys and in records from the California Natural Diversity Database, and the associated areas where biological surveys were conducted. Label the biological resources and survey areas as well as the project facilities;	Figure 5.6-1		
Appendix B (g) (13) (B) (ii)	A depiction of the extent of the thermal plume at the surface of the water if cooling water is proposed to be discharged to a water source. Provide the location for the intake and discharge structures on an aerial photograph(s) or detailed maps. Water sources include, but are not limited to, waterways, lakes, impoundments, oceans, bays, rivers, and estuaries; and	Does not apply for this project		

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SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (B) (iii)	An aerial photo or wetlands delineation maps at a scale of (1:2,400) showing any potential jurisdictional and non-jurisdictional wetlands delineated out to 250 feet from the edge of disturbance if wetlands occur within 250 feet of the project site and/or related facilities that would be included with the US Army Corps of Engineers Section 404 Permit application. For projects proposed to be located within the coastal zone, also provide aerial photographs or maps as described above that identify wetlands as defined by the Coastal Act.	Does not apply for this project		
Appendix B (g) (13) (C)	A discussion of the biological resources at the proposed project site and related facilities. Related facilities include, but are not limited to, laydown and parking areas, gas and water supply pipelines, transmission lines, and roads. The discussion shall address the distribution of vegetation community types, denning or nesting sites, population concentrations, migration corridors, breeding habitats, and other appropriate biological resources including the following:	Section 5.6.1; pages 5.6-1 through 5.6-18 Section 5.6.1.2; page 5.6-8 Section 5.6.1.6; pages 5.6-9 through 5.6-18		
Appendix B (g) (13) (C) (i)	A list of all the species actually observed;	Section 5.6.1.1, Table 5.6-2; page 5.6-8		
Appendix B (g) (13) (C) (ii)	A list of sensitive species and habitats with a potential to occur (as defined in (A) above); and	Section 5.6.1.1, Table 5.6-2; page 5.6-8		

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SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (C) (iii)	If cooling water is taken directly from or discharged to a surface water feature source, include a description of the intake structure, screens, water volume, intake velocity hydraulic zone field of influence, and the thermal plume dispersion area as depicted in response to B(ii) above. Describe the thermal plume size and dispersion under high and low tides, and in response to local currents and seasonal changes. Provide a discussion of the aquatic habitats, biological resources, and critical life stages found in these affected waters. For repower projects that anticipate no change in cooling water flow, this information shall be provided in the form of the most recent federal Clean Water Act 316(a) and (b) studies of entrainment and impingement impacts that has been completed within the last five (5) years. For new projects or repower projects proposing to use once-through cooling and anticipating an increase in cooling water flow, provide a complete impingement and entrainment analysis per guidance in (D)(ii), below.	Does not apply for this project		

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SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (D)	A description and results of all field studies and seasonal surveys used to provide biological baseline information about the project site and associated facilities. Include copies of the California Natural Diversity Database records and field survey forms completed by the applicant's biologist(s). Identify the date(s) the surveys were completed, methods used to complete the surveys, and the name(s) and qualifications of the biologists conducting the surveys. Include:	Section 5.6.1.1; pages 5.6-2 through 5.6-8 Section 5.6.1.1, Table 5.6-1; pages 5.6-3 through 5.6-7 Appendix N, Biology Resources		
Appendix B (g) (13) (D) (i)	Current biological resources surveys conducted using appropriate field survey protocols during the appropriate season(s). State and federal agencies with jurisdiction shall be consulted for field survey protocol guidance prior to surveys if a protocol exists;	Section 5.6.1.1, Table 5.6-1; pages 5.6-3 through 5.6-7		

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SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (D) (ii)	If cooling water is proposed to be taken directly from or discharged to a surface water feature source, seasonal aquatic resource studies and surveys shall be conducted. Aquatic resource survey data shall include, but is not limited to, fish trawls, ichthyoplankton and benthic sampling, and related temperature and water quality samples. For new projects or repower projects anticipating a change in cooling water flows, sampling protocols shall be provided to the Energy Commission staff for review and concurrence prior to the start of sampling. For repower projects not anticipating a change in cooling water flows, this information shall be provided in the form of the most recent federal Clean Water Act 316(b) impingement and entrainment impact study completed within five (5) years of the AFC filing date; and	Does not apply for this project		
Appendix B (g) (13) (D) (iii)	If the project or any related facilities could impact a jurisdictional or non-jurisdictional wetland, provide completed Army Corps of Engineers wetland delineation forms and/or determination of wetland status pursuant to Coastal Act requirements, name(s) and qualifications of biologist(s) completing the delineation, the results of the delineation and a table showing wetland acreage amounts to be impacted.	Does not apply for this project		

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SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (E)	Impacts discussion of the following:			
Appendix B (g) (13) (E) (i)	all impacts (direct, indirect, and cumulative) to biological resources from project site preparation, construction activities, plant operation, maintenance, and closure. Discussion shall also address sensitive species habitat impacts from cooling tower drift and air emissions;	Section 5.6.2; pages 5.6-18 through 5.6-22 Section 5.6.2.1; pages 5.6-19 through 5.6-22 Section 5.6.2.2; page 5.6-22 Section 5.6.2.3; page 5.6-22 Section 5.6.3; pages 5.6-22 through 5.6-23		
Appendix B (g) (13) (E) (ii)	facilities that propose to take water directly from, and/or discharge water to surface water features, daytime and nighttime impacts from the intake and discharge of water during operation, water velocity at the intake screen, the intake field of influence, impingement, entrainment, and thermal discharge. Provide a discussion of the extent of the thermal plume, effluent chemicals, oxygen saturation, intake pump operations, and the volume and rate of cooling water flow at the intake and discharge location; and	Does not apply for this project		
Appendix B (g) (13) (E) (iii)	Methods to control biofouling and chemical concentrations, and temperatures that are currently being discharged or will be discharged to receiving waters.	Does not apply for this project		

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SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (F)	A discussion of all feasible mitigation measures including, but not limited to the following:			
Appendix B (g) (13) (F) (i)	All measures proposed to avoid and/or reduce adverse impacts to biological resources;.	Section 5.6.3; pages 5.6-22 through 5.6-23 Section 5.6.4; page 5.6-23 Section 5.6.5; page 5.6-23		
Appendix B (g) (13) (F) (ii)	All off-site habitat mitigation and habitat improvement or compensation, and an identification of contacts for compensation habitat and management;	Does not apply for this project		
Appendix B (g) (13) (F) (iii)	Design features to better disperse or eliminate a thermal discharge;	Does not apply for this project		
Appendix B (g) (13) (F) (iv)	All measures proposed to avoid or minimize adverse impacts of cooling water intake. This shall include a Best Technology Available (BTA) discussion. If BTA is not being proposed, the rationale for not selecting BTA must be provided; and	Does not apply for this project		
Appendix B (g) (13) (F) (v)	Educational programs to enhance employee awareness during construction and operation to protect biological resources.	Not proposed for this project		
Appendix B (g) (13) (G)	A discussion of compliance and monitoring programs to ensure the effectiveness of impact avoidance and mitigation measures incorporated into the project.	None are proposed		

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SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (13) (H)	Submit copies of any preliminary correspondence between the project applicant and state and federal resource agencies regarding whether federal or state permits from other agencies such as the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the U.S. Army Corps of Engineers, the California Department of Fish and Game, and the Regional Water Quality Control Board will be required for the proposed project.	No consultation is anticipated for this project		
Appendix B (i) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project, and a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed; and	Section 5.6.6, Table 5.6-3; pages 5.6-23 through 5.6-24		
Appendix B (i) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits, leases, and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 5.6.6, Table 5.6-3; pages 5.6-23 through 5.6-24		

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Appendix B (i) (2)	The name, title, phone number, address (required), and email address (if known), of an official who was contacted within each agency, and also provide the name of the official who will serve as a contact person for Commission staff.	No agencies were contacted during the course of this assessment		
Appendix B (i) (3)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	No additional permits are anticipated		