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5.2 Biological Resources

This section describes biological resources in and near the Stanton Energy Reliability Center (SERC), and the potential effects that the project may have on these resources. Section 5.2.1 discusses the affected environment, including an overview of the region, habitat and vegetation communities, and special-status species. Section 5.2.1.5 presents the results of biological surveys in and near the SERC site. Section 5.2.2 presents an environmental analysis of the SERC, including standards of significance, potential impacts of construction and operation of the SERC, and impacts to special-status species. Section 5.2.3 evaluates any potential cumulative effects to biological resources in the project vicinity, and Section 5.2.4 addresses proposed mitigation measures that will avoid, minimize, or compensate for adverse impacts. Section 5.2.5 describes the laws, ordinances, regulations, and standards (LORS) that apply to the SERC. Section 5.2.6 presents permit requirements. Section 5.2.7 presents the regulatory agency contacts, and Section 5.2.8 contains the references used to prepare this section.

5.2.1 Affected Environment

This section provides an overview of the region including discussions of significant wetlands and other protected natural areas, sensitive habitats, designated critical habitat, and special-status plants and wildlife species. In addition, the methods and results of biological surveys for the project are included in Section 5.2.1.5. For the purposes of this document, the project includes the following: the project site, which consists of Parcel 1 (1.76 acres east of the Stanton Storm Channel/Dale-Cerritos drainage canal) and Parcel 2 (2.21 acres west of and including the channel); a 0.35-mile underground generator tie-line running west from the project site to Southern California Edison Barre Substation; a 12- or 16-inch-diameter natural gas line along Dale Avenue (spanning either 2.27 miles north or 1.78 miles south); and a temporary 2.89-acre worker parking area located at the Bethel Romanian Pentecostal Church (approximately 350 feet south of the SERC site on Dale Avenue). The regional overview of the project area includes, but is not limited to, the area within 10 miles of the SERC site.

The SERC site is 69 to 72 feet above mean sea level. The SERC project site and locations of the generation tie-line, natural gas pipeline, and temporary parking area can be found on U.S. Geological Survey (USGS) Anaheim, California 7.5-minute series topographic quadrangles within Township 3 South, Range 12 West (San Bernardino Meridian) (USGS, 2015). The SERC site will be located west of Dale Avenue and north of a railroad right-of-way. Land use in the surrounding area includes commercial, industrial, and residential.

A description of regional biogeography and habitat types was obtained from reference sources including *Ecological Subregions of California* (U.S. Department of Agriculture [USDA], 1997), *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland, 1986), *A Manual of California Vegetation* (Sawyer and Keeler-Wolf, 1995), and the California Department of Fish and Wildlife (CDFW) *Biogeographic Information and Observation System* (CDFW, 2016a). The U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) was also queried to determine the location of potential wetlands and water resources in proximity to the site (USFWS, 2016a). These sources, as well as aerial photographs and USGS topographical maps, were used to determine the terrestrial and aquatic biological resources with the potential to occur within 10 miles of the SERC site.

A list of sensitive biological resources for the region, including natural communities and special-status plant and wildlife species, was compiled for the project using the CDFW California Natural Diversity Database (CNDDB) RareFind5 database (CDFW, 2016b) as well as other publically available studies, information, and resources. The information in the reference sources listed above is based on known occurrences, historical records, or the presence of suitable habitat for any given life stage of a particular species. A list of potentially occurring sensitive biological resources was generated for the region based

on the combined results of these reference sources. Appendix 5.2A includes tables listing regional special-status plant and wildlife species.

5.2.1.1 Regional Overview

Ecoregions are ecosystems of regional extent that share common climatic and vegetation characteristics. Ecoregions are hierarchically organized into domains, divisions, provinces, and sections. The proposed project, including the project site, parking area, natural gas pipeline, and generator tie-line, lies within the Los Angeles Plain subsection of the Southern California Coast Ecological Section (USDA, 1997).

The Los Angeles Plain subsection occurs on the coastal plain of Southern California, adjacent to the Pacific Ocean (Bailey, 1995). According to Bailey, the predominant natural vegetation in this subsection includes coastal sage scrub and grassland communities, as well as broadleaf riparian forest communities along streams and rivers.

The climate within the Los Angeles Plain subsection is characterized by hot temperatures, subhumid conditions, and mean annual precipitation of 10 to 50 inches with some moisture from summer fog and frequent summer drought (Bailey, 2005). According to Bailey (2005), the mean annual temperature ranges from 56 to 60 degrees Fahrenheit.

Current land use within the region is urban/developed and dominated primarily by residential, commercial, and industrial operations. The SERC site is approximately 5.8 miles northwest of the Santa Ana River and 7.9 miles northeast of the Pacific Ocean, is located within the Santa Ana-Southern California Coastal Hydrologic Region, and is 4.6 miles southeast of the Region's Anaheim Bay Hydrologic Unit (HUC 12 – 180702010001) (USGS, 2013).

5.2.1.2 Significant Regional Wetlands and Protected Areas

Important ecological reserves and designated open spaces occur within the region. These protected areas provide important habitat for migratory birds along the Pacific flyway, as well as habitat for several special-status plants and wildlife species. Figure 5.2-1a and Figure 5.2-1b show the locations of these protected areas and regional wetlands in relation to SERC and its linear features. Figure 5.2-2 provides the USFWS NWI data at a scale of 1:2,400, including any potential jurisdictional and non-jurisdictional wetlands delineated out to 250 feet from the edge of disturbance. Significant wetlands and conservation areas within a 10-mile radius from the SERC are briefly described below. **All of the figures for this section are provided at the end of the section because some are multi-page figures.**

5.2.1.2.1 Bolsa Chica Ecological Reserve

Bolsa Chica Ecological Reserve encompasses approximately 1,341 acres of wetland habitat that is being restored on land previously used for oil and gas production along the Pacific coast (CDFW, 2016c). These wetlands are located approximately 6 miles southeast of SERC. These wetlands also provide significant stopover and wintering habitat for migratory birds as they move through the region, as well as habitat for native fish, wildlife, and plants (CDFW, 2016c). According to CDFW (2016c), over 300 species of birds have been observed at these wetlands, including 32 special-status birds such as the California least tern (*Sternula antillarum browni*; Federally Endangered [FE], State Endangered [SE], and CDFW Fully Protected [FP]), western snowy plover (*Charadrius alexandrinus nivosus*; Federally Threatened [FT], CDFW Species of Special Concern [SSC]), Belding's savanna sparrow (*Passerculus sandwichensis beldingi*; SE), and light-footed clapper rail/Ridgway's rail (*Rallus longirostris levipes*; FE, SE, and CDFW FP).

5.2.1.2.2 Chino Hills State Park

Chino Hills State Park is a 14,102-acre park that is managed as open space habitat for native plant and wildlife species (California State Parks [CSP], 2016a). Vegetation communities within the park includes willow (*Salix* spp.) and sycamore (*Platanus* spp.) woodland riparian habitat, California black walnut (*Juglans californica*) and coast live oak (*Quercus agrifolia*) woodland, coastal sage scrub, chaparral, and

grassland communities that support a diverse array of native wildlife species (CSP, 2016a). These plant communities also support migratory birds as well as least Bell's vireo (*Vireo bellii pusillus*; FE, SE, and CDFW SSC), coastal California gnatcatcher (*Polioptila californica*; FT and CDFW SSC), and coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*; CDFW SSC for San Diego and Orange Counties) (CDFW, 2016b; CSP, 2016a). Chino Hills State Park is located approximately 10 miles from the proposed SERC site.

5.2.1.2.3 Huntington Beach Wetlands

The Huntington Beach Wetlands Conservancy has been actively restoring coastal wetland habitats along the Talbert Channel and Huntington Beach Channel since 1989. The wetland restoration in this area includes four subunits: Newland Marsh, Magnolia Marsh (including the Upper Magnolia Marsh), Brookhurst Marsh, and Talbert Marsh. Collectively these areas encompass approximately 180 acres (Huntington Beach Wetlands Conservancy [HBWC], 2016). Primary habitats included coastal salt marsh, open water, and salt panne. Restoration of these areas began with the removal of the seaward levee of the Huntington Beach Flood Control Channel to restore tidal influence into the Talbert and Brookhurst Marshes. Restoration of the Magnolia Marsh site began in April 2009 and involved excavation of 40,000 cubic yards of fill to recreate historical tidal channels (HBWC, 2016). According to HBWC, the restoration work in Magnolia Marsh was completed in February 2010 (HBWC; 2016). SERC is located approximately 9.55 miles north of the Huntington Beach Wetlands.

Several special-status wildlife species have been reported or observed in these wetlands. The wetland complex supports a breeding population of Belding's savannah sparrow. Light-footed clapper rail/Ridgway's rail have been documented within the Brookhurst Marsh and Magnolia Marsh (Zembel et al., 2015; Smith, 2016). The wetland complex also provides foraging habitat for other endangered bird species such as the western snowy plover and the California least tern (CDFW, 2016b). Other special-status wildlife species observed utilizing the area include the California brown pelican (*Pelecanus occidentalis californicus*; CDFW FP) (foraging only) and the salt marsh skipper (*Panoquina errans*).

5.2.1.2.4 Huntington State Beach

Huntington State Beach is a recreational beach located on the Pacific coast in the City of Huntington Beach (CSP, 2016b). Although the majority of the beach is open to the public and heavily impacted by anthropogenic activity, a small section of beach, California State Parks Huntington State Beach Least Tern Natural Preserve, is fenced and closed to the public as a California least tern and snowy plover breeding colony preserve (CSP, 2016b). The preserve is located between Talbert Channel and the Santa Ana River Channel, on the southern end of Huntington State Beach, and encompasses approximately 13 acres (Sea & Sage Audubon Society, 2014). The preserve is approximately 10 miles south of the proposed SERC site.

5.2.1.2.5 Peter F. Schabarum Regional Park

Peter F. Schabarum Regional Park is a 575-acre regional park located approximately 9 miles northeast of the proposed SERC site (California Protected Areas Data Portal [CPAD], 2016). Although 75 acres have been developed for recreational use near Rowland Heights, the remaining southern portion has been left undeveloped and borders Powder Canyon (CPAD, 2016). The open space on the southern end of the park offers similar habitat to that of Puente Hills, and therefore has similar potential to support special-status species.

5.2.1.2.6 Puente Hills

Puente Hills is a collection of undeveloped open space parcels managed by the Puente Hills Landfill Habitat Preservation Authority (PHLHPA) (PHLHPA, 2007). The parcels include Arroyo Pescadero (812 acres), Powder Canyon (690 acres), and Worsham Canyon Open Space (327 acres), which compose Puente Hills; therefore, separate descriptions of these parcels have not been included (CPAD, 2016;

PHLHPA, 2007). Vegetation communities within the preserve include coastal sage scrub, chaparral, grassland, oak woodland, walnut woodland, and riparian woodland (PHLHPA, 2007). These communities support numerous native plant and wildlife species as well as provide habitat for migratory bird species as they move through the region (PHLHPA, 2007). The Puente Hills Open Space is located approximately 8 miles north of the proposed SERC site.

5.2.1.2.7 U.S. Army Corps of Engineers Los Angeles District – Salt Marsh Restoration Project

The Los Angeles District of the United States Army Corps of Engineers (USACE) owns approximately 92 acres of salt marsh habitat north of the Pacific Coast Highway on the eastern side of the Santa Ana River (USACE, 2013). The marsh is subject to muted tidal influence attributable to the elevation and operation of tidal gates. This wetland area supports a high diversity of bird species including the western snowy plover and Belding's savannah sparrow (CDFW, 2016b; USACE, 2013). The marsh is located approximately 10 miles south of the SERC site.

5.2.1.2.8 Seal Beach National Wildlife Refuge

Seal Beach National Wildlife Refuge is composed of approximately 965 acres of land within the U.S. Naval Weapons Station Seal Beach (USFWS, 2016b). The refuge primarily consists of wetland and salt marsh estuary habitat that was originally protected for the California least tern and light-footed clapper rail/Ridgway's rail. According to USFWS (2016b), the wetlands function as a critical stopover and wintering habitat for multiple bird species as they migrate along the Pacific flyway each year. The refuge is also characterized as being a significant island habitat within the highly developed, southern California urban region, and the refuge provides habitat for multiple fish, wildlife, and plants (USFWS, 2016b). Seal Beach National Wildlife Refuge is located approximately 5.5 miles southwest of the proposed SERC site.

5.2.1.2.9 Talbert Nature Preserve

The Talbert Nature Preserve is a 185-acre parcel within the City of Costa Mesa, California. The preserve is located along the eastern side of the Santa Ana River, approximately 10 miles south of the SERC site. Natural communities in this preserve include coastal strand (dunes), native grassland, woodlands, and riparian woodland/scrub. Special-status plant species known to occur in this area include southern tarplant (Centromadia parryi ssp. australis; California Native Plant Society [CNPS] Rare Plant Rank 1B.1) and Davidson's salt scale (Atriplex serenana var. davidsonii; CNPS Rare Plant Rank 1B.2) (CDFW, 2016b).

5.2.1.3 Sensitive Habitat Types and Critical Habitat

Sensitive habitats within 10 miles of the SERC include significant natural communities identified by the CNDDB, which include the following: southern coastal salt marsh, southern cottonwood willow riparian forest, southern dune scrub, southern foredunes, and southern California arroyo chub/Santa Ana sucker stream habitat (CDFW, 2016b).

Critical habitat for the coastal California gnatcatcher, San Diego fairy shrimp (*Branchinecta sandiegonensis*; FE), and western snowy plover are also present within the regional vicinity of the SERC. Sensitive habitat types and critical habitat within 10 miles of the SERC site and linear features are shown on Figure 5.2-3. Descriptions of these areas are provided below.

5.2.1.3.1 Sensitive Habitat Types

California Walnut Woodland. California walnut woodland is characterized by an open tree canopy dominated by southern California walnut (Holland, 1986). The understory of this alliance is typically dominated by nonnative winter-active grasses in relatively moist, fine-textured soils (Holland, 1986). According to Holland (1986), California walnut woodland intergrades with coast live oak woodland or coast live oak forest on more mesic sites. Characteristic species for this alliance are coast live oak, Engelmann oak (Q. engelmannii), sugar bush (Rhus ovata), red brome (Bromus madritensis ssp. rubens), and common horehound (Marrubium vulgare) (Holland, 1986). This sensitive vegetation community

is located approximately 8 miles north of the SERC site in the Puente Hills Open Space and Chino Hills State Park.

Southern Cottonwood Willow Riparian Forest. Southern cottonwood willow riparian forest is characterized by broadleaf winter-deciduous trees, including cottonwoods (*Populus fremontii*; *P. trichocarpa*), and several types of willows, including black willow (*Salix gooddingii*), sand bar willow (*Salix exigua*), Pacific willow (*Salix lasiandra*), and arroyo willow (*Salix lasiolepis*) (Holland, 1986). Associated species include sycamore (*Platanus racemosa*), mugwort (*Artemisia douglasiana*), and coyotebrush (*Baccharis glutinosa*). Southern cottonwood willow riparian scrub has been mapped as occurring along the Santa Ana River greenbelt, approximately 10 miles south of the SERC site. However, this community has been extirpated by channelization of the Santa Ana River (CDFW, 2016b).

Southern Coastal Salt Marsh. Southern salt marsh is a highly productive alliance dominated by salt-tolerant species, and it has a long growing season compared to northern coastal salt marshes (Holland, 1986). According to Holland (1986), this alliance typically occurs along sheltered inland margins of bays, lagoons, and estuaries that are routinely inundated by tidal salt water for at least some part of each year. Species commonly found in southern salt marshes include Watson's saltbush (Atriplex watsonii), saltwort (Batis maritima), California boxthorn (Lycium californicum), shore grass (Distichlis littoralis), California seablite (Suaeda californica), and Parish's glasswort (Salicornia subterminalis) (Holland, 1986). This sensitive vegetation community is located within Bolsa Chica Ecological Reserve, Huntington Beach Wetlands, USACE Salt Marsh Restoration Project, Seal Beach National Wildlife Refuge, and the Talbert Marsh (CDFW, 2016b). All of the salt marsh habitats within the regional vicinity of SERC are approximately 6 to 10 miles from the proposed site.

Southern Dune Scrub. Southern dune scrub is characterized as a dense coastal scrub community of scattered shrubs, subshrubs, and herbs that are typically less than 1 meter tall and often associated with a high percentage of cover (Holland, 1986). This habitat type is drier and fairly warmer, and it experiences less onshore wind when compared to central and northern dune scrub habitats. Native plants commonly found in this habitat include beach saltbush (*Atriplex leucophylla*), California croton (*Croton californicus*), California ephedra (*Ephedra californica*), mock heather (*Ericameria ericoides*), dune lupine (*Lupinus chamissonis*), desert thorn (*Lycium brevipes*), prickly pear (*Opuntia* ssp.), lemonade berry (*Rhus integrifolia*), and jojoba (*Simmondsia chinensis*) (Holland, 1986). This sensitive habitat type occurs in the Bolsa Chica Ecological Reserve and the Huntington Beach Wetlands, approximately 6 and 9.55 miles from the SERC site, respectively.

Southern Foredune. This sensitive vegetation community is characterized by low, often succulent, perennial herbs and subshrubs (Holland, 1986). According to Holland (1986), unlike active dune systems, southern foredune is a more stable dune structure because of vegetation, which reduces the amount of sand movement by wind. Typical vegetation in this sensitive community includes sand verbena (*Abronia* ssp.), beach bursage (*Ambrosia chamissonis*), beach morning glory (*Calystegia soldanella*), and sea-fig (*Carpobrotus chinensis*) (Holland, 1986). The nearest documented occurrence of this sensitive community is located approximately 9.5 miles south of the SERC site.

5.2.1.3.2 Critical Habitat

Critical habitat for three federally listed species occurs in the regional vicinity of SERC, as is depicted on Figure 5.2-3. Critical habitat for the coastal California gnatcatcher is approximately 10 miles south of the SERC site on the eastern side of the Talbert Channel, just north of Highway 1 and approximately 8 miles north of the project area within Puente Hills and Chino Hills State Park (CDFW, 2016b; USFWS, 2016c). Critical habitat for the San Diego fairy shrimp is located approximately 10 miles south of the SERC site in close proximity to Talbert Nature Preserve (CDFW, 2016b; USFWS, 2016c). For the western snowy plover, critical habitat exists within a 10-mile radius of the SERC site within the Bolsa Chica Ecological Reserve and Huntington Beach State Beach (CDFW, 2016b; USFWS, 2016c).

5.2.1.4 Regional Sensitive or Special-status Species

Special-status species information was compiled from a variety of sources and is summarized in a table provided in Appendix 5.2A. The table lists all special-status species historically found or with the potential to occur within the project region, including regional species listed as threatened or endangered that have special requirements under the federal Endangered Species Act (ESA) (USFWS, 1970) and the California Endangered Species Act (CESA) (Fish and Game Code, Section 2050 et seq.). Other nonlisted sensitive and special-status species, including CNPS List 1-4 species, CDFW SSC, CDFW FP Species, and other CDFW Special Animals, are also listed in Appendix 5.2A. This appendix includes the status designation for each species, habitat types that may support these species in the regional vicinity, a determination of potential for these species to occur within the SERC project area, and a rationale for the occurrence determination. Species that were observed during the biological reconnaissance and rare plant surveys are discussed in subsequent subsections and are provided in a technical memorandum in Appendix 5.2B, which includes site photographs. A copy of biological resources staff resumes is provided in Appendix 5.2C. The known locations of special-status species identified in the CNDDB within a 10-mile range of the SERC are shown on Figure 5.2-4. In addition, special-status species that have been documented within 1 mile of the SERC are provided in Figure 5.2-5.

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

- Federally or state-listed, proposed, or a candidate for listing as rare, threatened, or endangered (USFWS, 2016d; CDFW, 2016b)
- State Special Plant as defined by the CNDDB (CDFW, 2016b)
- Designated by the CNPS in its Inventory of Rare and Endangered Plants of California (CNPS, 2016)

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

- Federally or state-listed, proposed, or a candidate for listing as threatened or endangered (USFWS, 2016d; CDFW, 2016d)
- California State Species of Concern as defined by the CNDDB (CDFW, 2016b)
- California State Fully Protected Species (CDFW, 2016e)
- State Special Animal as defined by the CNDDB (CDFW, 2016b)

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

5.2.1.5 Biological Surveys

Biological resources evaluated for SERC impacts included plant communities, wildlife habitat, wetlands, and special-status species within the temporary and permanent SERC site impact locations. Information obtained during the literature review, biological reconnaissance survey, and rare plant survey were used to determine which special-status species might have the potential to occur within the SERC site. Information on species status, habitat preferences, geographic distribution, elevation range, and known locations near the SERC site was reviewed prior to the field surveys.

Habitat and plant community assessments were conducted within a 1-mile radius of the SERC and within 1,000 feet of the proposed generator tie-line and proposed pipeline routes where access was permitted. In this section, these areas are referred to collectively as the SERC survey area. Plant community and wildlife habitat assessments were conducted within the survey area to determine whether sensitive habitats occur within or near the SERC site, generator tie-line, or pipeline routes.

The SERC survey area was accessed from existing roads by vehicle and/or on foot. Habitat conditions within the SERC survey area were evaluated, and a preliminary classification of the vegetation and land cover types was developed. All field surveys were aided by aerial images. Photographs were also taken to document biological resources within the SERC survey area.

The regional special-status species lists described in Appendix 5.2A were evaluated against conditions within the SERC survey area to determine the likelihood of special-status species occurrence in the area. The potential for special-status species to occur within the SERC survey area was assessed by researching special-status species with potential to be found within the SERC region, compiling information on their conservation status, distribution, habitat characteristics, and known presence in the project region, including nearest known locations. A species was determined to have potential to occur within the SERC survey area if its known or expected geographic range includes the SERC vicinity and if suitable habitat for the species was observed or had potential to occur within the SERC survey area.

5.2.1.6 Land Cover Types and Vegetation Communities

Land cover types and vegetation communities identified within a 1-mile radius of the SERC are shown in Figure 5.2-6. As discussed previously, habitat and plant community surveys were conducted within the SERC survey area. The following sections discuss land cover types and vegetation communities within the SERC survey area.

5.2.1.6.1 Urban/Developed

Lands uses within 1 mile of the SERC site consist of residential, commercial, and industrial uses, which are classified as urban/developed. These developed areas around the facility may provide habitat for birds and nests protected under the USFWS Migratory Bird Treaty Act (MBTA) and CDFW Fish and Game Codes (Sections 3500, 3503.5, and 3800), such as house finch (*Haemorhous mexicanus*), mourning dove (*Zenaida macroura*), and northern mockingbird (*Mimus polyglottos*), among other avian species.

5.2.1.7 Generator Tie-Line

SERC will be interconnected with the regional electrical grid by a new, approximately 0.35-mile-long, 66-kV generator tie-line to Southern California Edison Barre Station. The proposed 66-kV line will include one engineered steel pole at the SERC site, west of Dale Avenue, and will then submerge underground at the pole and route to Barre Station under Dale Avenue. The generator tie-line is not expected to support or affect special-status species.

5.2.1.8 Natural Gas Pipeline

SERC will also require construction of an offsite natural gas pipeline. The proposed natural gas supply pipeline for SERC will tap into existing Southern California Gas Company lines at either the intersection of Dale Avenue/La Palma Avenue (approximately 2.75 miles) or Dale Avenue/Lampson Avenue (approximately 1.78 miles). The pipeline route will run along Dale Avenue and is not expected to support or affect special-status species.

5.2.1.9 Sensitive and Special-status Plant Species

As discussed previously, the regional special-status plant species list (Appendix 5.2A) was evaluated against observed conditions and the results of rare plant survey to develop a list of plant species with potential to occur within the SERC survey area. This list includes regulatory status, habitat requirements, occurrence determination, and a rationale for the occurrence determination. Figures 5.2-4 and 5.2-5 provide previously documented locations of special-status plant species within a 1- and 10-mile radius of the SERC site. Twenty-one special-status plants species have been documented within the regional vicinity of the SERC (CDFW, 2016b). Three special-status plant species have been documented within 1 mile of the SERC.

All habitats within the SERC site have been previously altered, and there are no natural plant communities within areas of ground disturbance for the SERC facility, generator tie-line, and natural gas pipeline. Biological reconnaissance and rare plant surveys were conducted on June 30, 2016, during the appropriate floristic period to confirm the absence of suitable habitat for special-status plants. Survey methods and additional results are provided in the technical memorandum in Appendix 5.2B.

One historical record for Parish's brittlescale (*Atriplex parishii*; CNPS Rare Plant Rank 1B.1) was documented in 1881 within Buena Park (CDFW, 2016b). Parish's brittlescale is an annual herb typically found in alkaline or clay soils in vernal pool, chenopod scrub, or playa habitats (CDFW, 2016b; CNPS, 2016). One historical record for the San Bernardino aster (*Symphyotrichum defoliatum*; CNPS Rare Plant Rank 1B.2) was documented in the vicinity of Buena Park in 1896; however, this population has been extirpated because of development (CDFW, 2016b). San Bernardino aster is a perennial herb that occurs in meadows, seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes, swamps, and valley and foothill grasslands (CDFW, 2016b). An occurrence of southern tarplant (*Centromadia parryi* ssp. *australis*; CNPS Rare Plant Rank 1B.1) was documented in 1933 approximately 5 miles west of Santa Ana (CDFW, 2016b). Southern tarplant occurs along the margins of marshes, swamps, vernal pools, and valley and foothill grasslands with salt heliotrope (*Heliotropium curassavicum*) (CDFW, 2016b; CNPS, 2016). There is no suitable habitat for these special-status plant species within the proposed project disturbance area. In addition, no special-status plant species were observed during the June 2016 rare plant survey.

5.2.1.10 Sensitive or Special-Status Wildlife Species

During the biological reconnaissance surveys, the regional special-status wildlife species list was evaluated against observed conditions to determine which species could occur or have the potential to occur in the SERC survey area. Appendix 5.2A lists sensitive and special-status wildlife species that have the potential to occur within the region (CDFW, 2016b) (see Figures 5.2-4 and 5.2-5 and Appendix 5.2A). Appendix 5.2A lists species, their regulatory status, habitat requirements, occurrence potential determination, and a rationale for the occurrence determination within the respective area.

No special-status species within the regional vicinity were assessed with having moderate or high occurrence potential. In addition, only two special-status wildlife species have been documented within 1 mile of the proposed SERC site; the western mastiff bat (*Eumops perotis californicus*; CDFW SSC) and western tidal-flat tiger beetle (*Cicindela gabbii*) are discussed below (CDFW, 2016b).

5.2.1.10.1 Migratory Bird Treaty Act

Several avian species protected under the MBTA have the potential to occur within 1 mile of SERC. These species have adapted to foraging and nesting in urban/developed areas, and they include but are not limited to mourning dove, house finch, American crow (*Corvus brachyrhynchos*), and Anna's hummingbird (*Calypte anna*). The MBTA protects all migratory birds, including nests and eggs.

5.2.1.10.2 Bald and Golden Eagle Protection Act

No species protected under the Bald and Golden Eagle Protection Act have been documented within 1 mile of the regional vicinity of SERC.

5.2.1.10.3 Federal Endangered Species Act

No species protected under the federal ESA have the potential to occur within the vicinity of SERC.

5.2.1.10.4 California Endangered Species Act

No species protected under the CESA have the potential to occur within 1 mile of SERC.

5.2.1.10.5 State Fully Protected Species

No state fully protected species have the potential to occur in the region SERC.

5.2.1.10.6 State Species of Special Concern

One state SSC has been documented within the vicinity of the SERC project (CDFW, 2016b). Several occurrences of western mastiff bat (*Eumops perotis californicus*) have been recorded in the regional vicinity and within 1 mile of the SERC site (CDFW, 2016b). According to CDFW (2016b), these bats are typically found in arid to semi-arid habitats including deciduous and conifer forests, as well as in grassland, chaparral, and coastal scrub habitat. The western mastiff bat roosts in cliff faces, trees, tunnels, and high buildings (CDFW, 2016b).

5.2.1.10.7 State Special Species

State special species are considered to be sensitive but do not have regulatory protection. One special animal, western tidal-flat tiger beetle, has been documented within 1 mile of the SERC site (CDFW, 2016b). The western tidal-flat tiger beetle inhabits estuaries and mudflats along the coast of southern California (CDFW, 2016b). There is no suitable habitat for this species within the SERC site. No other special animals are expected to occur within the vicinity of the SERC.

5.2.2 Environmental Analysis

Potential direct and indirect impacts to biological resources were evaluated to determine the permanent and temporary effects of construction and operation of the proposed SERC project. Results from the field surveys, habitat evaluations, and aerial imagery interpretation were evaluated to address the potential for presence of sensitive biological resources in the SERC project area. There is no suitable habitat for special-status species within the SERC site. Potential minor and less-than-significant impacts are limited to temporary noise disturbance during construction and possible avian collisions with the stacks and other structures.

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

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

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

5.2.2.1 Significance Criteria

The SERC would result in a significant impact on the environment if it would do the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as endangered, threatened, candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by CDFW or USFWS
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS
- Have a substantial adverse effect on federal or state protected waters of the United States
 (including wetlands) as defined by Sections 404 and 401 of the 1972 Amendments to the Federal
 Water Pollution Control Act, commonly known as the Clean Water Act, or the Porter-Cologne Act,
 either through direct removal, filling, hydrological alteration, or other means
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species
 or with established native resident or migratory native wildlife corridors, or impede the use of
 wildlife nursery sites
- Conflict with any local policies or ordinances protecting biological resources, such as a tree
 preservation policy or ordinance
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan
- Threaten to eliminate a plant or animal community

CEQA Section 15380 provides that a plant or animal species may be treated as "rare or endangered" even if the species is not on one of the official lists if, for example, it is likely to become endangered in the foreseeable future.

5.2.2.2 Potential Impacts of Construction

Construction of the SERC is expected to begin on September 1, 2018, beginning with site preparation, and will conclude on September 30, 2019, for a total duration of approximately 12 months. Initial clearing of Parcel 1 (1.76 acres) will take place during the first week of construction. Parcel 2 (2.21 acres) will be used for construction laydown during the first phase of construction, which will take place on Parcel 1. Existing asphalt surfacing on Parcel 1 will be removed during a later phase of construction. Approximately 3.96 acres associated with the dirt, paved, and/or graveled portions of Parcels 1 and 2 will be permanently disturbed (Table 5.2-1).

Table 5.2-1. Summary of Unpaved SERC Permanent and Temporary Disturbance Areas (in acres)

Project Feature	Habitat Type	Permanent	Temporary	Total
SERC site	Urban/developed	3.96	0	3.96
Construction laydown area	Urban/developed	Entirely on site	Entirely on site	-
Worker parking	Urban/developed	None	None	-
66-kV generator tie-line	Urban/developed	-	1.4	1.4
Natural gas pipeline (2.75 miles × 10 feet)	Urban/developed	-	3.33	3.33
Process water supply line	Urban/developed	-	Negligible	0
Total		3.96	4.74	8.7

5.2.2.2.1 SERC Facility

Activities related to the construction of the SERC facility will require site preparation, including clearing of weedy, upland vegetation and grading of Parcel 1 (1.76 acres). Parcel 2 (2.21acres) will be used for construction laydown during the initial phase of construction at Parcel 1, and then existing asphalt will be removed and Parcel 2 will be resurfaced. The SERC site is located within a previously disturbed lot that is surround by commercial, industrial, railroad right-of-way, and other developed areas. Parcels 1 and 2 do not provide habitat for sensitive and special-status species listed in Appendix 5.2A. The Stanton Storm Channel bisect the parcels, but no direct impacts are anticipated. Initial site grading will implement an approved site drainage design to manage onsite surface flow. Construction of the SERC facility may also result in temporary noise impacts to wildlife species within the vicinity. However, because no noise-sensitive species have been identified within the SERC facility, these impacts are not expected to be significant because these species are adapted to urban areas with high levels of ambient noise.

5.2.2.2. Construction Laydown Area

Parcel 2 (2.21 acres) will serve as a construction laydown area during construction of the project elements located on Parcel 1. Parcel 2 will be used for equipment staging, material storage, worker parking, and temporary administrative buildings. In addition, the nearby Bethel Romanian Pentecostal Church, located approximately 350 feet south of the SERC site along Dale Avenue, will be used for additional worker parking. The laydown area and existing church parking lot have been developed and does not support special-status species. Use of the laydown area may also result in temporary noise impacts to wildlife species within the vicinity. However, no noise-sensitive species have been identified within the laydown area, and these impacts are not expected to be significant.

5.2.2.2.3 66-kV Underground Generator Tie-Line

Activities related to the construction of the 0.35-mile 66-kV generator tie-line will require site preparation. Constructing the generator tie-line will be located within previously developed/disturbed areas. Significant impacts to biological resources are not anticipated.

5.2.2.2.4 Construction Impacts to Special-status Plant Species

Sensitive or special-status plants are not expected to occur within the SERC site or along the linear features; therefore, the project is not expected to result in significant impacts to sensitive or special-status plant species.

5.2.2.2.5 Construction Impacts to Special-status Wildlife Species

Sensitive or special-status wildlife are not expected to occur within the SERC site or along the linear features; therefore, the project is not expected to result in significant impacts to sensitive or special-status wildlife species.

Foraging Habitat for Raptors and Bats. The SERC site does not provide suitable foraging habitat for sensitive and special-status species. Foraging birds are protected under various federal and state codes, including the MBTA and California Fish and Game codes 3503, 3503.5, and 3513. The SERC will not result in the permanent loss of foraging habitat for western burrowing owl (*Athene cunicularia*; CDFW SSC), raptors, and bats. Therefore, significant impacts to foraging habitat for raptors and bats are not anticipated.

Nesting Birds. The SERC site provides potential nesting habitat for several urban-adapted bird species. Nearly all birds with potential to nest in the SERC survey area are protected under the MBTA and California Fish and Game codes. The nesting season generally occurs from February 1 through August 31. The SERC will result in the permanent and temporary loss of nesting habitat for some migratory and resident birds. Potential impacts from construction activities on nesting birds could primarily occur from site clearance and grading. These impacts would be significant in the absence of mitigation. Initial clearance and grading of the construction laydown and SERC facility should be conducted prior to the

February 1 start of the nesting season, and should be preceded by surveys to locate potential active nests. Every attempt will be made to remove nesting substrate (tall grasses and shrubs) from the construction sites before the nesting season begins. If construction begins during the nesting season, surveys by a qualified biologist will be required to locate, protect, and monitor active nests until nestlings fledge. Mitigation measures designed to minimize potential impacts to less-than-significant levels are detailed in Section 5.2.4.

Noise and activity associated with SERC construction are not anticipated to cause significant adverse impacts because of the high ambient noise levels and the fact that birds that would nest in the area are urban-adapted species. Monitoring of nesting activities during construction activity may be necessary to determine whether nests could be significantly disturbed. With the implementation of the mitigation measures detailed in Section 5.2.4, any potentially significant impacts to nesting birds will be reduced to less-than-significant levels.

5.2.2.2.6 Impacts to Wildlife Corridors

The SERC is within the Pacific Flyway, a common route of bird migration that extends along the West Coast of North America that spans an area from the pelagic regions of the Eastern Pacific to the Great Basin. However, the area has been developed and is not anticipated to be a major corridor within the Pacific Flyway. Therefore, the SERC will not significantly impede migration along the flyway.

SERC does not provide substantial terrestrial wildlife habitat, and the SERC area has been intensively developed; therefore, no terrestrial wildlife corridors are currently present in the project area. Significant impacts to wildlife corridors are not expected to occur.

5.2.2.2.7 Wetlands and Waters of the United States

An NWI-designated riverine system, Stanton Storm Channel/Dale-Cerritos drainage canal, is located between Parcel 1 and Parcel 2 of the SERC site; however, no direct impacts are expected. SERC construction will not cause loss or fill of any wetlands and/or waters of the United States. SERC implementation has the potential to indirectly affect the Stanton Storm Channel because water will be applied to the SERC site and laydown area for dust control during construction, and erosion and sediment washed into surface waters could potentially impact this feature. The SERC stormwater design will be governed by stormwater best management practices (BMPs); therefore, no significant adverse effects are anticipated.

As discussed further in Section 5.15, Water Resources, the Applicant will prepare an erosion and sediment control plan that specifies BMPs to be implemented during all project activities to avoid sediment runoff and erosion that would cause degradation to waters of the United States. With the implementation of these mitigation measures and BMPs, impacts to wetlands and waters of the United States will be less than significant.

5.2.2.3 Potential Impacts of Operation

During operation, the SERC will produce combustion turbine emissions, water discharge, noise, and light. The potential for each of these products of SERC operation to adversely impact sensitive biological resources is discussed in the following sections.

5.2.2.3.1 Combustion Turbine Emissions

Air emissions from the combustion turbine exhaust stacks include nitrogen oxides and particulate matter less than 10 micrometers in aerodynamic diameter. A deposition analysis was performed for nitrogen and particulates based on the Tier 1 modeling procedures contained in the guidance document *Near Field Nitrogen Deposition Modeling Guidance* (USDA Forest Service, USFWS, and National Park Service, 2013). Rather than convert the annual concentrations for the SERC operational impacts presented elsewhere, AERMOD was specifically run for the annual average case with deposition

velocities of 0.05 and 0.02 meter/second for nitrogen and particulates, respectively. All other model options and settings were identical to those used for the refined analysis of annual impacts. The regular receptor grids were modeled to determine the regional maximum deposition rate, while the annual impacts were averaged for all the regular receptor grids to obtain a regional average deposition rate.

Nitrogen oxide gases (nitric oxide and nitrogen dioxide) convert to nitric acid and ultimately nitrate particulates in a form that is suitable for uptake by most plants. The effect of this nitrogen could be to promote plant growth that could potentially encourage nonnative plant species at the expense of native species. There are no sensitive habitats that may harbor sensitive plant species susceptible to the effects of nitrogen deposition area within 6 miles of the SERC site. The SERC's maximum nitrogen deposition rate would be 0.188 kilograms per hectare per year (kg/ha/yr) at the maximum impacted receptor. The average depositional rate would be less than 0.036 kg/ha/yr across the entire modeling domain, which is the rectangular area within 10 km of the project. The maximum level of nitrogen deposition from the SERC in the Seal Beach National Wildlife Refuge area is estimated at 0.012 kg/ha/yr, which is far below levels necessary to cause adverse effects. Therefore, it is unlikely that there would be significant impacts to biological resources from nitrogen deposition

5.2.2.3.2 Stormwater and Process Water Discharge

Wastewater from infrequent combustion turbine water washes will be collected in holding tanks (one for each combustion turbine generator) and will be hauled away by a licensed waste hauler. Each auxiliary skid for the gas turbine packages will be procured with weatherproof enclosures or will have rain shelters to prevent potential contamination of storm waters. As such, no collection of contaminated storm waters will be needed. Wastewater (or other wastes) from occasional small leaks on skids within the enclosures will be retained on the skid and tested for oily residue prior to release into surrounding permeable areas, and if oil contamination is present, will be collected with rags and sorbents and disposed of accordingly for any contaminants observed.

SERC will not have a practice of washing down any equipment with oily residues. Equipment that has oily residues will be cleaned with rags and sorbents, and appropriate cleaning solutions will be applied to the rags and sorbents. After the cleaning, the oily rags and sorbents will be properly stored, manifested, and disposed of by licensed disposal companies in the regulatory required time frames.

SERC will prepare a stormwater pollution prevention plan that specifies BMPs to be implemented during all project activities to avoid stormwater discharges that would cause water quality degradation. Any stormwater that is discharged into surface waters would be potentially harmful to water quality downstream.

Because SERC will draw process water from a water supply system and then discharge a small amount of industrial wastewater into the sanitary sewer system, there will be no mechanism for entrapment of aquatic species or discharging water to affect aquatic resources during operations. There will be no full-time worker occupation of the site, and no sanitary facilities will be located there. Therefore, significant adverse effects are not anticipated.

5.2.2.3.3 Noise and Light from Plant Operations

The SERC site is adjacent to industrial and commercial land uses. These existing conditions result in several sources of lighting and noise emissions. Operation of the SERC will produce some noise, as described in Section 5.7, Noise. The SERC site contains limited habitat for wildlife species, and the majority of the project vicinity has been developed. Ambient noise and light levels are already high; therefore, impacts are not anticipated to be significant.

5.2.2.3.4 Potential for Collision and Electrocution Hazard to Wildlife

The SERC site provides limited, marginal habitat for urban-adapted bird species. The project vicinity has been developed, and construction of SERC is not expected to significantly increase avian collisions or

electrocutions. The 66-kV generator tie-line will also be located underground. Therefore, significant impacts are not anticipated.

5.2.2.3.5 Effects of Operation on Special-status Species

Impacts to Special-status Plants. There are no sensitive or special-status plants located at the SERC site or along the linear features; therefore, the project is not expected to result in significant impacts to sensitive or special-status plant species.

Impacts to Sensitive and Special-status Wildlife Species. There are no sensitive or special-status wildlife located at the SERC site or along the linear features; therefore, the project is not expected to result in significant impacts to sensitive or special-status wildlife species.

5.2.2.3.6 Operation Phase Impacts to Wetlands and Waters of the United States

The Stanton Storm Channel is located on Parcel 2 of the SERC site, but there will be no direct or indirect effects to this drainage as a result of SERC operation. Therefore, no mitigation measures are being proposed.

5.2.3 Cumulative Effects

A cumulative impact refers to a proposed project's incremental effect together with other closely related past, present, and reasonably foreseeable future projects whose impacts may compound or increase the incremental effect of the SERC (Public Resources Code [PRC] Section 21083; 14 CCR 15064[h], 15065[c], 15130, and 15355). The majority of the area within 6 miles of the SERC site has been developed, and SERC would not result in a loss of significant habitat. Therefore, cumulative impacts from SERC are expected to be less than significant.

5.2.4 Avoidance and Minimization Measures

The following section describes the proposed measures that are intended to avoid and minimize potential adverse effects of the project to biological resources. A Biological Resources Mitigation Implementation and Minimization Plan will be prepared prior to construction that outlines how the Applicant will implement the mitigation and protection measures developed specifically for the project through consultation.

A site-specific worker environmental awareness program (WEAP), intended to educate construction workers and operators on biological resources in the area and the measures that will be undertaken to avoid or minimize impacts to these resources, will be administered by the Designated Biologist as part of the mitigation plan. The WEAP will include an oral, video/powerpoint, and/or written materials presentation that discusses the types of construction activities that may impact biological resources and the measures developed to avoid such impacts. The WEAP will also include appropriate contact information and procedures. The program will include information regarding encounters with wildlife and dealing with situations involving biological resources.

General construction measures to be implemented within the SERC area will be developed as part of the WEAP and will include the following:

- Provide construction monitoring by a qualified biologist to ensure compliance with the protection measures.
- Conduct preconstruction and clearance surveys for avian species, as applicable.
- Prepare standardized construction monitoring and compliance reports that analyze the effectiveness of the measures.

5.2.4.1 Minimization Measures for Site Restoration

5.2.4.1.1 Minimization Measure 1 – SERC Closure Plan

Over the long term, once the SERC facilities are no longer needed, the structures will be removed and the SERC area will be restored to approximate preconstruction conditions. Because rehabilitation of the site is not expected to occur for more than 30 years, a draft conceptual plan may be included as part of the Biological Resources Mitigation Implementation and Minimization Plan. This draft plan can then be updated at a later date (but no later than 1 year prior to closure) to reflect the current technology and regulatory requirements at the time of facility closure.

A formal rehabilitation plan for the SERC facility closure will be developed by the project owner and submitted to the California Energy Commission (CEC) Compliance Project Manager at least 1 year prior to facility closure.

The SERC facility closure restoration plan will include the following sections and details:

- Goals and objectives of the restoration
- A description of methods employed to achieve the restoration goals and objectives
- Success criteria used to determine whether the restoration is successful
- A monitoring and maintenance program, including details on remedial measures
- A description of annual reporting
- A restoration implementation and monitoring timeline and schedule of planned activities

5.2.4.1.2 Minimization Measure 2 – Nesting Birds

Sites to be disturbed during the nesting season between February 1 and August 31 will be surveyed for nesting birds prior to construction. A qualified biologist will perform a preconstruction survey for nesting birds in the SERC area, including areas within 100 feet of all SERC facilities, utility corridors, and access roads. If an active nest of a species protected under the MBTA is found, construction activity will be limited within an appropriately sized buffer around the nest, which will be monitored by a qualified biologist to avoid impacts to the nest. Nests may be relocated, or young birds may be rehabilitated and released under the guidance of CDFW, as necessary, to avoid project delays attributable to the presence of active bird nests.

Frequent (every few days) disturbance of potential nesting habitat may be initiated in project areas just prior to the nesting season to remove nesting substrate and discourage nesting in construction areas.

5.2.5 Laws, Ordinances, Regulations, and Standards

The following sections describe the LORS that apply to potential impacts on biological resources in the SERC area, and list the agencies responsible for enforcing the regulations. A summary of the LORS is provided in Table 5.2-2.

5.2.5.1 Federal LORS

5.2.5.1.1 Federal ESA (16 United States Code [USC] 153 et seq.)

Adverse impacts are defined as "take," which is prohibited except through authorization of a Section 7 or Section 10 consultation and Incidental Take Authorization. "Take" under federal definition includes "such act as may include significant habitat modification or degradation" (5 Code of Federal Regulations §17.3). Species that are not listed are not protected by the federal ESA, even if they are candidates for listing. However, USFWS advises that a candidate species (as well as species of concern) could be elevated to listed status at any time and, therefore, applicants should regard these species with special consideration. No federally listed plant or animal species are expected to occur within the vicinity of the SERC, and therefore no consultation with USFWS is necessary.

Table 5.2-2. Laws, Ordinances, Regulations, and Standards for Biological Resources

LORS	Requirements/Applicability	Administering Agency	AFC Section Explaining Conformance
Federal			
Federal ESA (16 USC 1531 et seq.)	Designates and protects federally threatened and endangered plants and animals and their critical habitat. Applicants for projects that could result in adverse impacts on any federally listed species are required to consult with and mitigate potential impacts in consultation with USFWS.	USFWS	The SERC is not anticipated to impact any federally threatened or endangered plants or animals (Section 5.2.2.2).
MBTA (16 USC 703 to 711)	Protects all migratory birds, including nests and eggs.	USFWS	The SERC will include mitigation measures to reduce impacts to resident and migratory birds to a less-than-significant level (Section 5.2.2.2).
Bald and Golden Eagle Protection Act (16 USC 668)	Specifically protects bald and golden eagles from harm or trade in parts of these species.	USFWS	The SERC is not expected to cause any adverse effects on bald and golden eagles (Section 5.2.2.2).
State			
CESA (Fish and Game Code Section 2050 et seq.).	Species listed under this act cannot be "taken" or harmed, except under specific permit.	CEC	The SERC will include mitigation measures to reduce impacts to State-listed species to a less-than-significant level (Section 5.2.2.2).
Fish and Game Code Section 3511	Describes bird species, primarily raptors that are Fully Protected. FP birds may not be taken or possessed, except under specific permit requirements.	CDFW	No FP bird species, primarily raptors, are expected to be impacted by the SERC project (Section 5.2.2.2).
Fish and Game Code Section 3503	States that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.	CDFW	The SERC will include mitigation measures to reduce impacts to bird nests and eggs to a less-than-significant level (Section 5.2.2.2).
Fish and Game Code Section 3503.5	Protects all birds of prey and their eggs and nests.	CDFW	The SERC project will include mitigation measures to reduce impacts to bird nests and eggs to a less-than-significant level (Section 5.2.2.2).
Fish and Game Code Section 3513	Makes it unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird.	CDFW	The SERC project in not anticipated to impact any birds of prey (Section 5.2.2.2).
Fish and Game Code Sections 4700, 5050, and 5515	Lists mammal, amphibian, and reptile species that are FP in California.	CDFW	No FP mammals, amphibians, and reptile species in California are expected to be impacted by the SERC project (Section 5.2.2.2).

Table 5.2-2. Laws, Ordinances, Regulations, and Standards for Biological Resources

LORS	Requirements/Applicability	Administering Agency	AFC Section Explaining Conformance
Fish and Game Code Sections 1900 et seq.,	The Native Plant Protection Act lists threatened, endangered, and rare plants listed by the State.	CDFW	No state threatened, endangered, or rare plants are expected to be impacted by the SERC project (Section 5.2.1.9).
Title 14, CCR, Sections 670.2 and 670.5	Lists animals designated as threatened or endangered in California.	CDFW	The SERC project is not expected to affect any threatened or endangered animals in California (Section 5.2.2.2).
California Fish and Game Code (Sections 1601 through 1607)	Prohibits alteration of any stream, including intermittent and seasonal channels and many artificial channels, without a permit from CDFW.	CDFW	No streams, including intermittent and seasonal channels, will be impacted by the SERC project (Section 5.2.2.2).
CEQA (PRC Section 15380)	CEQA requires that the effects of a project on environmental resources must be analyzed and assessed using criteria determined by the lead agency.	CEC	The AFC analysis and process is CEQA equivalent. All requirements under CEQA are met with the analysis in the SERC AFC.
Warren Alquist Act (PRC Section 25000, et seq.)	Warren-Alquist Act is a CEQA-equivalent process implemented by the CEC.	CEC	The AFC analysis and process is CEQA equivalent. All requirements under the Warren-Alquist Act are met with the analysis in the SERC AFC.

Note:

AFC = Application for Certification

5.2.5.1.2 MBTA (16 USC 703 to 711)

This statute protects all migratory birds, including nests and eggs.

5.2.5.1.3 Bald and Golden Eagle Protection Act (16 USC 668)

This law specifically protects bald and golden eagles from harm or trade in parts of these species. Bald and golden eagles are not expected to occur within the vicinity of the SERC.

5.2.5.2 State LORS

5.2.5.2.1 CESA

CESA (Fish and Game Code Sections 2050-2116) created the categories of "threatened" and "endangered" species to align with federal regulations. It converted all "rare" animals into the Act as threatened species, and requires mitigation for impacts to species and their habitat. CDFW requires a CESA Section 2081(a) permit for take of candidate or listed threatened and endangered animals for scientific, educational, or management purposes, as well as a CESA Section 2081(b) permit for incidental take of listed threatened and endangered animals from all activities. No state-listed species are expected to occur within the SERC site, and therefore SERC is not required to obtain a CESA Section 2081 (b) permit.

5.2.5.2.2 Fish and Game Code Sections 3500, 3503.5, and 3800

All birds are provided protection under Sections 3500, 3503.5, and 3800 of the California Fish and Game Code. Section 3503.5 prohibits the take, possession, and needless destruction of any bird of prey or nests or eggs of any species on the MBTA list except as otherwise provided in the codes and regulations. Disturbance of any active bird nest during the breeding season is prohibited. When nesting birds are present on a specific property, take must be avoided, and project proponents are required to reduce or eliminate disturbances within the active nesting territories or during the nesting season. The SERC has the potential to affect foraging habitat and/or nesting habitat for some urban-adapted bird species protected under the MBTA.

5.2.5.2.3 Fish and Game Code Section 3511

This code identifies bird species, primarily raptors, that are FP. FP birds may not be taken or possessed except under specific permit requirements. The SERC will not affect foraging habitat and/or nesting habitat for FP species.

5.2.5.2.4 Fish and Game Code Section 3513

This code makes it unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird.

5.2.5.2.5 Title 14, CCR, Sections 670.2 and 670.5

This code lists animals designated as threatened or endangered in California. State SSC is a category conferred by CDFW on those species that are indicators of regional habitat changes or are considered potential future protected species. These species do not have any special legal status, but are intended by CDFW for use as a management tool to take these species into special consideration when decisions are made concerning the future of any land parcel. No CDFW SSC have the potential to occur within the SERC site.

5.2.5.2.6 CEQA (PRC Section 15380)

CEQA defines "rare" in a broader sense than the definitions of threatened, endangered, or species of special concern. Under this definition, CDFW can request additional consideration of species not otherwise protected. CEQA requires that the effects of a project on environmental resources must be analyzed and assessed using criteria determined by the lead agency.

5.2.5.2.7 Warren Alquist Act (PRC Section 25000, et seq.)

The Warren Alquist Act is a CEQA-certified and CEQA-equivalent process implemented by the CEC. Preparation of this AFC will result in an assessment prepared by the CEC staff to fulfill the requirements of CEQA.

5.2.6 Permits and Permit Schedule

Because the SERC site is located within a developed area and no natural habitats are present, consultation with CDFW and USFWS is not required.

It is not expected that a Clean Water Act Section 404 permit will be required because the SERC will not affect waters of the United States. Similarly, a CDFW Streambed Alteration Agreement will not be needed because SERC will not affect a streambed or alter waters of the State.

5.2.7 Agency Contacts

Table 5.2-3 lists regulatory agency contacts for biological resources for this project.

Table 5.2-3. Agency Contacts for Biological Resources

Issue	Agency	Contact Information
State-listed species	CDFW, South Coast Region	Don Blankenship
	•	3883 Ruffin Road
		San Diego, CA 92123
		(858) 467-4201
ederally-listed species	USFWS	Chris Delith
		2493 Portola Road #B
		Ventura, CA 93003
		(805) 644-1766

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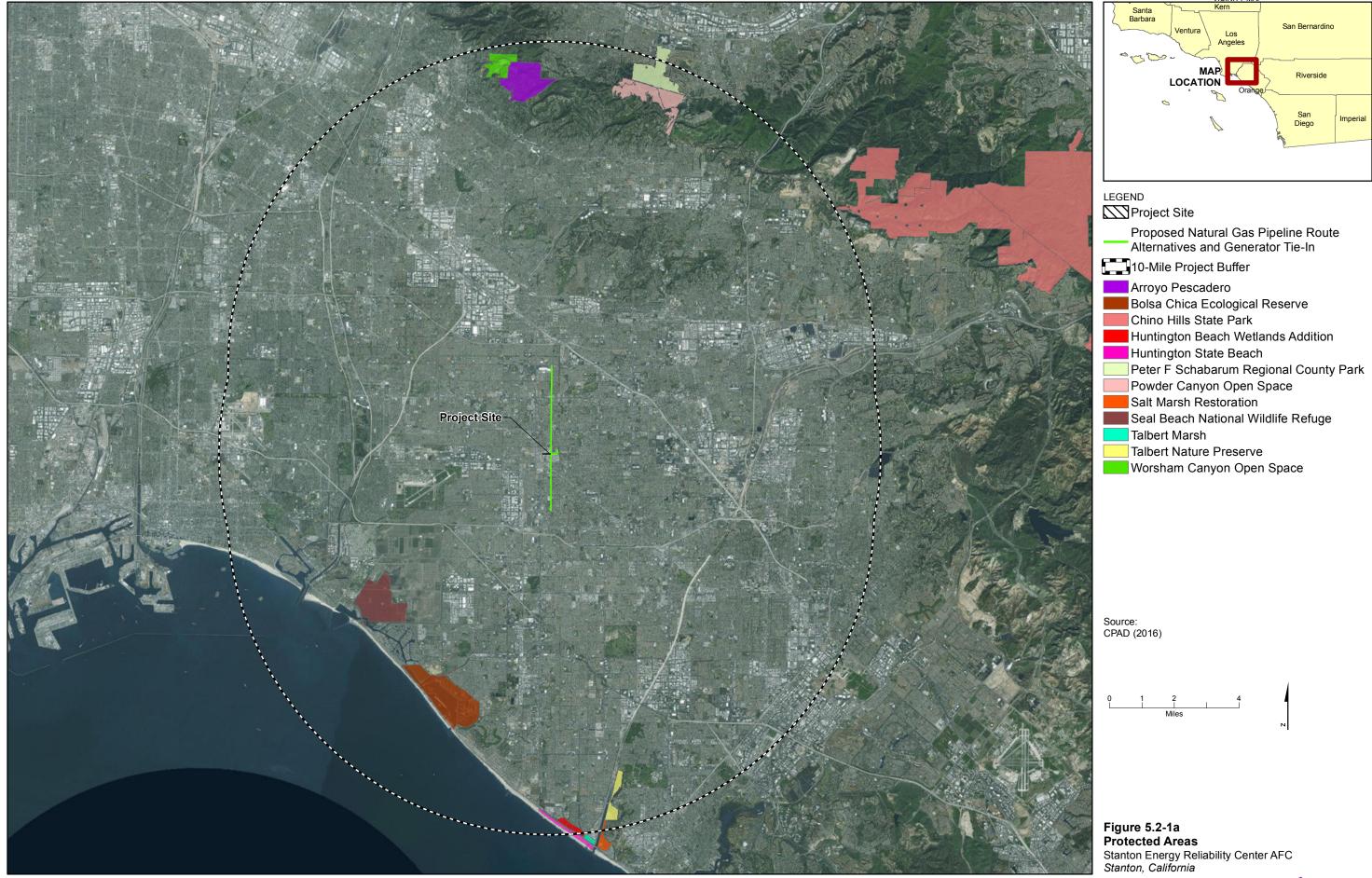
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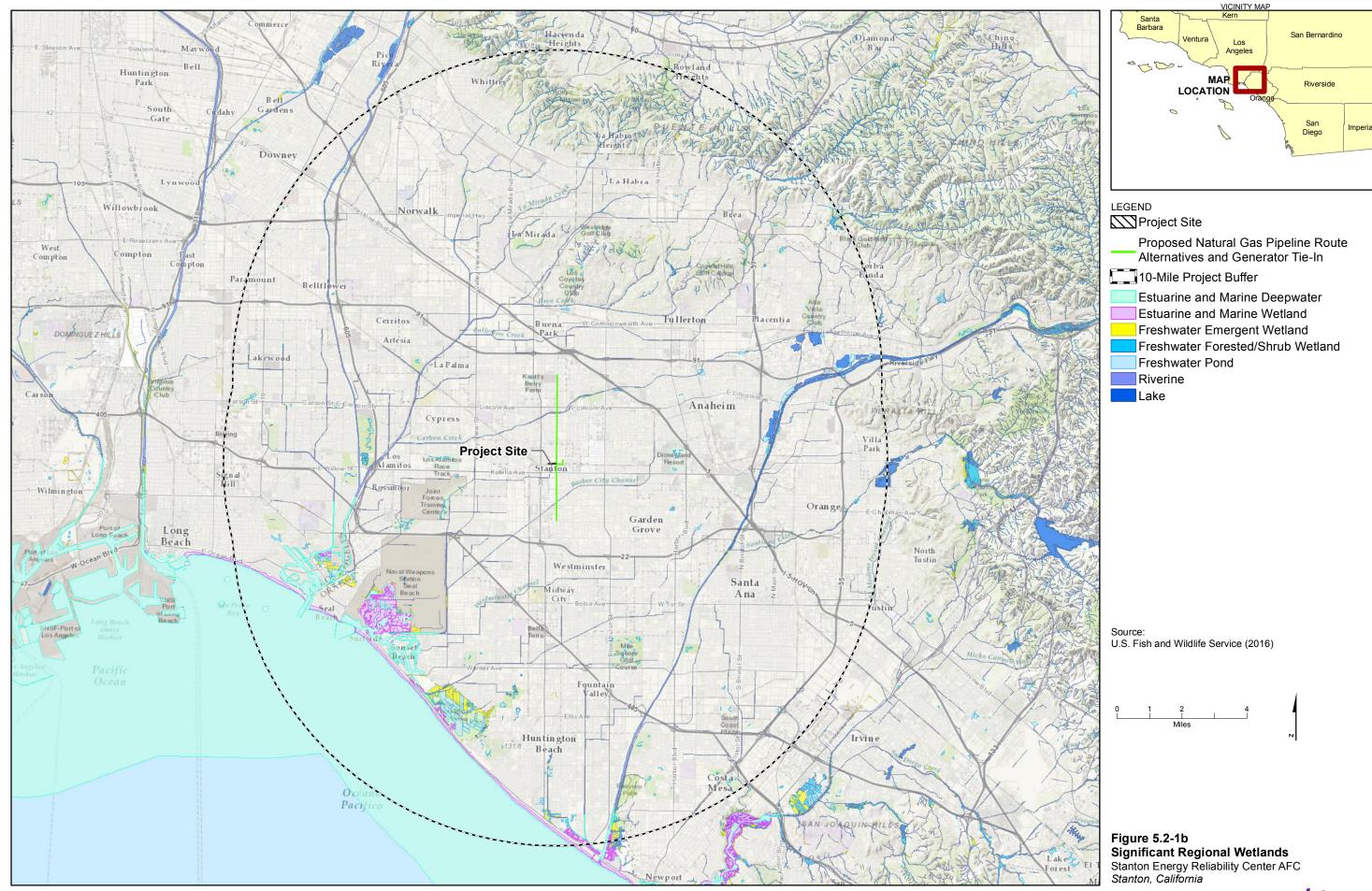
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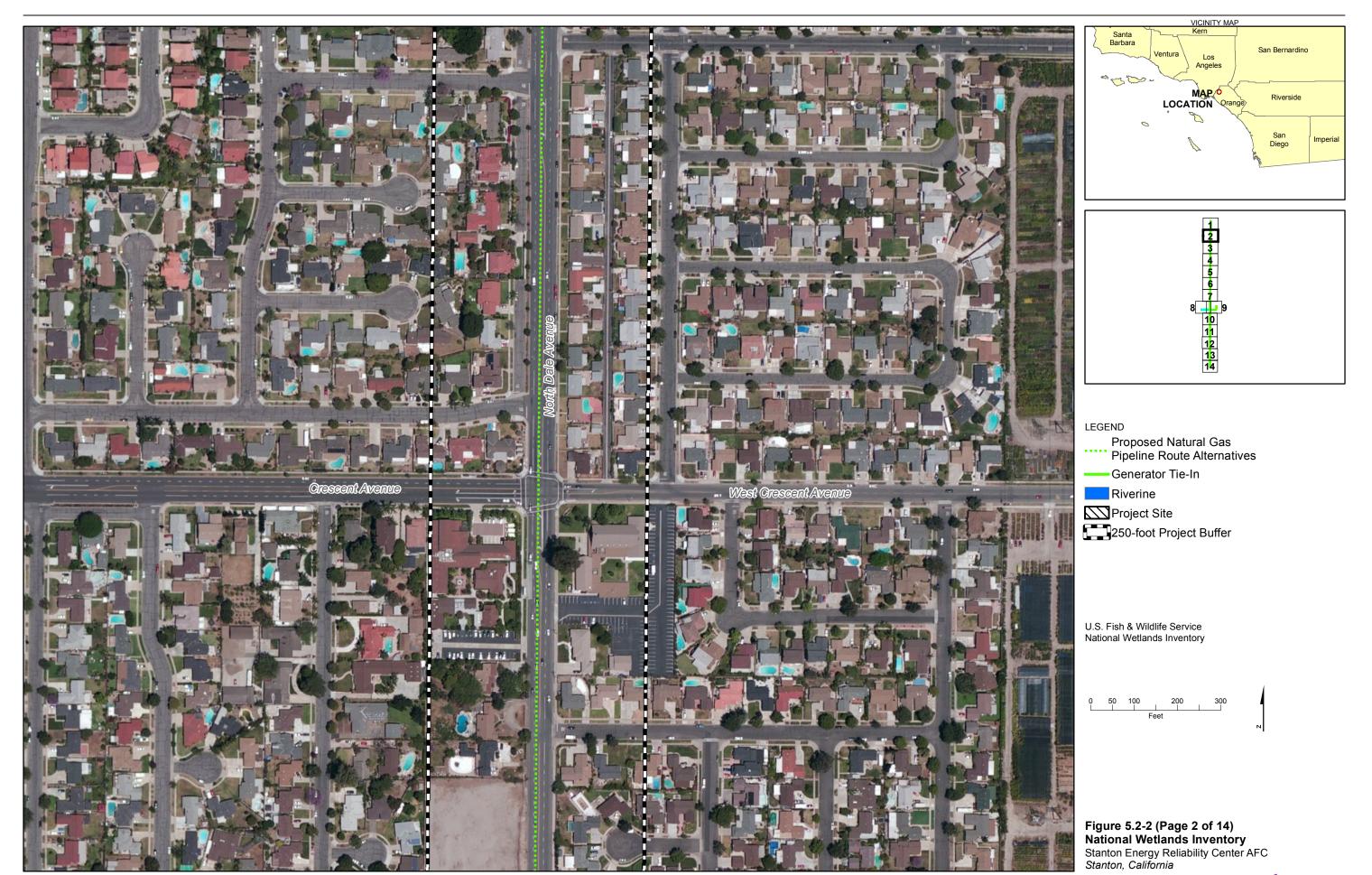
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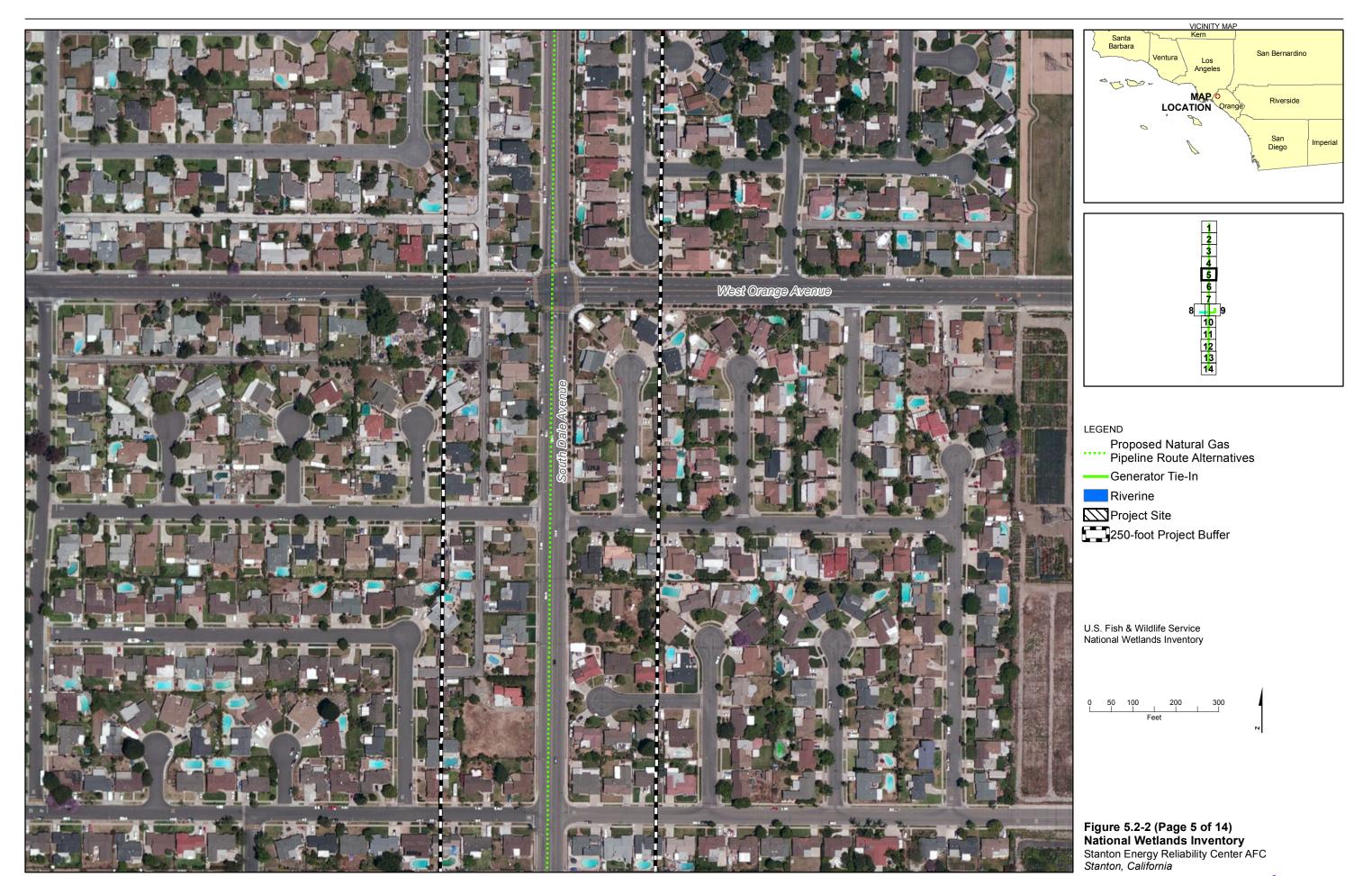


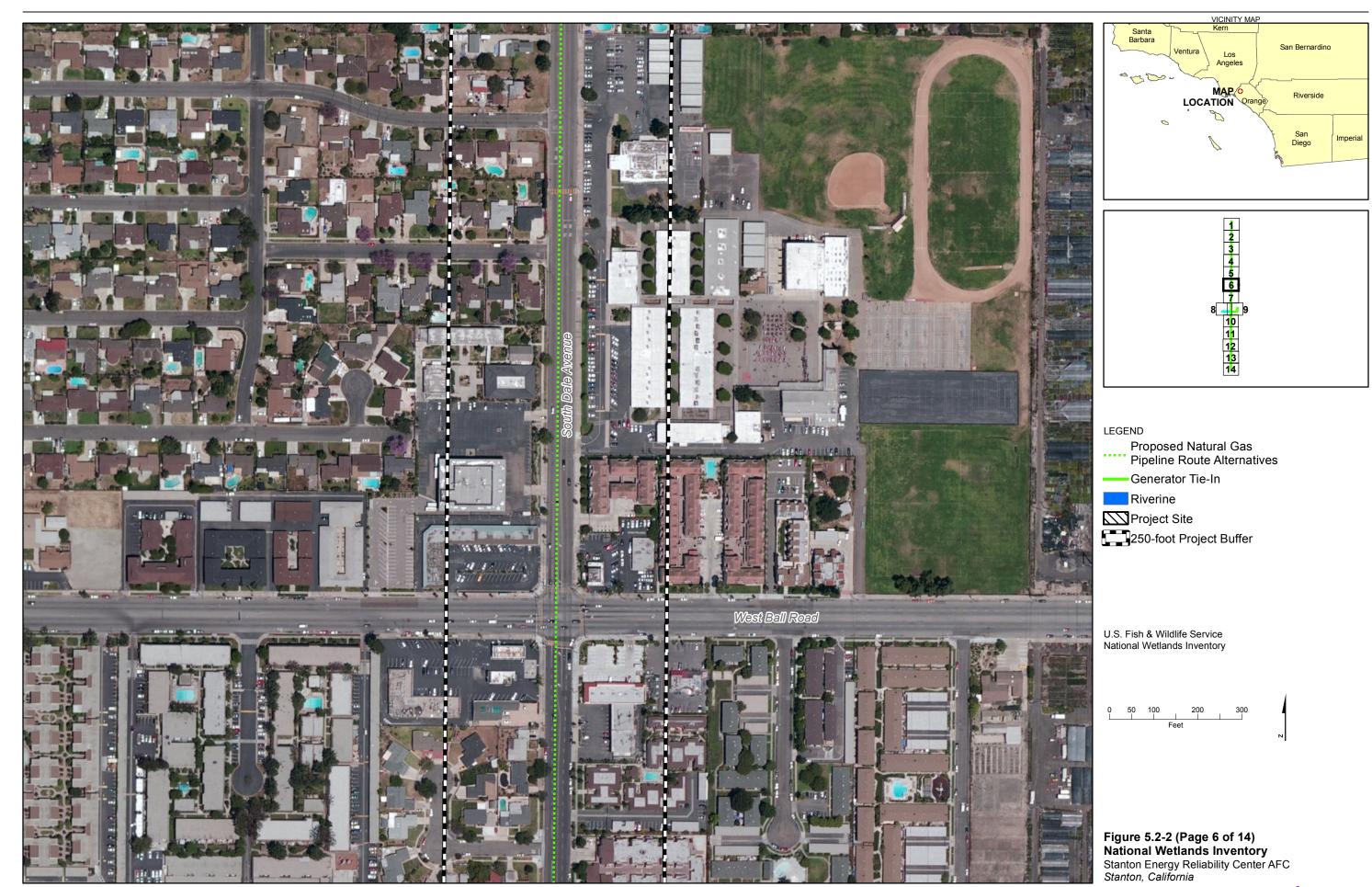


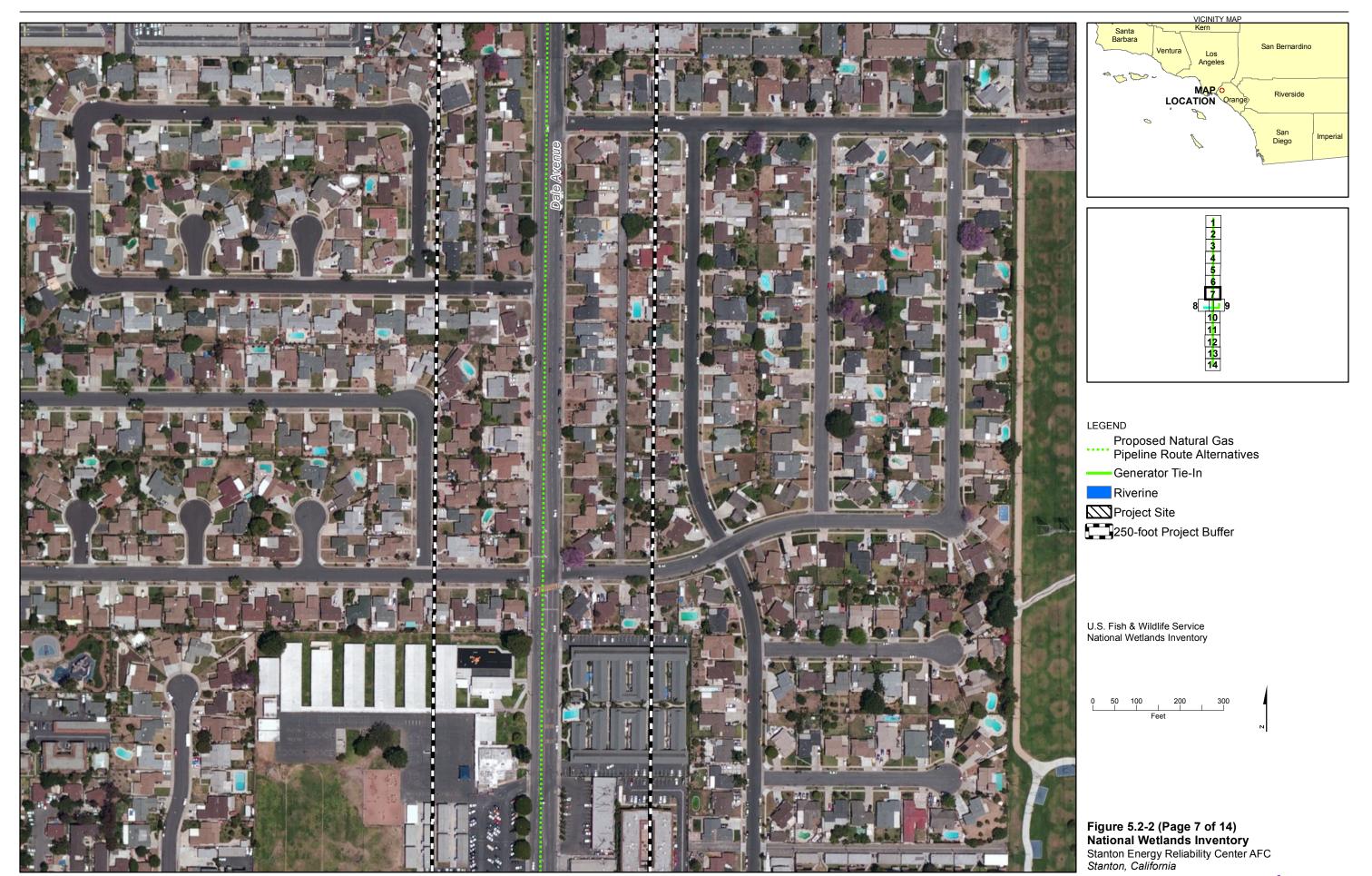


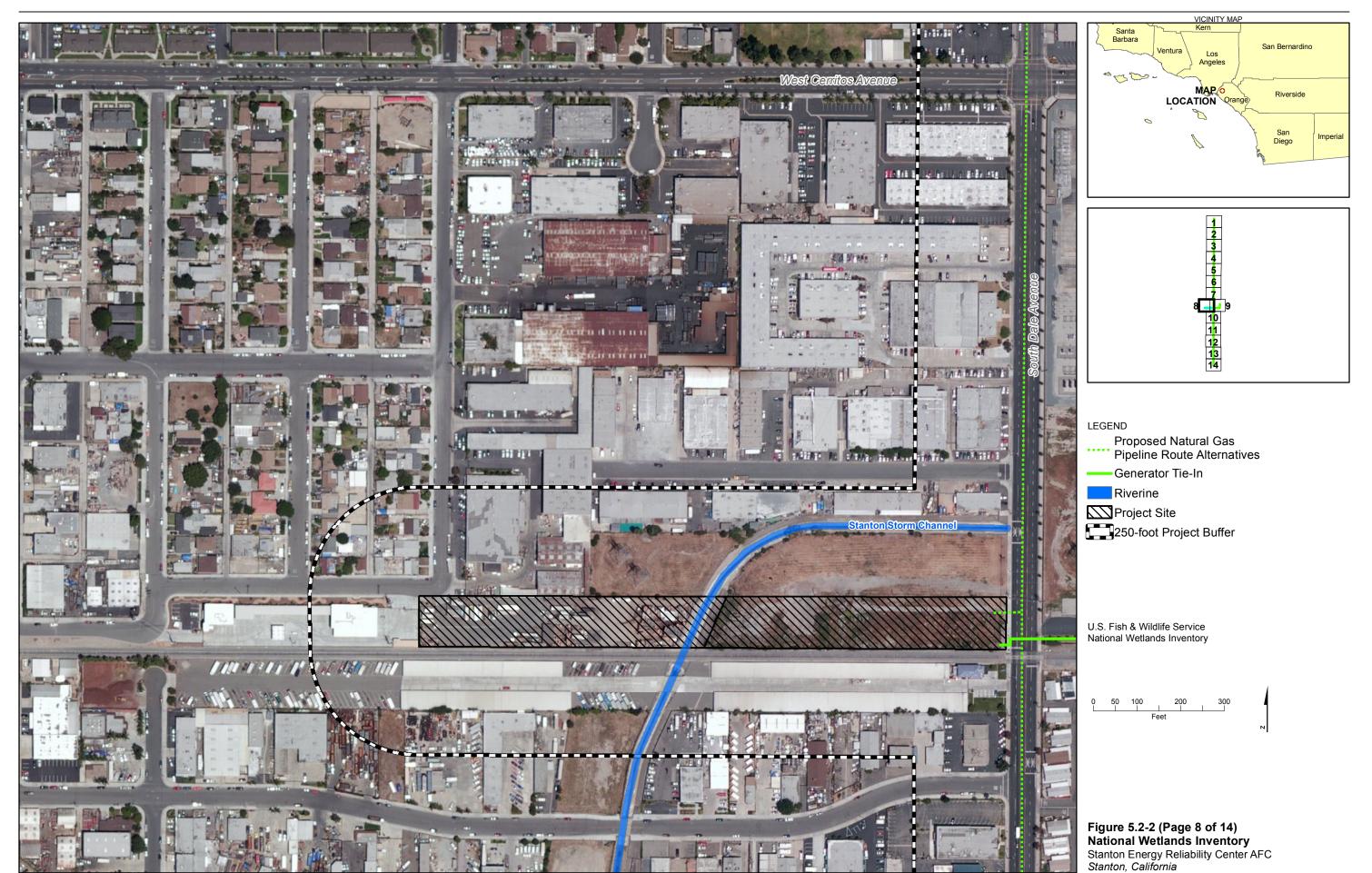






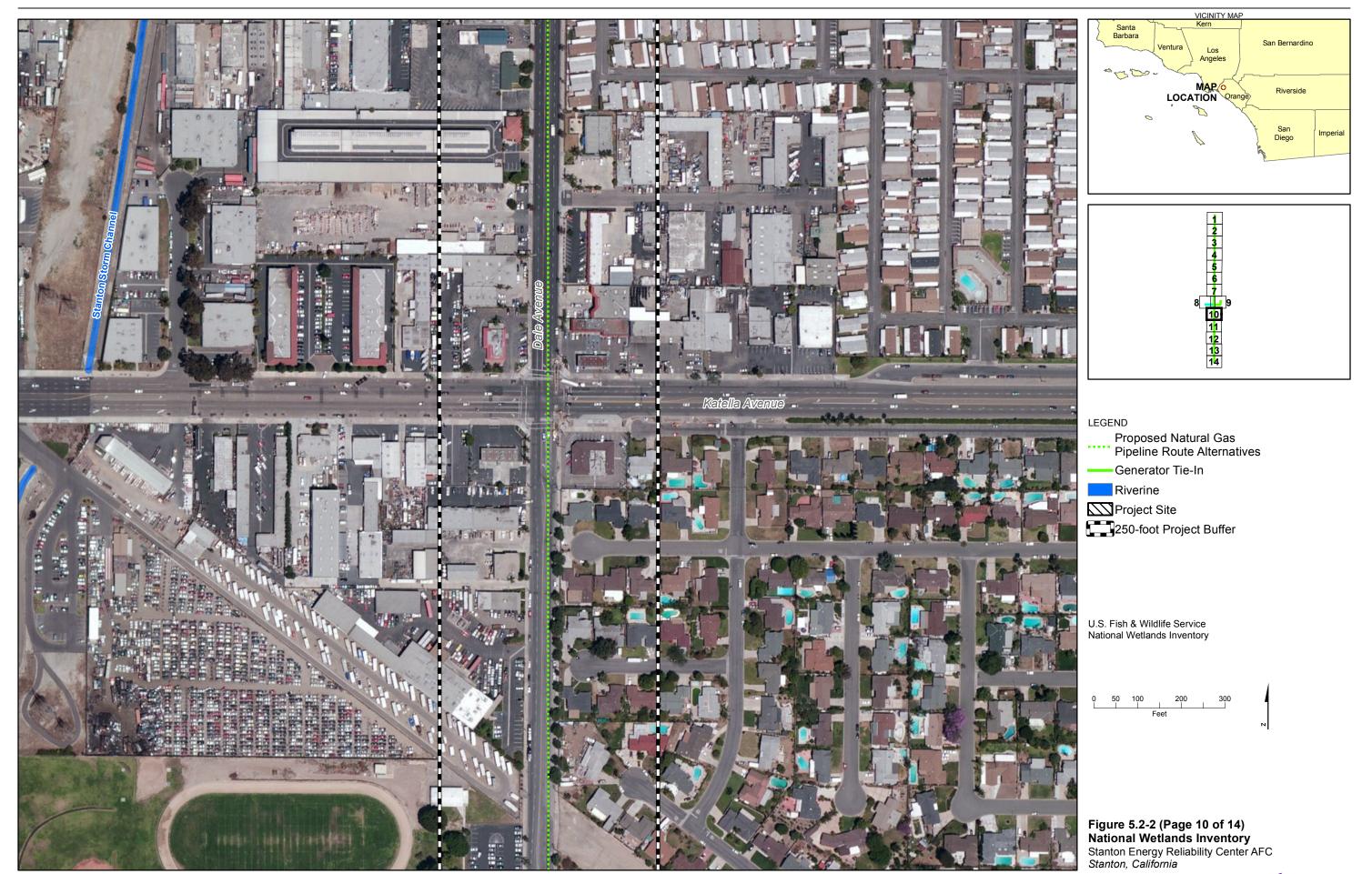






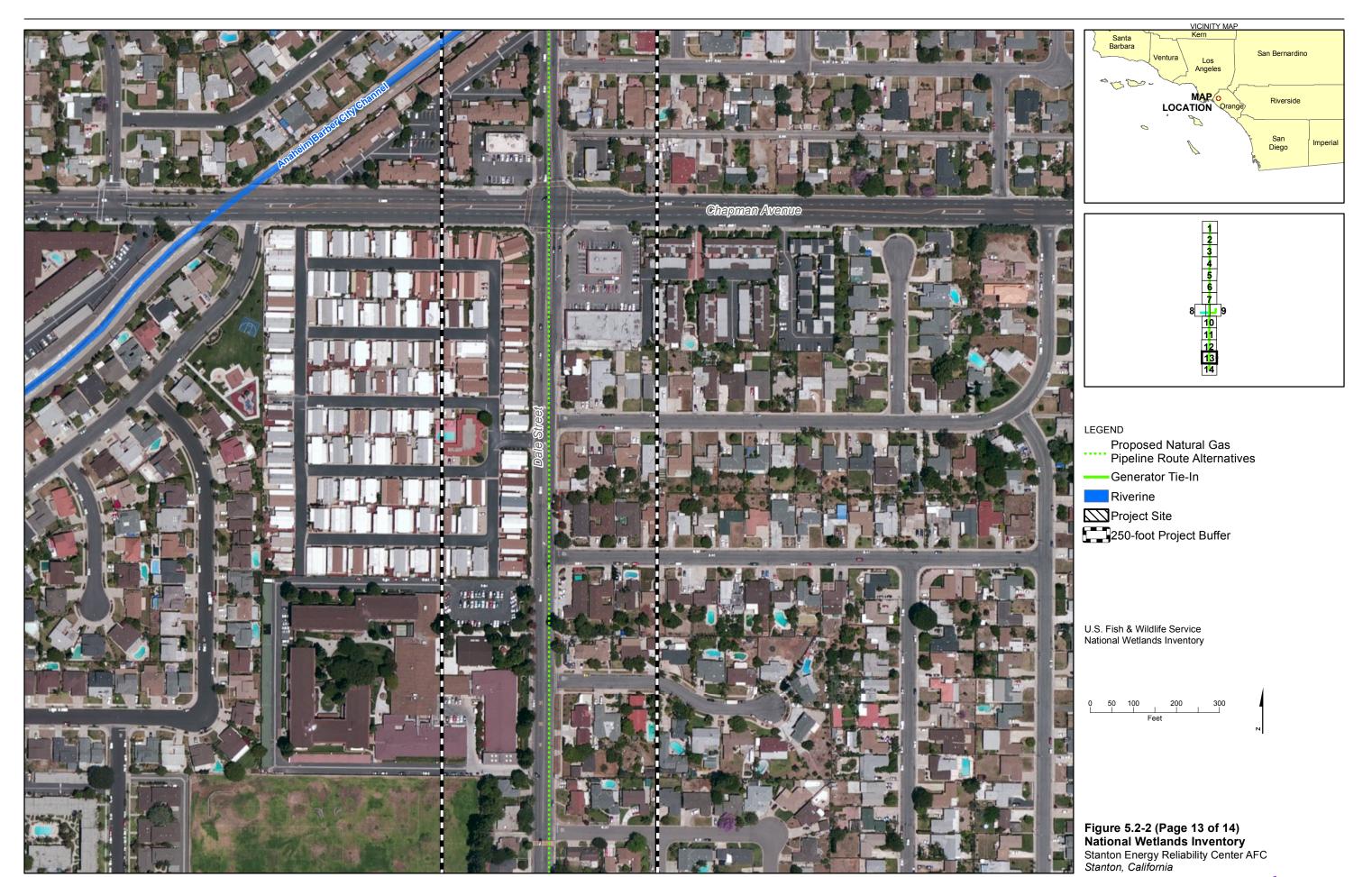


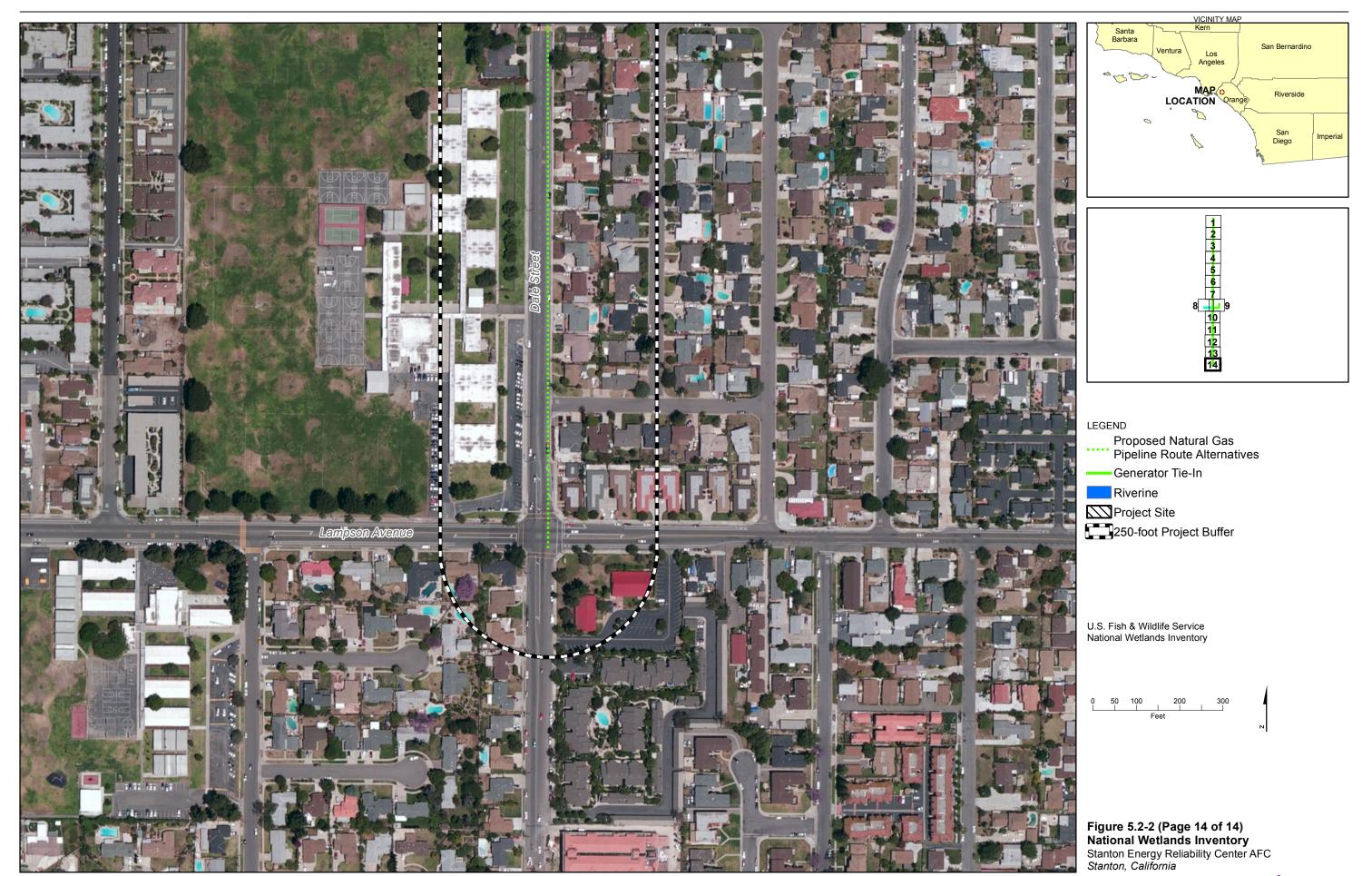
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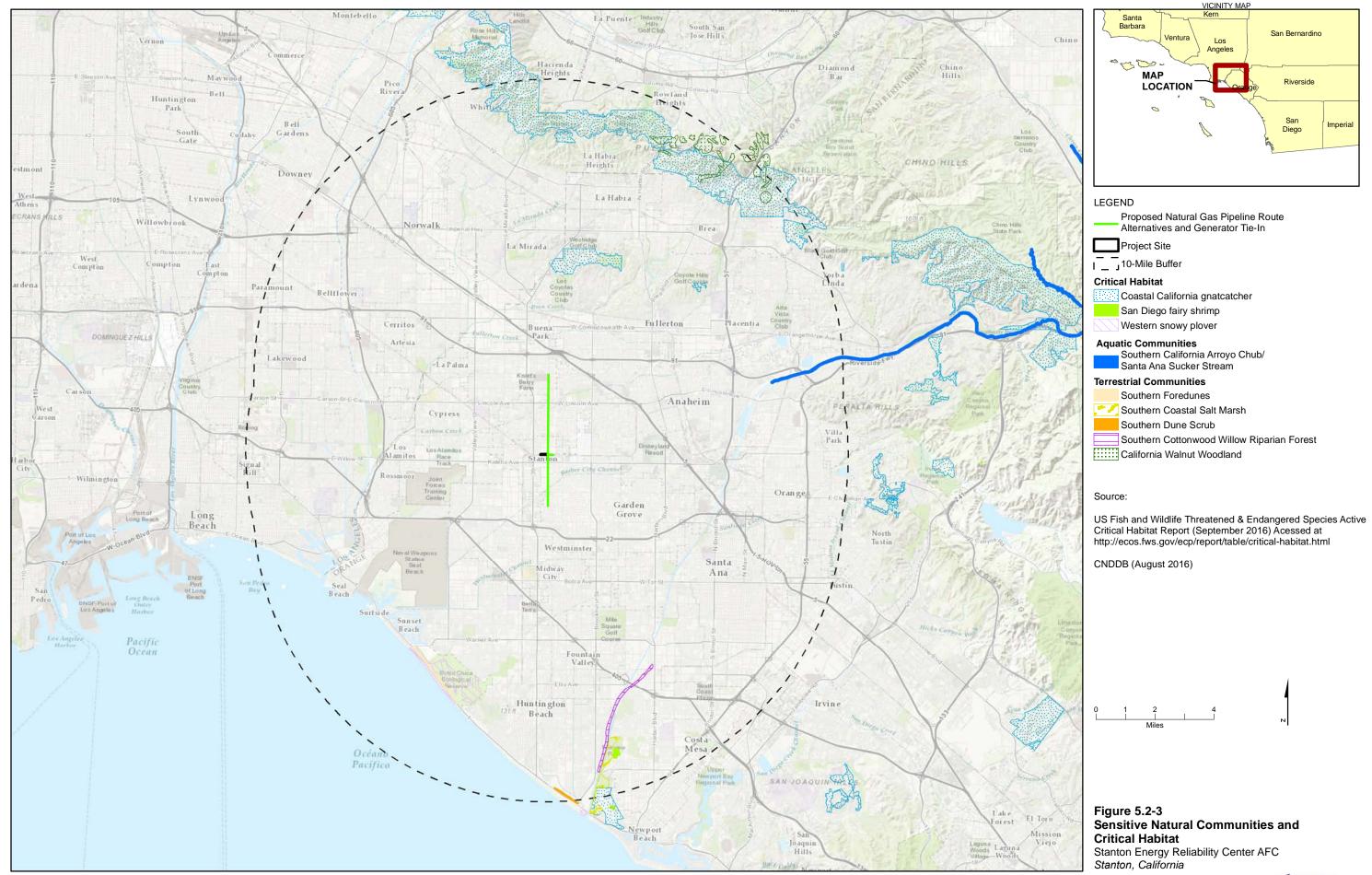


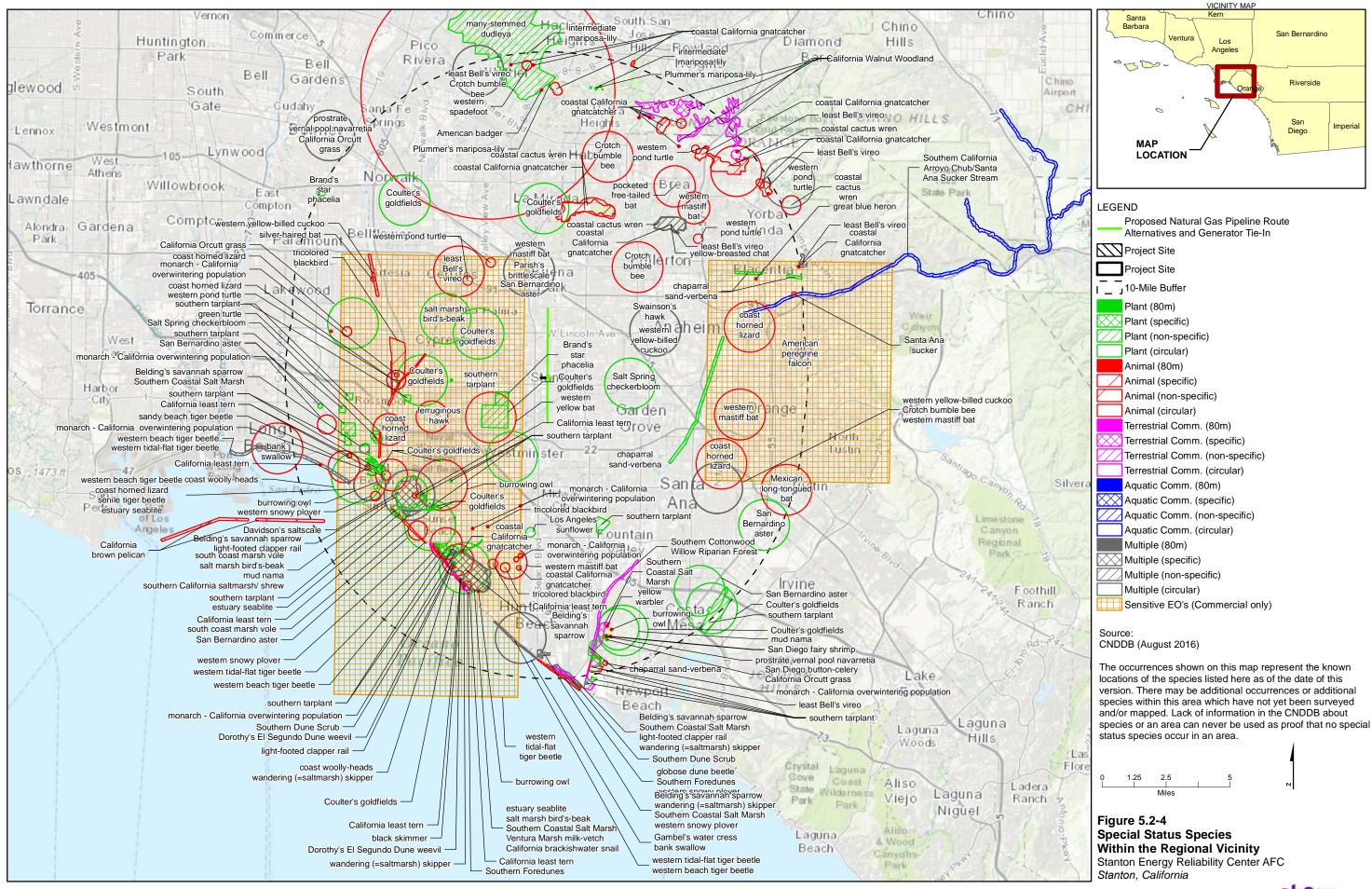


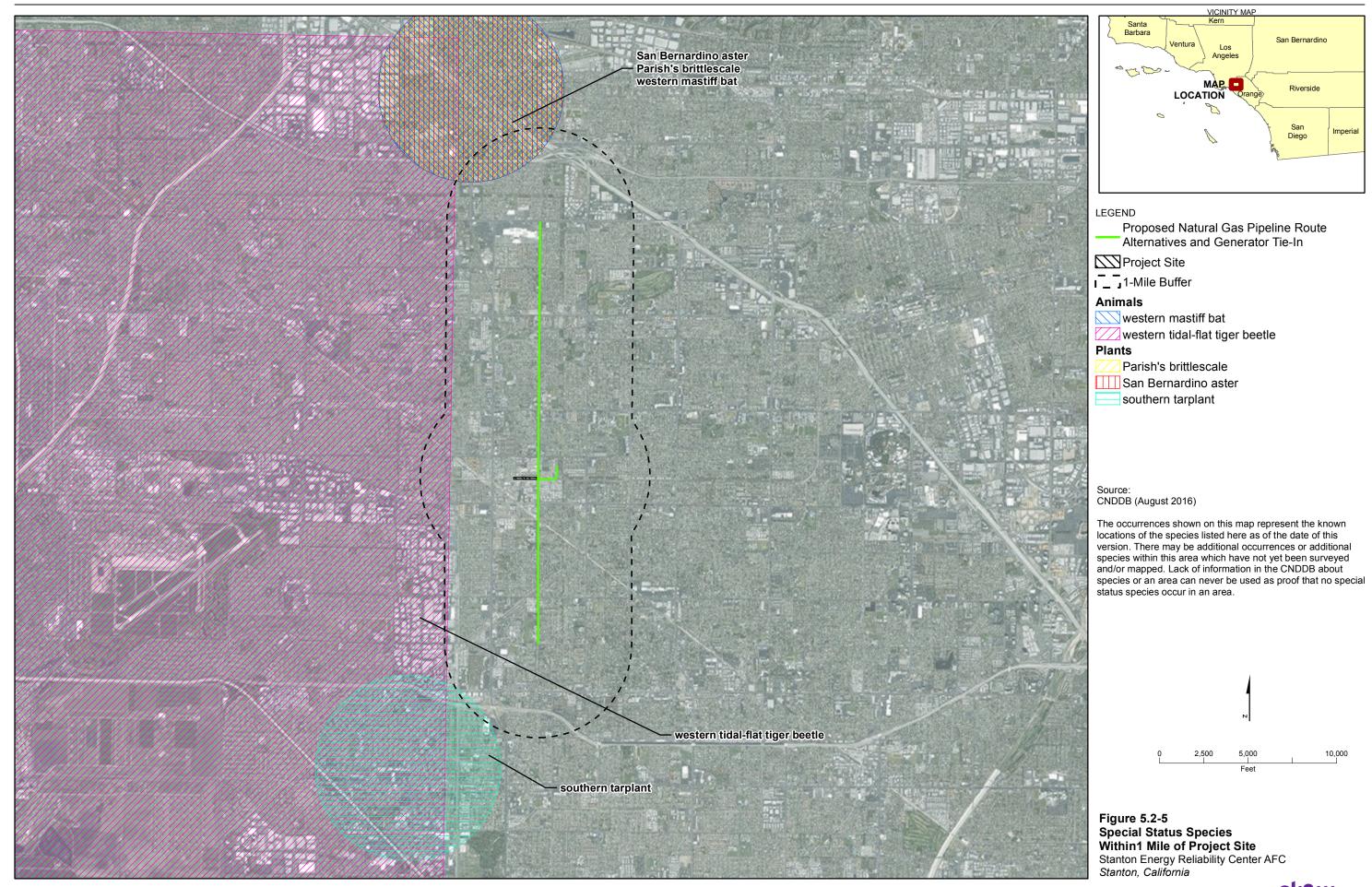












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