# 3.18.1 Impact Analysis

# **Summary of Impacts**

Table 3.18-1 presents a summary of the significance of impacts for each element of the Environmental Checklist, Appendix G of the CEQA Guidelines for Mandatory Findings of Significance.

Table 3.18-1 Summary of Proposed Project Impacts for Mandatory Findings of Significance

| Would the Proposed Project:   | Potentially<br>Significant<br>Impact | Less than Significant Impact with Mitigation Incorporated | Less than<br>Significant<br>Impact | No Impact |
|---|--------------------------------------|---|------------------------------------|-----------|
| Impact MFOS-1: Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? |                                      |   |                                    |           |
| Impact MFOS-2: Have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)   |                                      | $\boxtimes$   |                                    |           |
| Impact MFOS-3: Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?  |                                      |   |                                    |           |

### **Impact Discussion**

Impact MFOS-1: Would the proposed project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Significance Determination

Less than significant with mitigation

### Fish and Wildlife Species Habitat

The proposed project would involve the replacement of conductor and power poles along two existing power lines. Replacement poles would be placed an average of 12 feet away from the existing poles and within existing easements. As discussed in Section 3.4: Biological Resources, the proposed project would have no effect on habitat for fish. Construction activities would result in temporary and permanent impacts on habitat for wildlife; however, the small isolated areas of habitat loss around each pole would not substantially reduce the habitat of a wildlife species. The impacts on habitat for wildlife would be less than significant.

## Fish and Wildlife Population Levels

The proposed project would be located in upland areas and would have no effect on fish populations, as discussed in Section 3.4.6: Biological Resources. Grading, excavation, and vehicle and equipment access during construction of the proposed project could cause mortality or injury of individual wildlife if wildlife were to occur in the proposed project area at the time of construction. Project construction would last for approximately eight months. Project construction activities would be limited to pole work areas, existing access roads, a 50-foot segment of new access road, staging yards, and helicopter ILAs. The existing access roads, staging yards and helicopter ILAs are currently disturbed or developed and do not contain suitable habitat for wildlife. Construction activities in each pole work area would last for one day for direct bury poles to one week for foundation poles. There is a low potential for wildlife to occur in the proposed project area at the time of construction; therefore, the impact on one or a few individual wildlife of any species would not cause any wildlife population to drop below self-sustaining levels. The impact on wildlife population levels would be less than significant.

#### **Plant and Animal Communities**

Impacts on plant and animal communities are discussed in Section 3.4: Biological Resources. Impacts on plant and animal communities would be isolated to the individual work areas and would not impact communities of plants or animals. No impact would occur.

### Rare or Endangered Plants and Animal Numbers and Range

The proposed project would involve reconductoring two existing power lines within existing easements and transmission corridors. The proposed project would not restrict the range of any rare or endangered plant or animal species. No impact on the range of any rare or endangered species would occur.

# Rare or Endangered Plants

The proposed project has the potential to reduce the number of rare and endangered plant species through direct removal of individual plants during grading and construction, or through indirect impacts such as invasive weed introduction (see the discussion of direct and indirect impacts on special-status plants in Section 3.4: Biological Resources). Direct and indirect impacts on special-status plants could reduce the number of rare and endangered plants in the area, which would be significant impact. MM Biology-1 requires flagging of thread-leaved brodiaea populations, pre-construction surveys, and avoidance of rare and endangered plants, or salvage and relocation if avoidance is infeasible. MM Biology-9 specifies requirements for invasive weed control. The proposed project with mitigation would not reduce the number of any rare or endangered plant species. The impact would be less than significant with mitigation.

# Rare or Endangered Wildlife

The proposed project has the potential to impact rare or endangered wildlife, as discussed in Section 3.4: Biological Resources. Construction activities could injure or kill rare or endangered special-status wildlife individuals, resulting in a reduction in the number of species occurring in the area. The proposed project would also involve noise and light impacts, which could affect species breeding behavior and could result in nest abandonment and a reduction in rare or endangered species numbers. These impacts would be significant. MM Biology-2, MM Biology-3, MM Biology-4, MM Biology-5, MM Biology-6, MM Biology-7, and MM Biology-8 require worker training, pre-construction surveys, biological monitoring, noise buffers, use of exclusion fencing, and helicopter and lighting restrictions to avoid impacts on rare and endangered species numbers. The impact would be less than significant with mitigation.

### California History or Prehistory

Pole removal and installation, grading of access roads, vegetation removal, and other ground-disturbing activities have the potential to damage important examples of California history or prehistory, including CRHR-eligible and previously undiscovered historical, archaeological, and tribal cultural resources, including the SMAD. Damage to important examples of California history or prehistory including CRHR-eligible resources in work areas and areas that may be graded during access road re-establishment that would affect the integrity of those resources would be a significant impact. APM CUL-02 requires SDG&E to follow the avoidance and minimization recommendations in the Recommendations for Cultural Resources Protection and Avoidance report (HDR, Inc. 2015). Impacts would remain significant, because APM CUL-02 does not specify procedures to follow if previously undiscovered resources are encountered and does not address impacts from access road re-establishment. Cultural resource training, monitoring, evaluation, and avoidance of eligible cultural resources as necessary, would reduce the impact of construction activities on these resources (MM Cultural-1, MM Cultural-2, MM Cultural-3, MM Cultural-4, and MM Cultural-6). The proposed project would not eliminate

important examples of the major periods of California history or prehistory with implementation of mitigation.

**Mitigation Measures:** MM Biology-1, MM Biology-2, MM Biology-3, MM Biology-4, MM Biology-5, MM Biology-6, MM Biology-7, MM Biology-8, MM Biology-9, MM Cultural-1, MM Cultural-2, MM Cultural-3, MM Cultural-4, and MM Cultural-6 (refer to Sections 3.4: Biological Resources and 3.5: Cultural, Tribal Cultural, and Paleontological Resources)

Impact MFOS-2: Would the proposed project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

Significance Determination

Less than significant with mitigation

#### Introduction

Section 15130 of the CEQA Guidelines requires a discussion of the cumulative impacts of a project. Cumulative impact analysis accounts for the combined impacts associated with two or more projects in a given area. The following cumulative analysis evaluates the potential cumulative impacts from the proposed project in combination with other past, present, and probable future projects in the area. Based on the cumulative impacts analysis provided below, the proposed project would not result in a significant cumulative environmental impact.

# Approach to Cumulative Impact Analysis

CEQA Guidelines Section 15130(b) presents two approaches for analyzing cumulative impacts:

- A list of past, present, and probable future projects producing related or cumulative impacts, including those projects outside the control of the agency; or
- A summary of projections contained in an adopted local, regional, or statewide plan, or related planning document that describes or evaluates conditions contributing to the cumulative effect.

A hybrid approach is used in this IS/MND: a list of probable future projects is considered in combination with baseline conditions, agency projections, and adopted planning documents. The cumulative analysis considers, but does not exclusively rely on, planning documents to establish the cumulative scenario for the analysis.

### Area of Analysis

The analysis of potential cumulative impacts is generally limited to projects occurring within an approximately 2-mile-wide corridor centered on the approximately 10.24-mile-long proposed project alignment (i.e., 1 mile on each side of the alignment). The analysis area represents the physical extent of the limits in which indirect impacts of the proposed project may occur. For these reasons, the approximately 1-mile buffer is an appropriate distance to determine the potential for other probable future projects to be cumulatively considerable.

#### **Data Collection**

Information on probable future projects in the area was gathered from local planning department, federal, and state agency websites, and communication with City of San Clemente staff. The SDAPCD attainment plans, SCAQMD 2016 Air Quality Management Plan, RWQCB Basin Plans, and City of San Clemente General Plan were also reviewed to define the cumulative project context and appropriate thresholds for the analysis.

### **Past Projects**

Past projects to the north and west of the proposed project vicinity include residential, light industrial, and commercial developments; municipal and private recreational facilities; and open space within the city of San Clemente. Northeast of the proposed project is Orange County undeveloped land. Talega Substation is located at the northern terminus of the proposed project. East of the proposed project is MCB CPEN, with some agricultural land, small areas of mixed residential and commercial, and MCB CPEN facilities. SONGS Mesa is located at the southeast terminus of the proposed project, with SONGS located across I-5 from the proposed project.

# **Present and Probable Future Projects List**

Table 3.18-2 includes a list of present (i.e., under construction) and probable future projects considered in this cumulative analysis. The table indicates the project name, project type, a description of the project, its location and status. A total of 15 projects have been identified within 1 mile of the proposed project. The locations of cumulative projects in relation to the proposed project are shown on Figure 3.18-1. Each project in Table 3.18-2 has an assigned number that is keyed to Figure 3.18-1.

# **Cumulative Impact Analysis**

### Introduction

The cumulative impact analysis for the proposed project is provided for each of the environmental resource topics analyzed in this Initial Study. The proposed project would have no impact on Agriculture and Forestry Resources, Land Use, Mineral Resources, and Population and Housing; therefore, the proposed project would not contribute to cumulative impacts on these resources. These resource topics and cumulative impacts on these resources are not discussed in the following cumulative analysis.

#### **Aesthetics**

# Geographic Extent

The geographic extent for the analysis of cumulative impacts on aesthetic resources includes both local and regional viewsheds. Local cumulative effects could occur within the immediate proposed project viewshed (projects, activities, and landscapes visible within the same field of view as the proposed project) and could generally be visible along the proposed project alignment.

Table 3.18-2 Cumulative Projects List

|     | Project Name   |  |   |  |
|-----|--|--|---|--|
| No. | (Project Type)   | Project Components   | Location  | Status   |
| 1   | Ranch Plan Planned<br>Community<br>(Development)   | Allows for the construction of 14,000 dwelling units, 3,480,000 square feet (sf) of urban activity center uses, 500,000 sf of neighborhood center uses, and 1,220,000 sf of business park uses. Development is concentrated among eight planning areas. Planning Area 8 (500-acre maximum) is located near the proposed project, and may include a sheriff station, fire station, golf course, hotel, and an affordable housing community. | Planning Area 8 located<br>approximately 0.5 mile<br>northeast of the<br>proposed project (near<br>Talega Substation).          | Planning Area 8 is not scheduled for construction. Complete build out is anticipated in 2035.  |
| 2   | Avenida Pico-<br>Courtyards to Camino<br>La Pedriza<br>(Transportation)  | Street repaving project.   | Located 0.25 mile northwest of Segment A.   | Construction complete in 2016.   |
| 3   | South Orange County<br>Reliability<br>Enhancement (SOCRE)<br>Project<br>(Utility)                                      | Includes construction of a new double-circuit 230-kV transmission line from the proposed San Juan Capistrano Substation to SDG&E's 230/138/69-kV Talega Substation within an existing transmission line corridor, and the relocation of several distribution line segments (approximately 1.8 miles, total) adjacent to Talega Substation.   | A portion of SOCRE near<br>the Talega Substation is<br>located in the same<br>transmission corridor as<br>the proposed project. | Construction of the Talega corridor transmission lines would occur over nine months, starting in late 2019. The site development plan is currently in progress.  |
| 4   | North Area Waste<br>Water Conveyance<br>Pipeline, Military<br>Construction Project<br>P-1046A and P-1046B<br>(Utility) | Involves construction, operation, and maintenance of a pipeline and pumping station to support increased wastewater flows. Also, includes demolition of the existing pumping station and associated force main pipelines, decommissioning of an existing sewage treatment plant, and the construction of a pumping station.  | Proposed pipelines run<br>along segments of San<br>Mateo and Basilone<br>Roads and overlap with<br>proposed project area.       | Sewage lift station (P-1046A) construction is scheduled to begin in February 2017 and pipeline upgrades in June 2017. North Regional Tertiary Treatment Plant sewage pumping station, a sewer pipeline, and reclaimed water storage tank (P-1046B) are under construction. |
| 5   | TL 13835 Wood to Steel<br>Project  | Involves the removal of seven existing wood pole structures, installation of six new steel pole structures,  | Between Cristianitos<br>Road and the San<br>Mateo Substation.   | Project is in the design phase.  |

|     | Project Name  |   |   |  |
|-----|---|---|---|--|
| No. | (Project Type)  | Project Components  | Location  | Status   |
|     | (Utility)   | installation of communications cable, and transferring existing 69-kV and 12-kV underbuild.   | Overlaps with proposed project area.  |  |
| 6   | Montalvo Canyon<br>Outlet<br>(Utility)  | Drainage improvements to the reach of Montalvo Canyon natural waterway.   | Located approximately<br>1 mile west of Segment<br>F.   | Project is in the design phase.<br>Construction is anticipated to<br>start in the beginning of 2017. |
| 7   | Riviera Waterline<br>Removal<br>(Utility)   | Removal of the waterline within the canyon and slope.   | From S. Ola Vista towards<br>City boundary in Riviera<br>Canyon (located<br>approximately 0.75 mile<br>west of Segment F).              | Contract awarded.<br>Construction should begin in<br>November 2016.                                  |
| 8   | Recycled Waterline<br>Replacement-Calafia<br>State Beach to<br>Municipal Golf Course<br>Pond<br>(Utility) | Replacement of the asbestos cement line that spans 4,000 feet from Calafia State Beach to the golf course pond.   | From Calafia State Beach to the San Clemente Municipal Golf Course (located approximately 0.50 mile west of Segment F).                 | Design work is planned in<br>April 2017 with construction in<br>2018.                                |
| 9   | Avenida Del<br>Presidente Water Line<br>Replacement<br>(Utility)  | Replacement and relocation of the water line into the center of the street per City of San Clemente standards.  | Along Avenida Del<br>Presidente from Avenida<br>San Dimas to Avenida<br>Pala (located<br>approximately 0.25 mile<br>west of Segment F). | Project is in the design phase.<br>Construction anticipated to<br>start beginning of 2017.           |
| 10  | Large Scale Exercise<br>Training, MCB CPEN<br>(Training)  | Involves extended and expanded amphibious training exercises at MCB CPEN, including the Green Beach area, the Sierra Training Area, and landing beaches and inland training areas south of the proposed project.  | Beach, Sierra Training<br>Area, and adjacent<br>areas.  | Ongoing.   |
| 11  | Joint Logistics Over the<br>Shore (JLOTS),<br>Maritime<br>Prepositioning Force<br>(MPF), and Field        | Consists of an increased annual tempo of existing amphibious training exercises at various landing beaches and inland areas within MCB CPEN covering a larger area. Annual exercises would increase from 12 to 15, and training exercises would be expanded to include White Beach, located on the southern | Vehicle routes from the landing beach to the west of SONGS (i.e., "Green Beach") across segments of the proposed project.               | Ongoing.   |

| No. | Project Name<br>(Project Type)                        | Project Components  | Location  | Status  |
|-----|---|---|---|---|
|     | Training Exercise (FEX) Training, MCB CPEN (Training) | portion of MCB CPEN. JLOTS training would occur<br>once every three to five years, MPF exercises would<br>take place once every two years, and FEX training<br>could occur four times each year.  |   |   |
| 12  | Northern Advanced<br>Water Treatment Plant<br>P-1044  | Includes construction, operation, and maintenance of potable water infrastructure upgrades. Improvements will include a new water treatment plant and associated facilities, including an effluent discharge system and connection of the MCB CPEN northern and southern water systems.   | Located adjacent to<br>Segment C.   | Under construction.   |
| 13  | TL 692<br>(Utility)                                   | Involves reconductoring, removal of approximately 73 existing wood pole structures, and installation of roughly the same number of new steel pole structures along a seven-mile alignment between Las Pulgas Substation and Japanese Mesa Substation.   | The northern terminus of TL 692 is at Japanese Mesa Substation, which is the southern terminus of the proposed project.             | Project is in the preliminary design stage.                                     |
| 14  | SONGS Synchronous<br>Condenser Project<br>(Utility)   | Involves the initial installation of one synchronous condenser and related facilities (e.g., transformers, switchgear, relays) within SDG&E's existing switchyard area in the SONGS plant. Synchronous condenser enclosure would occupy approximately 20,000 sf within a development area of approximately 105,000 sf. Grading to create the pad for the enclosure requires construction of four retaining walls along portions of the pad and 22,500 cubic yards of grading. | SDG&E switchyard on<br>the west side of SONGS,<br>adjacent to I-5<br>(approximately 0.30 mile<br>southeast of proposed<br>project). | Construction completed in 2016. Project in the commissioning stage.             |
| 15  | Decommissioning of<br>SONGS<br>(Utility)              | Decommissioning and dismantling of the former SONGS facility.   | Approximately 0.30 mile southeast of the proposed project.  | Dismantlement work may begin by late 2017. Demolition planned to begin in 2024. |

Sources: (Rancho Mission Viejo 2016, Vuong 2016, City of San Clemente 2016b, Parker 2016, CPUC 2016a, Nguyen 2016, United States Marine Corps 2016, DoN 2010, Ryan 2016, Chenorro 2016) (City of San Clemente 2017, DoN 2015, United States Marine Corps 2012, SCE 2015, Areva 2015, SCE 2016)



Figure 3.18-1 Cumulative Projects

Regional cumulative effects occur when viewers perceive that the general visual quality or landscape character of a regional area is diminished by the proliferation of visible similar structures or construction, even if the changes are not within the same field of view as existing or known future structures or facilities. The result is a perceived "industrialization" or "urbanization" of the existing landscape character. Cumulative aesthetic impacts could occur from activities within 1 mile or less of the proposed project. Beyond 1 mile, structures become less distinct, or not visible because they blend in sufficiently with background forms, colors, and textures.

Also, beyond 1 mile it is likely that sightlines will become impaired or blocked by intervening terrain and vegetation. The geographic extent of the cumulative analysis therefore extends 1 mile from the proposed project.

### **Potential Cumulative Impacts**

The following projects listed in Table 3.18-2 would be in the same viewshed as the proposed project from public vantage points:

- Ranch Plan Planned Community (#1)
- Avenida Pico (#2)
- SOCRE (#3)
- JLOTS, MPF, and FEX (#11)
- TL 13835 (#5)

- Large Scale Exercise Training (#10)
- Wastewater Conveyance (#4)
- TL 692 (#13)
- SONGS Synchronous Condenser (#14)
- Decommissioning of SONGS (#15)

The remaining projects are not considered in the analysis of cumulative aesthetics impacts because they would either not be within the same viewshed as the proposed project due to intervening topography, buildings, and vegetation, or they would not be visible from a public vantage point (i.e., the project would be located within MCB CPEN and not visible from outside of MCB CPEN).

**Scenic Vistas.** The proposed project would be visible from a City of San Clemente scenic ridgeline, the Rancho San Clemente Trail; however, no other projects would be visible from the Rancho San Clemente Trail due to intervening topography, buildings and vegetation. There would be no cumulative impact on scenic vistas because no other projects would be visible from the Rancho San Clemente Trail.

Scenic Highways. Segments E and F of the proposed project would be visible from I-5, which is eligible for designation as a State Scenic Highway. Motorists on I-5 have a low to moderate viewer sensitivity. Cumulative projects #4, #10, #11, #13, #14, and #15 may also be visible from I-5; however, the visual change from these projects would be low. Construction of the wastewater conveyance (#4), TL 692 (#13), and decommissioning and dismantling SONGS (#15) would be visible from I-5; however, viewers would not be exposed to views of construction for more than a few minutes due to the fast speeds (65 miles per hour posted speed limit) at which motorists travel along I-5. During operation, the wastewater conveyance would not visible because it would be underground, and dismantling SONGS would remove a large industrial area from views along I-5, improving scenic quality. While replacement poles for TL 692 may be

taller than existing poles, reconductoring the line would replace an existing industrial element rather than introduce a new one. Training operations at MCB CPEN (#10 and #11) are ongoing, and viewers are accustomed to seeing training operations occur on MCB CPEN. The synchronous condenser at SONGS (#14) has already been installed and is visually consistent with the other industrial elements at SONGS. Cumulative impacts on scenic resources along I-5 would be less than significant.

Visual Quality. Existing utility infrastructure, including transmission lines and urban development, have compromised the existing visual setting in the proposed project vicinity such that the existing visual quality is low to moderate. Repaving of Avenida Pico (#2) would be complete by the time proposed project construction starts in 2018. Training activities (#10 and #11) at MCB CPEN are ongoing; the frequency of training activities has already increased, and viewers are accustomed to training activities at MCB CPEN. The elements of the Wastewater Conveyance project (#4) that would be visible in the same area as the proposed project would be underground and therefore not visible. These projects would therefore not contribute to a cumulative impact on visual quality.

Construction and/or operation of TL 13835 (#5), TL 692 (#13), and projects at SONGS (#14 and #15) would likely overlap with construction and/or operation of the proposed project. The reconductored transmission and power lines (#5 and #13) and projects at SONGS (#14 and #15) would occur in areas that have existing industrial elements. The reconductored TL 13835 and TL 693 would not significantly degrade existing visual quality in the area because they would replace transmission infrastructure in existing transmission corridors where the visual quality is low due to existing transmission infrastructure. The synchronous condenser installed at SONGS (#14) is visually consistent with the low visual quality of the energy infrastructure at the generation station. Decommissioning and dismantling SONGS (#15) could improve visual quality because it would remove industrial elements, and potentially create views of the Pacific Ocean that are not currently available to viewers; therefore, decommissioning would not adversely affect visual quality in the area. The industrial elements of these projects would be comparable to existing views and would not significantly affect visual quality in the area.

Operation of the proposed project would occur at the same time as construction and/or operation of SOCRE (#3), and full buildout of the Ranch Plan Planned Community (#1). SOCRE would replace existing wood 138-kV poles structures with new steel poles up to over 100 feet taller than existing structures. A portion of SOCRE would occur in the same transmission corridor as the proposed project near Talega Substation. Although the new steel poles for SOCRE would be installed in an existing transmission corridor, the poles would be much larger and taller than other transmission facilities in the corridor, creating a significant cumulative impact on visual quality when considered with the proposed project and other electrical improvements in the corridor. The Ranch Plan would introduce urban and suburban visual elements to what is currently an open space. The large expanse of housing and shopping centers would degrade the visual quality of the area, creating a significant cumulative impact on visual quality when considered with other developments in the area.

Segment A of the proposed project would be visible within the same viewshed as SOCRE, and proposed project Segments A and B would be visible within the same viewshed as the Ranch Plan Planned Community; the remaining segments of the project would be screened by intervening topography, vegetation, and buildings or backdropped by the landscape. Steel pole structures would replace existing wood poles in Segment A, and conductor would be installed on existing steel lattice towers in Segment B. While the proposed pole structures in Segment A would appear slightly larger and taller than the existing wood poles, the proposed pole structures would be much shorter than the adjacent and visually dominant steel lattice towers, including SOCRE. In the portion of Segment A where SOCRE and the proposed project would be installed in the same viewshed, the SOCRE pole structures would be up to approximately 81 feet taller than the proposed project pole structures. As a result, the visual change from the proposed project would be overshadowed by the visually dominant SOCRE pole structures, and the proposed project would not considerably contribute to a significant cumulative impact on visual quality.

While viewer sensitivity may be high from vantage points where both the proposed project and the Ranch Plan Planned Community would be visible, the proposed project pole structures and conductor would be visually comparable to the existing power line in both form and line, and would not significantly affect visual quality of the area. The proposed project would therefore not have a considerable contribution to a significant impact on visual quality.

**Light and Glare.** Construction of the projects listed above and the proposed project could occur during nighttime hours. Nighttime lighting could adversely affect sensitive receptors near construction activities; however, it is highly unlikely that nighttime lighting would occur simultaneously for the proposed project and the cumulative projects listed above, because nighttime lighting for the proposed project would only be conducted for emergencies and safety purposes. The cumulative impact from lighting would therefore be less than significant.

Metallic elements from the transmission and infrastructure projects (#3, #5, #13, #14, and #15) could produce glare if materials with reflective surfaces, particularly large structures such as steel lattice towers, are used to construct and/or to operate the projects. The proposed project would use specular conductor in the same transmission corridors as the cumulative transmission and infrastructure projects that could produce glare from additional steel structures and conductor. The cumulative impact from glare could be significant.

The proposed project would introduce a new potential source of glare from new conductor and fencing around staging yards and helicopter ILAs. Temporary fencing would only be visible in close proximity to staging areas and would not produce distracting glare. New conductor would be installed in existing transmission corridors where it would replace existing conductor and produce glare comparable to the existing lines. The largest potential source of glare from the proposed project would be the steel pole structures; however, SDG&E would install dull galvanized steel pole structures, which would not produce glare. The potential glare created by the proposed project would not contribute considerably to a potentially significant cumulative impact.

# Air Quality

### Geographic Extent

Air quality is a regional resource and is neither defined nor limited by jurisdictional boundaries, political boundaries, or project boundaries. The cumulative study area for air quality primarily encompasses activities within each air basin, SDAB and SCAB, which includes Orange and San Diego Counties, as detailed in Section 3.3: Air Quality.

### Impacts Avoided by the Proposed Project

The proposed project would not conflict with or obstruct implementation of the applicable air quality plans. The proposed project would not contribute to cumulative impacts from conflicts with applicable air quality plans.

### **Potential Cumulative Impacts**

**Regional Air Quality.** Regional air quality is affected by all activities that occur within the air basin. The SDAB and SCAB are in nonattainment for PM<sub>2.5</sub>, PM<sub>10</sub>, and ozone. Past, present, and probable future projects in the SDAB and SCAB have resulted in the nonattainment status for the SDAB and SCAB. The cumulative impact on existing air quality violations in the SDAB and SCAB and cumulative emissions from probable future projects of criteria pollutants for which the SDAB and SCAB are in nonattainment would be significant.

Cumulative impacts on regional air quality are addressed by the SDAPCD and SCAQMD thresholds of significance for construction and operational criteria pollutant emissions. The thresholds developed by each agency represent the levels at which a project's individual emissions of criteria air pollutants and precursors would result in a cumulatively considerable contribution to the region's existing nonattainment. If a project's emissions exceed the thresholds, the project would result in a considerable contribution to the cumulatively significant air quality impact in the applicable air basin.

Emissions generated during construction of the proposed project would not exceed the SDAPCD significance thresholds for ozone precursors in the SDAB and would not exceed SCAQMD significance thresholds for any air pollutant in the SCAB (refer to Section 3.3: Air Quality, Impact b). The proposed project's contribution to a significant cumulative impact to an existing air quality violation and nonattainment of ozone would be less than considerable.

**Local Air Quality.** Cumulative projects listed in Table 3.18-2 that have the potential to be constructed simultaneously with the proposed project include:

- Ranch Plan Planned Community (#1)
- Avenida Pico (#2)
- SOCRE (#3)
- Wastewater Conveyance (#4)
- TL 13835 (#5)
- Large Scale Exercise Training (#10)
- Montalvo Canyon Outlet (#6)
- Recycled Waterline Replacement (#8)
- Water Line Replacement (#9)
- JLOTS, MPF, and FEX (#11)
- TL 692 (#13)
- Decommissioning of SONGS (#15)

Carbon monoxide hotspots, fugitive dust emissions, and diesel emissions have the potential to result in localized air quality impacts. Construction vehicle and equipment used during construction of the cumulative projects would generate localized diesel and fugitive dust emissions in the vicinity of sensitive receptors. Construction timing may overlap for some of the cumulative projects, but construction of the projects would occur for a short duration and would not be concentrated in one location. Vehicle trip increases could elevate CO emissions at intersections; however, construction of the cumulative projects would be temporary and would not affect the same intersections. Only one cumulative project, the Ranch Plan Planned Community (#1), would increase traffic along routes to and from the development during operation; however, the increase in vehicle trips would not occur at the same time as construction of the proposed project and would not result in a cumulative impact. Localized CO emissions at intersections would not increase substantially from cumulative projects; the cumulative impact from localized emissions would be less than significant.

### **Biological Resources**

### Geographic Extent

The geographic extent for the biological resources cumulative analysis includes the extent of vegetation and wildlife communities and special-status species (including their habitats) that could be adversely affected by construction, operation, restoration, and decommissioning of the proposed project, specifically, all similar habitats within 1 mile of the proposed project. This geographic extent is appropriate because it accounts for the cumulative effects on special-status species including from noise, dust, and sedimentation, that could impact vegetation communities of concern or special-status species.

### Impacts Avoided by the Proposed Project

No impact from conflicts with local policies or ordinances, or conflicts with an adopted HCP or NCCP would occur as a result of construction, operation, or maintenance of the proposed project. The proposed project would not contribute to cumulative impacts on these resources.

### **Potential Cumulative Impacts**

Past, present, and all probable future projects listed in Table 3.18-2 contribute or would contribute to cumulative impacts on biological resources within the cumulative analysis study area.

Special-Status Species. Many special-status species, including plants, amphibians, reptiles, birds, and mammals, are found in the proposed project region. Direct cumulative impacts on special-status species could occur from injuring or killing plant or wildlife species and loss of special-status species' habitat through vegetation removal. Cumulative projects could result in indirect impacts on special-status species from construction or operational noise, dust caused by project activities, erosion, the introduction or spread of invasive species, and wildfires. Substantial impacts on special-status species' habitat and populations could occur during construction of Ranch Plan Planned Community (#1). Several other cumulative projects would also affect smaller areas of habitat and could impact individual special-status plants and wildlife (SOCRE [#3], TL 13835 [#5], Water Treatment Plant [#12], and TL 692 [#13]). The

cumulative direct and indirect impacts on special-status species would be potentially significant.

Construction of the proposed project would directly impact special-status species in the proposed project area (see Table 3.4-2) from loss of potentially suitable habitat, and injury or mortality of individuals. The proposed project could also indirectly impact special-status species from noise, introduction and/or spread of invasive non-native plant species, and dust, erosion, and sedimentation during construction. The proposed project alignment would traverse the nesting and foraging habitat of several special-status bird species. The proposed project's contribution to a significant cumulative impact on special-status species could be considerable. SDG&E has proposed APMs to reduce impacts on special-status species, including pre-construction surveys and monitoring for nesting birds, coastal California gnatcatcher, arroyo toad, and Pacific pocket mouse, as well as consultation under Section 7 of the ESA (APM BIO-01, APM BIO-02, APM BIO-04, and APM BIO-05). These APMs would not be sufficient to reduce the impact on special-status species to less than significant. The proposed project's contribution to a significant cumulative impact on special-status species could remain considerable. Mitigation measures (MM Biology-1, MM Biology-2, MM Biology-3, MM Biology-4, MM Biology-5, MM Biology-6, MM Biology-7, MM Biology-8, MM Biology-9, MM Biology-10, MM Biology-11, and MM Biology-14) would be implemented, which include additional pre-activity survey requirements, worker training, monitoring, and habitat delineation or fencing requirements to avoid and minimize direct impacts on special-status species, restore temporarily disturbed areas, and compensate for habitat impacts. The impact on thread-leaved brodiaea populations would be avoided with mitigation. The proposed project would not contribute to regional loss of habitat for special-status species with mitigation, and the proposed project would avoid considerable impacts on special-status species or populations. The proposed project would not contribute considerably to a significant cumulative impact on special-status species with mitigation.

Sensitive Communities and Wetlands. Wetlands, riparian habitat, and sensitive communities, including potential ESHA, occur throughout the region. The cumulative projects listed in Table 3.18-2 involve earth movement, grading, and habitat alteration that would temporarily and permanently impact wetlands, riparian habitat, and sensitive vegetation communities. Indirect impacts on sensitive communities and wetlands could occur from erosion and sedimentation, the introduction or spread of invasive species, and the loss of vegetation from wildfires. The cumulative direct and indirect impacts on sensitive communities and wetlands would be potentially significant.

The proposed project would not be located in wetland areas, and construction of the proposed project would not contribute to cumulative impacts on wetlands.

Construction of the proposed project would result in temporary and permanent direct impacts on sensitive vegetation communities from vegetation clearing and earthwork (see Table 3.4-10). Permanent direct impacts on sensitive vegetation communities would result from proposed pole structures and clearance areas. The proposed project could contribute considerably to

significant cumulative impacts on sensitive vegetation communities. MM Biology-9 and Biology-10 require restoration for temporary impacts on vegetation communities and compensation for permanent impacts on vegetation communities. The direct impact on sensitive vegetation communities would be less than considerable with mitigation.

Indirect impacts on sensitive vegetation communities could occur from introduction of invasive weed seed, erosion, sedimentation, and increased risk of wildfire. These indirect effects have the potential to result in the loss or degradation of large areas of suitable habitat near the proposed project. The proposed project includes implementation of a project-specific Fire Prevention Plan (Appendix E) to control wildfire. The proposed project would also comply with the requirements of the NPDES Construction General Permit to reduce erosion and sedimentation. The proposed project's contribution to significant cumulative impacts on sensitive vegetation communities from introduction of invasive weeds could still be considerable. MM Biology-12 requires weed control to minimize the potential for introduction of weed seed to the area. The indirect impact on sensitive vegetation communities would be less than considerable with mitigation.

Movement Corridors and Migratory Species. Loss of habitat has the potential to lead to habitat fragmentation or loss of movement corridors. Permanent loss of habitat could occur from vegetation removal with no restoration or return of vegetation after construction activities cease. The cumulative projects consist of infrastructure projects located within existing utility and transportation corridors and an isolated residential development project. The cumulative projects would not impact species migration because the infrastructure development within existing corridors and residential development would not create a new impact on wildlife movement patterns. The cumulative impacts on movement corridors and migratory species would be less than significant.

# Cultural, Tribal Cultural, and Paleontological Resources Geographic Extent

The geographic extent for the cultural resources cumulative analysis includes the entire SMAD and the limits of all cultural and tribal cultural resources, including any cultural landscapes and TCPs that could be affected by the proposed project.

The geographic extent for cumulative paleontological impacts of the proposed project includes the extent of the Bay Point Formation, Capistrano Formation, Monterey Formation, Pleistocene alluvial flood plain deposits, San Mateo Formation, and Santiago Formation, which have high paleontological sensitivity within the proposed project area. This geographic extent is appropriate because these geologic formations could contain similar paleontological resources to the proposed project area.

### Potential Cumulative Impacts

Construction and operation of numerous past and present projects within the cumulative analysis study area have resulted in substantial changes to the cultural resources of the region, particularly with projects that were conducted prior to the National Historic Preservation Act

and the CRHR. Typical activities that would result in the disturbance or destruction of resources include grading, excavation, boring, trenching, and other types of sub-surface ground disturbance as well as changes to the historic landscape. Cumulative projects listed in Table 3.18-2 that involve ground disturbance or are located within the same historic landscape (e.g., the SMAD, TCPs, and cultural landscapes) include:

- Avenida Pico (#2)
- SOCRE (#3)
- TL 13835 (#5)
- Large Scale Exercise Training (#10)
- Decommissioning of SONGS (#15)
- Wastewater Conveyance (#4)
- Water Treatment Plant (#12)
- TL 692 (#13)
- SONGS Synchronous Condenser (#14)

These cumulative projects could affect resources in the cumulative analysis study area. The cumulative impact on cultural, tribal cultural, and paleontological resources would be potentially significant because the ground disturbance from the combination of these projects could damage or destroy such resources in the area. MCB CPEN is required to comply with Section 106 of the National Historic Preservation Act and implement tribal consultation, which would reduce the impact to cultural resources within MCB CPEN. Due to the abundance of significant resources in the cumulative analysis study area, the potential for cumulative impacts to cultural, tribal cultural and paleontological resources is potentially significant.

Cultural and Tribal Cultural Resources. Construction of the proposed project would involve ground-disturbing activities such as vegetation removal, grading, trenching, and excavation for new pole structures, the underground power line (Segment C), work area and staging yard preparation, and access roads. These ground-disturbing activities could impact known and previously undiscovered cultural and tribal cultural resources, including human remains. The proposed project would involve work within the limits of several tribal cultural resources and the SMAD (refer to Section 3.4: Cultural, Tribal Cultural, and Paleontological Resources).

APM CUL-02 requires SDG&E to follow the avoidance and minimization recommendations in the Recommendations for Cultural Resources Protection and Avoidance report (HDR, Inc. 2015); however, APM CUL-02 does not specify the procedures for treatment of any resources, and significant impacts would remain even with the APMs. The proposed project mitigation includes cultural resource training, monitoring, avoidance of eligible cultural resources, procedures to follow upon discovery of human remains, and measures for access road grading to avoid resources would reduce the impact of construction activities on cultural and tribal cultural resources (MM Cultural-1, MM Cultural-2, MM Cultural-3, MM Cultural-4, MM Cultural-5, and MM Cultural-6). The proposed project would have a less than considerable contribution to the potentially significant cumulative impact on cultural and tribal cultural resources with the implementation of mitigation.

**Paleontological Resources.** Proposed project ground-disturbing activities have the potential to impact paleontological resources and contribute considerably to significant cumulative impacts on paleontological resources. MM Paleo-1 and MM Paleo-2 require SDG&E to monitor all ground-disturbing activities that would occur in paleontologically-sensitive areas and mitigate

impacts on paleontological resources through preservation in place (i.e., avoidance) or other methods. The proposed project's contribution to the significant effect on paleontological resources would be less than considerable with the implementation of mitigation.

# **Geology and Soils**

### Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with geology and soils includes projects within 0.5 mile of the proposed project, which could cumulatively contribute to erosion, slope instability, or geologic hazards. This extent is the reasonable distance across which erosion, landslides, or other geologic hazards could combine.

### Impacts Avoided by the Proposed Project

The proposed project would not use septic tanks or alternative waste water disposal systems. The proposed project would not contribute to cumulative impacts from septic tanks or alternative waste water disposal systems.

### **Potential Cumulative Impacts**

Cumulative projects listed in Table 3.18-2 that are located within 0.5 mile of the proposed project construction areas and proposed project alignment include:

- Avenida Pico (#2)
- SOCRE (#3)
- Wastewater Conveyance (#4)
- TL 13835 (#5)
- Recycled Waterline Replacement (#8)
- Water Line Replacement (#9)
- Large Scale Exercise Training (#10)
- JLOTS, MPF, and FEX (#11)
- Decommissioning of SONGS (#15)

Impacts from seismic hazards and expansive soils do not generally combine with impacts from past, present, or probable future projects and are not discussed further.

Erosion. Earth movement, mass grading, excavation, boring, trenching, and vegetation removal could expose soil to erosion and loss. Most of the cumulative projects are linear utility projects that would not require substantial ground-disturbing activities compared to projects that require concentrated grading, such as development projects. Only one cumulative project, (Ranch Plan Planned Community [#1]), would require substantial earth movement. Construction of SOCRE (#3), Wastewater Conveyance (#4), TL 13835 (#5), and TL 692 (#13) would occur within the same corridor as the proposed project. SOCRE (#3) and Wastewater Conveyance (#4) would disturb more than 1 acre, and are required to obtain coverage under the NPDES Construction General Permit, which requires preparation of a SWPPP and implementation of erosion control BMPs to avoid significant cumulative impacts from soil loss and erosion. The remaining cumulative projects would require minimal or no grading, and would not result in a cumulatively significant impact from erosion. The cumulative impact from erosion would be less than significant.

**Unstable Geologic Unit or Soil.** The region is prone to landslides due to the soil types present and steep slopes. Substantial earth movement, excavation, and vegetation removal could destabilize slopes and cause a landslide. Construction of SOCRE (#3), Wastewater

Conveyance (#4), TL 13835 (#5), and TL 692 (#13) would occur within the same corridor as the proposed project. No other cumulative projects are located on the same slopes as the proposed project that would be at risk of landslides. SOCRE (#3) and Wastewater Conveyance (#4) are required to incorporate stabilization techniques dependent upon the outcome of site-specific geotechnical investigations to avoid impacts from slope destabilization and landslides (United States Marine Corps 2012, CPUC 2016b). TL 13835 (#5) and TL 692 (#13) would not require substantial ground-disturbing activities that could contribute to slope destabilization or landslides. The cumulative impact would be less than significant.

#### **Greenhouse Gas Emissions**

### Geographic Extent

GHGs are global pollutants and have long atmospheric lifetimes of one year to several thousand years, which permits dispersal of GHGs around the globe. In contrast to air quality, which generally is a regional or local concern, human-caused emissions of GHGs have been linked to climate change on a global scale. As such, the geographic extent for the GHG emissions cumulative analysis is global.

## **Potential Cumulative Impacts**

Impacts from GHG emissions to climate change are inherently cumulative. Past, present, and probable future projects worldwide contribute or would contribute to the cumulative conditions for GHG emissions. The cumulative impact from GHG emissions would be significant.

SDAPCD and SCAQMD considered the cumulative global impact of GHGs when setting the thresholds of significance for construction emissions of GHGs. The thresholds represent the levels at which a project's individual emissions of criteria air pollutants and precursors would result in a cumulatively considerable contribution GHGs.

Use of vehicles and equipment during construction of the proposed project would generate GHG emissions. Maintenance and operations activities would not increase after construction of the project. The proposed project would generate approximately 62 MT CO<sub>2</sub>e per year. As described in Section 3.7: Greenhouse Gas Emissions, GHG emissions from construction of the proposed project would not exceed the SCAQMD GHG emissions threshold of 10,000 MT CO<sub>2</sub>e per year. The proposed project's contribution to GHG emissions would not be cumulatively considerable.

# Hazards and Hazardous Materials

### Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with hazards and hazardous materials is the area within approximately 1 mile of the proposed project. This geographic extent is appropriate because it accounts for the potential for wildfires to be ignited by the proposed project and other projects that could cumulatively increase the risk of wildfires within the same high risk firesheds.

# **Potential Cumulative Impacts**

**Routine Transport, Use, and Disposal of Hazardous Materials and Accidental Hazardous Materials Releases.** Construction and operation of the cumulative projects would use equipment and vehicles that could leak hazardous materials, including gasoline and diesel fuel, engine oil, coolant, lubricants, and grease. Hazardous materials, particularly fuel, may be transported to and from project work areas, increasing the risk of accident and release. SONGS decommissioning (#15) would involve the handling of large quantities of hazardous materials, but these materials would be of a different nature than the hazardous materials used during typical construction or operation of the other projects. Construction of the proposed project would not contribute to a cumulative impact with the SONGS decommissioning. The hazard to the public from fuel leaks from the proposed project would be highly localized due to the small amount of hazardous materials that typical construction activities would use. The cumulative impact from accidental releases of hazardous materials would be less than significant.

Two of the utility projects, TL 13835 (#5) and TL 692 (#13), would involve removing wood poles that are likely chemically treated. AB 1353 requires proper disposal of treated wood waste, minimizing the risk from the cumulative utility pole replacement projects. Two cumulative projects, Ranch Plan Planned Community (#1) and SOCRE (#3), traverse a FUDS near Talega Substation where unexploded ordnances could be encountered, increasing the danger to the public; however, the hazard from unexploded ordnances is not a cumulative impact. No cumulative impact from the unexploded ordnances or treated wood poles would occur.

Hazardous Materials Sites. A review of hazardous material investigation and cleanup site databases provided information regarding the hazardous material sites located in the proposed project area (Table 3.8-1). Construction and operation of cumulative projects within the cumulative analysis study area have the potential to result in the accidental release of soil and groundwater contaminated by hazardous materials. However, the hazard to the public from hazardous sites would primarily be localized. The existing soil contamination on the SCE San Onofre Site has the potential to mobilize via contaminated groundwater. The mobilized contamination from the hazardous material site has the potential to be encountered during dewatering activities, which may occur during construction of TL 692 (#13). The cumulative impact from the accidental releases of hazardous materials mobilized from a known hazardous site could be significant.

Proposed project construction activities would not occur on a hazardous materials site. Two proposed pole replacements would occur within an area that could be affected by mobilized contamination from a known hazardous materials site. Installation activities could encounter contamination, which could pose a risk to the public or the environment. The proposed project's contribution to a significant cumulative impact on the public or environment from exposure to contamination could be considerable. However, the proposed pole replacement sites are unlikely to be impacted by hazardous soil or groundwater due to distance and being upgradient from the known hazardous materials site. The proposed project with mitigation would not contribute considerably to a significant cumulative impact from potential contamination.

**Air Traffic Hazard.** Construction of the cumulative projects would not substantially increase air traffic in the region. Only one project, SOCRE (#3), would require the use of helicopters during construction. The proposed project would be constructed and could use helicopters in proximity to SOCRE helicopter activities. However, SOCRE is also an SDG&E project. As such, any helicopter activities would be coordinated within SDG&E. Additionally, proposed project helicopter use is projected for up to 14 days throughout the eight-month construction period. It is highly unlikely that SOCRE and the proposed project would concurrently use helicopters in the same area and cause a cumulative air traffic hazard. The cumulative air traffic hazard with SOCRE would be less than significant.

MCB CPEN has established Restricted Use Airspace over MCB CPEN due to air and ground training activities. Conflict between project helicopter activities and MCB CPEN helicopter operations could occur. Any helicopter activities on the MCB CPEN would be coordinated with MCB CPEN in advance of helicopter use to avoid air traffic hazards. Project helicopter activities would be timed with MCB CPEN to avoid conflicts with MCB CPEN helicopter operations. The cumulative air traffic impact would be less than significant.

Wildland Fire. Use of heavy machinery and equipment for construction in undeveloped areas could increase the risk of wildfire from sparks and through worker behavior, such as smoking or parking vehicles in dry vegetation. Cumulative projects constructed simultaneously and within the same fire risk area, including SOCRE (#3), Wastewater Conveyance (#4), and TL 13835 (#5), would involve similar construction activities, which could increase wildfire risk in the fireshed. Operation of the Ranch Plan Planned Community (#1) would increase the level of human influence and increased travel adjacent to wildlands. Large Scale Exercise Training (#10) includes artillery fire, which substantially increases the risk of wildfire ignitions. The cumulative impact from an increase in wildland fire risk would potentially be significant.

Construction of the proposed project would occur in high and very high fire risk areas. Construction vehicles, equipment, and worker behavior (i.e., smoking) could ignite dry vegetation, resulting in wildfires. Construction would be temporary, and the increase in ignition potential during operation would not increase. SDG&E has prepared a site-specific Construction Fire Prevention Plan (Appendix E), which includes procedures and policies to decrease the risk for wildfire ignition and increase fire suppression capabilities. Procedures and fire-fighting equipment that would be used by the proposed project would vary dependent on the fire potential index of the day. On days with extreme fire risk, proposed project construction would be halted until the fire risk reduces. Implementation of the Construction Fire Prevention Plan would not ensure prevention or containment of all ignitions; however, the proposed project's contribution to the increased risk of wildfire would be less than considerable.

# Hydrology and Water Quality

### Geographic Extent

The geographic extent for the hydrology and water resources cumulative analysis includes the water resources that would be affected by the proposed project, as well as any downstream receiving water and upland contributing areas related to those water resources. The geographic

extent for this cumulative analysis is defined as the watersheds where the proposed project would be located, which include the San Mateo Creek and San Onofre Creek-Frontal Gulf of Santa Catalina Watersheds. These watersheds represent both the hydrologic and administrative units for water quality control, and protection of beneficial uses for water resources in the proposed project area.

## Impacts Avoided by the Proposed Project

The proposed project would not deplete groundwater supplies or interfere with groundwater recharge. Drainage patterns would not be substantially altered by the proposed project in such a way as to result in on- or off-site flooding. The proposed project would not construct houses or structures within a 100-year flood hazard area. Structures and people would not be exposed to loss, injury, or death from flooding as a result of the proposed project. The proposed project would not contribute to cumulative groundwater or flooding impacts.

# Potential Cumulative Impacts

Past, present, and probable future projects listed in Table 3.18-2 contribute or would contribute to the cumulative conditions for hydrology and water quality within the cumulative analysis study area. The proposed project would not contribute to cumulative impacts on structures and people from loss, injury, or death from seiche, tsunami, or mudflow, because these impacts are location- and resource-specific, and cumulative impacts would not occur from multiple projects.

Water Quality Standards, Waste Discharge Requirements, and Erosion. Construction and operation of cumulative projects could require the use of hazardous materials such as diesel fuel and gasoline. Ground-disturbing activities required to construct cumulative projects could result in soil erosion and sediment deposition into local streams. Spilled materials and sedimentation from earth-moving activities could potentially be transported to waterways and adversely impact water quality in the watershed. Cumulative projects that disturb 1 acre or more of earth during construction would be required to obtain coverage under the NPDES Construction General Permit, which requires preparation and implementation of a SWPPP. Compliance with the requirements of the Construction General Permit and project-specific SWPPP would avoid a cumulative exceedance of water quality standards. The cumulative impact would be less than significant.

**Increased or Polluted Runoff.** The Ranch Plan Planned Community (#1) cumulative project would substantially increase impervious surfaces in the region. Runoff would increase from these areas but would not drain to the same stormwater drainage systems as the proposed project. Use of vehicles and equipment during construction or operation of the cumulative projects could release hazardous materials due to leaks or spills; however, the quantity of pollutants would be minimal, and would not result in a substantial source of polluted runoff. The potential increase or polluted runoff would result in a less than significant cumulative impact.

#### Noise

### Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with noise is limited to areas within 0.5 mile of the proposed project components. This geographic extent is appropriate because noise levels attenuate rapidly with distance and the noise generated by activities greater than 0.5 mile from the proposed project would not combine with the noise generated by proposed project construction.

# Impacts Avoided by the Proposed Project

The proposed project would not result in a permanent increase in ambient noise. No impact from excessive noise exposure would occur because the proposed project would not be located in the vicinity of a private airstrip or within 2 miles of a public or public use airport. The proposed project would not contribute to cumulative impacts from permanent ambient noise increases or proximity to an airport.

### **Potential Cumulative Impacts**

The cumulative projects listed in Table 3.18-2 are located within 0.5 mile of the proposed project area and could potentially produce noise at the same time as proposed project construction due to concurrent construction or other activities are:

- Avenida Pico (#2)
- SOCRE (#3)
- Wastewater Conveyance (#4)
- TL 13835 (#5)
- Recycled Waterline Replacement (#8)
- Water Line Replacement (#9)
- Large Scale Exercise Training (#10)
- JLOTS, MPF, and FEX (#11)
- Decommissioning of SONGS (#15)

Noise Standards. Construction of the cumulative projects within the City of San Clemente that are not required to comply with local noise regulations (SOCRE [#3] and TL 13835 [#5]) could occur during time periods when construction noise is not permitted per the City of San Clemente; however, it is highly unlikely that the proposed projects and SOCRE or TL 13835 would construct outside of approved time periods at the same time in proximity to one another, because the proposed project would only construct outside of the approved hours for emergency and safety purposes and for a short duration. The cumulative impact from conflict with the City of San Clemente noise standards would therefore be less than significant.

**Groundborne Vibration.** Construction of the cumulative projects would require the use of heavy equipment that would generate groundborne vibrations. The vibrations would be short-term. Additionally, groundborne vibrations are localized and attenuate very rapidly with distance (a few feet). Impacts would be localized and not cumulative. No cumulative impact from groundborne vibration would occur.

**Ambient Noise.** The cumulative projects would require use of heavy machinery during construction. Takeoff and landing of helicopters would occur during construction of SOCRE (#3) and during Large Scale Exercise Training (#10) and JLOTS, MPF, and FEX (#11). Large vehicles, equipment, and helicopters would increase ambient noise temporarily and

periodically on MCB CPEN, but the noise level would not substantially increase, because ambient noise is affected by existing military activities.

Residences within the City of San Clemente could be cumulatively affected by the temporary increase in ambient noise if SOCRE and the proposed project are constructed simultaneously in proximity to one another. Simultaneous construction of SOCRE and the proposed project in the same area is not feasible because the projects are located so close to one another that the design requires the projects to be constructed separately and not concurrently. There would be no cumulative noise impact from construction of the proposed project and SOCRE.

#### **Public Services**

### Geographic Extent

The geographic scope for the analysis of cumulative impacts associated with public services is the service area of the cities and counties traversed by the proposed project. The proposed project would primarily be located within MCB CPEN, and a small portion would be located in the City of San Clemente. The geographic extent for the analysis of cumulative impacts associated with public services is the area within approximately 1 mile of the proposed project. This geographic extent is appropriate because it accounts for the potential increased wildfire risk from projects within the same high fire risk area and consequent increased need for fire services.

# Impacts Avoided by the Proposed Project

The proposed project would not directly or indirectly induce substantial population growth that would require new or physically altered schools, parks, or other public facilities. The proposed project would not contribute to cumulative impacts on these resources.

#### **Potential Cumulative Impacts**

Past, present, and probable future projects listed in Table 3.18-2 contribute or would contribute to the cumulative conditions for fire service and emergency response times within the cumulative analysis study area.

As described in greater detail under the Hazards and Hazardous Materials cumulative analysis, use of vehicles and equipment during construction in high fire risk areas could spark and ignite a wildfire, necessitating fire services. Several cumulative projects, including SOCRE (#3), Wastewater Conveyance (#4), and TL 13835 (#5), would be constructed in the same high fire risk areas. Higher intensity training on MCB CPEN (Large Scale Exercise Training [#10] and JLOTS, MPF, and FEX [#11]) could increase the risk of wildfires and consequently increase the need for fire services. MCB CPEN's INRMP addresses increased wildfire risk from military operations; therefore, the cumulative impact on fire services within MCB CPEN would be less than significant.

The Ranch Plan Planned Community (#1) would increase demand for fire and police services; however, the community would not be constructed and occupied until after the proposed project construction is completed. There would be no cumulative impact on fire services from the proposed project and the Ranch Plan Planned Community.

Cumulative projects constructed simultaneously (Avenida Pico [#2], Wastewater Conveyance [#4], and Water Line Replacement [#9]) could interfere with the response time of emergency services due to lane or road closures. However, the impact would be localized to the construction areas and would not cumulatively reduce response time. New facilities would not be required. No cumulative impact from need for new or physically altered fire and police facilities would occur.

#### Recreation

### Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with recreation extends to within 1 mile of the proposed project. A geographic distance of 1 mile is appropriate because neighbors are expected to use recreational facilities in proximity to their community. A 1-mile area surrounding the proposed project includes the parks that are most likely to be used by the same community that uses the parks affected by the proposed project. This geographic extent is appropriate because it considers the effects of other projects within this region on the resources impacted by the proposed project.

### Impacts Avoided by the Proposed Project

The proposed project would not require the construction or expansion of recreational facilities. The proposed project would not contribute to a cumulative impact from the construction or expansion of recreational facilities.

### **Potential Cumulative Impacts**

SOCRE (#3) and TL 13835 (#5) are located within San Onofre State Beach, and Montalvo Canyon Outlet (#6), Riviera Waterline Removal (#7), and Recycled Waterline Replacement (#8) are adjacent to or within the state beaches (i.e., Riviera Beach, Calafia Beach) along the City of San Clemente's coast. The recreational areas are very large. Construction of cumulative projects within or adjacent to recreational facilities could temporarily restrict use of those facilities; however, construction of the utility projects would be extremely limited in duration and unlikely to restrict access simultaneously. Additionally, the cumulative projects are limited in size and would not inhibit use of the entire San Onofre State Beach or other state beaches. The cumulative impact would be less than significant.

### **Transportation and Traffic**

#### Geographic Extent

The geographic extent for the transportation and traffic cumulative analysis includes the local and regional roadways (refer to Table 3.16-5, which lists the local roadways in the proposed project area) and highways (I-5) that would be crossed by the proposed project or utilized for transportation of proposed project materials. The extent of the analysis includes all projects within 1 mile of the proposed project, because these cumulative projects are expected to use the same roads for access. In general, the proposed project's transportation and traffic impacts (such as increased traffic volume and lane closures) would diminish with increased distance from the proposed project area. Accordingly, greater weight is placed on cumulative projects that are located nearer to the proposed project.

# Potential Cumulative Impacts

Cumulative projects listed in Table 3.18-2 that may potentially have overlapping construction schedules include:

- Avenida Pico (#2)
- SOCRE (#3)
- Wastewater Conveyance (#4)
- TL 13835 (#5)

- Recycled Waterline Replacement (#8)
- Water Line Replacement (#9)
- Decommissioning of SONGS (#15)

Conflict with Traffic Standards. Construction worker vehicles and haul trucks used during construction of the cumulative projects would use I-5 and local roadways to access work sites. The number of additional trips that would result from the construction of cumulative projects is not quantifiable because the numbers of vehicles or equipment that could be used by the cumulative projects is unknown. The number of peak hour trips from the cumulative projects could result in a drop of LOS to below traffic standards (SANDAG CMP, Orange County CMP, or Orange County MPAH). The cumulative impact could be significant.

Construction workers and haul trucks accessing the proposed project area could use the same segments of I-5 and local roadways as the cumulative projects. The proposed project would contribute less than 30 trucks during peak hours on a peak day of construction. The additional vehicle trips generated by the proposed project would be negligible compared to the capacity of the roadways proposed for use as construction routes. The proposed project would have a less than considerable contribution to the cumulative traffic impact.

**Air Traffic Patterns.** Construction of the cumulative projects would not substantially increase air traffic in the region. Only one project, SOCRE (#3), would require the use of helicopters during construction. As required by FAA regulations, a Congested Area Plan would be prepared by any project flying within 1,500 feet of residents. Any helicopter activities on MCB CPEN would be coordinated with MCB CPEN in advance. As such, safety risks from increased air traffic would be limited. The cumulative impact would be less than significant.

**Traffic Hazards.** Construction of the cumulative projects would increase truck traffic to and from work sites. Conflicts with normal traffic flow and MCB CPEN traffic could occur. Lane and road closures may be necessary during construction of the cumulative projects (Avenida Pico [#2], Wastewater Conveyance [#4], and Water Line Replacement [#9]). The proposed project would not require lane closures on the same roadways as cumulative projects. No cumulative impact from lane or roadway closures would occur.

**Emergency Access.** Lane and road closures may be required during construction of the cumulative projects. Closures have the potential to restrict or slow down emergency vehicles and responders. Construction of the cumulative projects would not result in lane and road closures in the same areas because lane or road closures would only potentially occur where the cumulative projects cross or occur within roadways. The potential lane or road closures from the cumulative projects would not affect the same roadways as the proposed project. The cumulative impact on emergency access would be less than significant.

Alternative Transit. Bicycle lanes, bus stops, and bus routes have the potential to be affected by lane and road closures required during construction of the cumulative projects or during stringing of overhead power lines. Each project may have limited impacts on some bicycle lanes, bus stops, and bus routes. Most of these impacts would be localized and of limited duration due to the nature of the construction projects (e.g., linear projects). It is not likely that all closures would happen at the same time or even have significant overlaps. Even when all closures are considered together, disruption to the overall system would be minimal and not cumulatively significant.

### **Utilities and Service Systems**

### Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with utilities and service systems is the service area of the cities and counties traversed by the proposed project. Because the proposed project would traverse land within the jurisdiction of the City of San Clemente and MCB CPEN, the geographic extent for the utilities and service systems analysis encompasses these jurisdictions.

# Impacts Avoided by the Proposed Project

The proposed project would not require or result in the construction of new water, wastewater, or storm water drainage facilities. No impact would occur from conflicts with federal, state, and local statutes and regulations related to solid waste.

### **Potential Cumulative Impacts**

Water Supplies and Facilities. SDG&E would obtain water from the City of San Clemente for dust control during construction of the proposed project. The proposed project would not use water from MCB CPEN and would not contribute to cumulative impacts on water supply within MCB CPEN. The City of San Clemente relies on imported water from the Metropolitan Water District to accommodate the majority of demand. The sources of water purchased from the Metropolitan Water District include the Colorado River Aqueduct and State Water Project. The City of San Clemente's water sources can accommodate demand from projected growth and the potential for multiple dry years through 2040 (City of San Clemente 2016a). The City of San Clemente water supply planning process addresses the cumulative water demand from existing projects and cumulative projects by including commitments for water supply from the Metropolitan Water District. The cumulative impact on water supplies and facilities would be less than significant.

Wastewater Treatment Requirements and Facilities. Construction of the cumulative projects may require portable toilets for construction workers. The waste would be minimal and disposed of in accordance with applicable wastewater treatment requirements. Only a few cumulative projects (Ranch Plan Planned Community [#1]; JLOTS, MPF, and FEX [#11]; and Large Scale Exercise Training [#10]) would increase demand for wastewater treatment during operation, but would not generate wastewater at the same time as the proposed project. The cumulative impact on wastewater treatment requirements and facilities would be less than significant.

Mitigation Measures: MM Aesthetics-1, MM Biology-1, MM Biology-2, MM Biology-3, MM Biology-4, MM Biology-5, MM Biology-6, MM Biology-7, MM Biology-8, MM Biology-9, MM Biology-10, MM Biology-11, MM Biology-12, MM Biology-14, MM Cultural-1, MM Cultural-2, MM Cultural-3, MM Cultural-4, MM Cultural-5, MM Cultural-6, MM Paleo-1, and MM Paleo-2 (refer to Sections 3.1: Aesthetics; 3.4: Biological Resources; and 3.5: Cultural, Tribal Cultural, and Paleontological Resources)

Impact MFOS-3: Would the proposed project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Significance Determination

Less than significant with mitigation

The following sections of this IS/MND discuss various types of impacts that could have potentially adverse effects on human beings:

- Dust and air pollutants emitted during proposed project construction activities (refer to Section 3.3: Air Quality),
- Potential increase in GHG emissions during proposed project construction activities (refer to Section 3.7: Greenhouse Gas Emissions),
- Potential for wildland fires during proposed project construction activities (refer to Section 3.8: Hazards and Hazardous Materials)
- Potential release of gasoline, diesel fuel, oil, and lubricants associated with construction equipment and other vehicles (refer to Section 3.8: Hazards and Hazardous Materials),
- Potential risk from unexploded ordnances (refer to Section 3.8: Hazards and Hazardous Materials),
- Noise generated by proposed project construction (refer to Section 3.12: Noise), and
- Potential traffic hazards (refer to Section 3.16: Transportation and Traffic).

These potential impacts are all temporary impacts that could occur during proposed project construction activities. Each type of impact with the potential to cause substantial adverse effects on human beings has been evaluated. The potential health impact from air pollutants generated during construction would be less than significant. The hazard to the public from increased risk of wildland fires or unexploded ordnances and the release of hazardous materials would be less than significant with mitigation, specifically, MM Hazards-1, MM Hazards-2, MM Hazards-3, and MM Hazards-4. The effects from temporary noise increases on sensitive receptors would be less than significant with mitigation, specifically, MM Noise-2 and MM Noise-3. Traffic hazards from conflicts with large vehicles on MCB CPEN and hazards from damage to roadways would be less than significant with mitigation, specifically, MM Traffic-1, MM Traffic-2, and MM-Traffic 4. The proposed project would have a beneficial effect on human beings in the project area by increasing electrical service capacity and reliability. The proposed project's adverse effects on human beings would be less than significant with mitigation.

Mitigation Measures: MM Hazards-1, MM Hazards-2, MM Hazards-3, MM Hazards-4, MM Noise-2, MM Noise-3, MM Traffic-1, MM Traffic-2, and MM Traffic 4 (refer to Sections 3.8: Hazards and Hazardous Materials, 3.12: Noise, and 3.16: Transportation and Traffic)

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